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MINISTRY OF TRADE AND INDUSTRY

SI/MAL/82/803

MALAYSIA

Terminal report *

Prepared for the Government of Malaysia

by the United Nations Industrial Development Organization,

acting as executing agency for the United Nations Development Programme

Based on the work of William Hock, UNIDO Consultant

United Nations Industrial Development Organization

Vienna

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ABSTRACT

The report SI/MAL/82/802, Royalty Payments in the Motor Vehicle Industry, is prepared for the Malaysian Government, which requested UNIDO to collect and analyse data on this issue in other countries.

The report covers current practice regarding royalty payments in motor vehicle industries in the seven countries studied and contains similar comments taken from the files on hand of other countries. It comments on royalty payments and the effect of greater local automotive component manufacturing upon the cost and quality of the vehicles. The report provides basic considerations and suggestions as to the treatment of payments in the assembly car industry.

Royalty payments should not be permitted for CKD assembly, according to the mission, thus the possibility of double royalty payments may be eliminated. Royalties for L/C should be based upon component CKD cost or deletion allowance, with the rates in proportion to the amount of manufacturing know-how transferred. Product design royalty payments should be allowed only after case by case study.
I. SUMMARY

This report was prepared by Mr. William Hock, UNIDO consultant, and Hubert A. Janiszewski, UNIDO staff, for the Ministry of Trade and Industry and discusses the practice of Royalty Payments in the automobile industry. The report has been prepared on the request of the Malaysian Government. It includes the findings of seven countries visited by the consultant, plus presentation of data from other countries available at UNIDO.

Malaysia is considering expansion of automobile component manufacturing activities, and it is logical that the Government wishes to take a closer look at the progress made in this direction in other developing nations; the effect of other countries' policies on the car price and national economy; and the type of contractual agreements and profit remittances under which the progress was made.

Of special concern of this phase of the project is the type and size of royalty payments and whether double royalty payments occur in current agreements for the motor vehicle assemblers. What effect does government approval of contracts have on the likelihood of multinationals to undertake local manufacture, and how can local manufacturing be encouraged? What is the best structure of contractual agreements? These are the main questions addressed in this report.

It was found that automotive sales in Malaysia have increased to where expansion of L/C is feasible. It is proposed that expansion be further encouraged by, primarily, the creation of a climate for the generation of an export market. Detailed discussion on the type and form of contracts to make by the industry are contained herein.
In the view of the authors of this report the royalty payments for CKD assembly should not be permitted. Royalty payments for manufacturing know-how are justified and the percentage payment should vary with the amount of technical know-how transferred. Payments should be based upon component costs reflected by deletion price, not on net sales price. Payment of royalties for design and know-how, could be decided on individual merit.

Detailed discussion on each of the seven countries is presented and they show an intriguing variety of ways in which a country can try to establish automobile local manufacturing. The most successful programmes, according to the view of the consultant, are in effect in Mexico and the Philippines, both countries also have an active manufacture for export programme. Malaysia would do well to study these systems in detail and extract the features from both, that best represent their national aspirations.

Data on hand within the UNIDO files has been reviewed and findings presented of additional countries judged to be of interest but to which time limitations prevented a visit.

To present an overall view of the comparable status of the seven countries in the study a Country by Country Comparison chart is included at the end of this section. An illustrative graph, at the end of the introduction, showing how car prices increase with reductions in CKD should aid in understanding this phenomena.

Appended is a glossary of terms, common to the industry and used freely herein. There are also annexes of sections of contracts dealing with
royalties and remittances from countries where they could be obtained, that are of interest. An outline entitled "Characteristics of an Agreement" should be of quite some value as a guide in the preparation of future contracts.

Lastly, a summary section is included of the persons interviewed by the consultant, their titles, their associations and their pertinent comments so the reader can judge as to the source and validity of the ideas presented.
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<tr>
<td>Mexico</td>
<td>70</td>
<td>355,000</td>
<td>50 (car)</td>
<td>No</td>
<td>Yes, Yes</td>
<td>7 (55)</td>
<td>Export credit and medium car volume keeps costs within reasonable percent of free market price.</td>
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<td>Philippines</td>
<td>48</td>
<td>29,600 (19,000 trucks)</td>
<td>45 (30% physical)</td>
<td>No</td>
<td>Yes, Yes</td>
<td>5 cars, 11 trucks</td>
<td>Export credit and firm control has generated local manufacture even at modest volumes.</td>
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<tr>
<td>Indonesia</td>
<td>150</td>
<td>27,300 (161,000 trucks)</td>
<td>Minor (car) up 70% (truck)</td>
<td>Some</td>
<td>No (indirect)</td>
<td>32 (90)</td>
<td>In a market dominated by trucks, cars are CKD only. The AUV will be made here.</td>
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<td>Malaysia</td>
<td>14</td>
<td>87,500</td>
<td>Modest</td>
<td>Some</td>
<td>Yes, Yes</td>
<td>27 (135)</td>
<td>New CKD and L/C policy now under study. Many makes and models.</td>
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<td>Thailand</td>
<td>47.2</td>
<td>26,700</td>
<td>45 listed (actually less)</td>
<td>Some</td>
<td>Yes, No</td>
<td>34</td>
<td>Inconsistent programme laxly administered. Too many makes and models.</td>
</tr>
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<td>Costa Rica</td>
<td>2.3</td>
<td>3,500</td>
<td>Minor</td>
<td>No</td>
<td>Yes, No</td>
<td>Yes</td>
<td>Considering stopping CKD. Drastic drop in car sales because of depreciation.</td>
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<tr>
<td>Singapore</td>
<td>2.4</td>
<td>25,200</td>
<td>None</td>
<td>No</td>
<td>No, No</td>
<td>All</td>
<td>Stopped CKD in 1978, after about 10 years. All cars are CBU.</td>
</tr>
</tbody>
</table>
II. INTRODUCTION

A. Purpose

The Malaysian Government is of the view that the payments involved in CKD assembly production are too high, and simultaneously is considering an increase in the mandatory local content (L/C) requirements in the CKD automobile assembly programme. These two issues will most probably require setting a new policy in respect to:

- current and future assembly operations in the automotive industry;
- retaining present and setting a new policy in respect to L/C.

Through the UNDP, the Government requested that UNIDO make a survey of existing practice in seven countries and advise them on the course of action to be possibly taken by the Government. Besides a study of current agreements in Malaysia the other countries to be reviewed were Singapore, Thailand, Philippines, Mexico and Costa Rica. Additional information, for comparative purposes, has been provided through the TIES system of UNIDO, from the Republic of South Korea, Colombia and Argentina.

This fact-finding report is the basis for recommendations made jointly by Mr. W. Hock, UNIDO consultant, and a UNIDO staff member, Mr. H.A. Janiszewski, to the Ministry of Trade and Industry. It evaluates the value provided to the licensee for the royalty payment, and treats most carefully the possibility of double royalty payments, with the purpose of eliminating such payments if they exist. The report also covers the issue related to the possible progress of the L/C programme in Malaysia.

B. History

Since the introduction of CKD in the mid-1960's Malaysia has gradually encouraged a L/C programme by means of a modest mandatory deletion list. With
steady growth within the country, a surge in recent car sales and a continued expansion of manufacturing potential and importance, the Malaysian Government is now ready to consider expanding the car local component manufacturing programme.

Manufacturing is the fastest growing sector of the Malaysian economy having an annual rate increase of over 13%, compared to 8% for the economy as a whole. Exports account for almost one quarter of the total and are rising. The Government wishes to further support and encourage this sector.

In the automotive sector a modest mandatory local content (L/C) programme is in effect, which includes:

- Tyres
- Batteries
- Glass
- Paints and chemicals
- Exhaust systems
- Seat cushions
- Wiring harness
- Side moldings
- Seat belts
- Leaf springs
- Carpets and pads
- Shock absorbers
- Radiator hose
- Spring pins
- Shackle pins
- U bolts and shackles
- Side moldings

There are over 100 primary automotive component parts manufacturers in production, of the 170 companies approved, and there are others which supply products as a secondary market. Normally, the technical know-how is obtained from a joint venture association. Production is for both OEM and aftermarkets.

C. Market

The limited market volume in Malaysia is deluted by the wide range of vehicle makes and models (27 makes, 135 models of passenger cars). There is great potential danger that manufacture of passenger car components in these
relatively low volumes (under 100,000 units annually) will result in a lowering of quality and a rise (up to 500%) in component cost. This is especially so as local sources of raw materials become available, unless makes are limited to one or at most two in each of only 2 or 3 engine sizes.

Rate of deletion is often set on a fixed time schedule, especially for simpler components with good aftermarket demand. For complicated components such as axles, transmissions or engines, market volume is a more reasonable basis on which to time entry into L/C. Production at lower volumes extract tremendous cost penalties. An export market such as ASEAN complementation, or back to the source country, can ease the cost burden. More advanced countries have incorporated that feature into their L/C programme.

Another feature of motor vehicle production in Malaysia is that Principals usually hold limited equity in local plants which stem from the Government policy of keeping down foreign investments.

Limiting makes and models to a very few is a tremendous advantage in developing L/C, and such has been the practice of most developing countries with a successful vehicle industry. Generally, the approach has been by one of the following 4 ways:

1. Increase L/C until all but a few assemblers/manufacturers drop out of the market.

2. Drop import of vehicles which in the previous year did not sell a set minimum. That number might vary with engine size.

3. Call for plans for a L/C programme, and choose only those proposals which most closely meet government's goals.

4. Design a programme that encourages manufacture for export, and accept only those applicants who agree to it.
The first option is probably least subject to criticism and complaint of favoritism. It also reflects accurately the desires and forces of the marketplace. The second also reflects the demand of the marketplace, and tends to eliminate the larger and more expensive models soonest. Choice three requires, for best success, a strong central government insensitive to political pressure and with a firm commitment to follow through.

The fourth choice according to the view of the authors of the report, is undoubtedly the most sensible for Malaysia. It is working well in both the Philippines, where car sales are smaller than in Malaysia, and in Mexico, where annual sales are much larger. It is recommended that particular attention be given to the characteristic of the situation in these countries.

The contractual agreements for any programme will now be examined but before it is done in detail, some general definitions and comments are in order.

D. Contracts

1. Profits

The ultimate goal of a multinational manufacturer or local entrepreneur is the making of a profit. To do so he invests risk capital, often experiencing delayed returns and many setbacks. The entrepreneur naturally anticipates a greater return than investing in the relatively safe ventures of stocks, bonds, real estate or trade.

Government's goals in encouraging manufacture can be quite different. They may be to broaden the country's manufacturing base and reduce dependence of economy in agriculture; to increase employment; to gain world prestige; to develop greater use of available natural resources such as iron, coal, rubber, chemicals, etc.; or to find a market for its engineering graduates and skilled workers.
Possibly the answer is a slow and cautious approach with time to observe and evaluate each step. But whatever the Government goal, the profit goal of the manufacturer must be recognized. To restrict it too much will dry up risk capital and in some instances drive away the multinationals.

2. Value

In agreements among large corporations and small/medium size companies of developing countries, it is often felt that terms and conditions are not necessarily just and equitable; in such circumstances Governments choose to sometimes play an active role.

Manufacturing know-how is a value and worthy of compensation, either on the basis of units or unit value of a total value. The manufacturers' experience in low labour cost fabrication of reliable units with positive reliable equipment at an investment adjusted to the required volume is knowledge that permits fabrication of a reliable product at least cost. This type of know-how is usually of some market value.

Product design is recognized to have similar value. The cost of patents, research and development, life testing, materials used and tolerances specified are all present in the unrestricted provision of product specifications. It is again a value worthy of compensation. The proof of its suitability, its field experience, stands behind each product design offered.

A third value is less obvious but nevertheless there. It is the intangibles, the reputation, the good will, the international advertising, the trust of a customer in a name. The sales know-how, the service facilities and guarantees behind the product are what make a customer choose one item over another when basic value appears equal. This value too is worth compensation.
This intangible value, reflected to trade name, should be specifically closely evaluated in the context of developing countries.

These three items, know-how, product design and intangibles are values that usually will demand compensation. For each component their relative merit must be weighed and paid accordingly. Once paid for, it is not customary that they should be paid for again in a second agreement. On this basis then, payments in assembly operations shall be evaluated.

3. Deletion Allowance

A simple illustration of CKD cost and profit can be gained by looking at chart No. 1 in the back of this section. Whatever the CKD value set at no deletions the CKD cost must drop to zero at 100% deletion, as shown in the shaded area. If the Principal's profit is represented by value "A" the pack cost can be represented by line P1 or P2. The line P1 illustrates a charge with a constant markup per unit; P2 illustrates a profit based upon CKD provided, and it diminishes with reduced CKD value.

The principal may feel that a separate value B should be charged for the CKD startup help plus his intangibles. Intangibles could be international reputation of a product quality, the good name of the vehicle, advertisement, goodwill, as well as assembly and manufacturing know-how. If so, the pack charge would be represented by line P3 or P4. Note that at 100% deletion the principal is still making a profit for the intangibles provided.

If the licensee is billed separately for profit "B" it performs the functions and can be called a royalty. Of course profits A+B together equal "C" and the value of "C" to one Principal may be set at no more than or even less than the "A" charge of another.
Regardless of method of billing, it is the value of the markup and the slope of the curve at P1, P2, P3 or P4 that determines the licensee's actual cost. CKD markup, royalty, are all profits for the principal and it is their total value that is important. To argue over labels becomes but an exercise in semantics.

As deletions approaches 50% the deletion costs become so burdensome that the basis of billing usually changes from a deleted CKD pack cost to a direct component billing charge.

Deletion value represents the cost of the individual CKD component minus the costs associated with removing it from the pack. For instance, the source plant is told to delete the horn. The CKD box size probably does not change for this item, the pack arrives with a bit of empty space and shipping charges are the same. The factory order reads one set of CKD, minus horns. Not to gather horns along with other CKD is a chore, and probably costs more than the labour of collecting it. Orders to the source factory for horns must be reduced. And so it goes. All these extra costs are collected in the deletion price, which is the horn cost minus the costs of not shipping it. The above example may sound extreme but is provided for the sole purpose of illustrating the calculation of deletion allowance.

Each Principal has his own idea of a reasonable markup on a CBU or CKD pack, and if he cannot realize this profit he will get out of the business. Competition usually keeps the markup within reason. It is difficult in the extreme, for governments to determine what that markup is, whatever name is given to it, and to set limits on it may result in dissolution of the CKD agreement.
Probably the most reasonable way to control the markup is to require a CKD component breakdown and see that line P2 or P4 is the basis of CKD costing. It is difficult but not impossible for the Principal to provide this, for from 5,000 to 10,000 items must be individually costed with boxing, freight, insurance, profit, intangibles, etc. included.

As CKD is deleted and replaced with components locally manufactured, the local component cost usually rises. Reasons are many, including higher costs associated with lower volumes, technical know-how costs, research and development costs, higher local profits, often higher costs of raw materials, and others.

The greater the deletions the higher the vehicle cost. This is illustrated in the Chart No. 1, by line L, labelled vehicle cost. The slope of L is set to represent 50% price increase for locally made components, a mild assumption indeed. Line L₂ has an angle representing 100% markup, and its slope could be in excess of that.

The dealer profit is represented by "D" so the vehicle sales price the line S. If a manufacturing know-how charge, a royalty, Rₘ, the cost increases to S₂. If the royalty charge is based upon local sales price the royalty will increase if the percent markup remains constant and represents line S₃.

If there is a further royalty payment to cover, patent rights or other design know-how costs, as illustrated by Rₗ then vehicle sales price becomes line S₄. When Rₗ like Rₘ is based upon local selling price each compounds the other and vehicle cost is represented by S₅. Thus the vehicle sales price can rise, and rise, and rise.
If $L_2$ were the slope, instead of $L_1$, all "S" lines would increase accordingly. This chart is thus a graphic illustration of why the local manufacture of a vehicle increases its cost.

When a CKD royalty charge is made based on the retail sales price, line $S_1$, the royalty value increases as the value of the CKD drops. This is not then a reasonable basis for CKD profits.

The payments in Malaysia for rights to assemble motor vehicles, in some instances, are calculated at present as follows:

- assembly royalty based on difference between vehicle sales price minus landed price of CKD;
- continuous technical assistance fee (expressed like royalty), based on the same basis as above;
- ad-hoc technical assistance fee paid for actual services of the principals.

Moreover, when component is manufactured locally, usually under know-how or licence agreement, the basis for calculating royalty for assembly operations is not lowered by full value of such component, but only by part of it, due to different calculation of deletion allowance, as illustrated in this report (Table 2).

In this sense, therefore, in Malaysia, do exist double, even triple royalty payments, in CKD assembly operations.

The issue of so called double royalties is particularly evident when CKD assembly royalty is charged, and when a particular component to be deleted is becoming available locally. In such instances the CKD assembly royalty is increased by value of deleted component. In addition the local manufacturer of deleted component is paying royalties for manufacturing know-how for this specific component.
<table>
<thead>
<tr>
<th></th>
<th>Honda Accord 4 Doors</th>
<th>Toyota Corolla Sedan</th>
<th>Datsun Sunny 130 X</th>
<th>Volvo 264 GLM/GLA</th>
<th>Mazda 626 Saloon</th>
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<td><strong>Total Item Price CKD</strong></td>
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<td>-</td>
<td>180.17</td>
<td>116.33</td>
<td>116.33</td>
</tr>
</tbody>
</table>

*note: in M$ Total price of CKD (CIF pack price):*  
Toyota = $5,889.24  
Datsun = $5,553.11  
Honda = $7,563.56  
Mazda = $8,053.00  
Volvo = $20,576.00  
Mercedes = $23,316.32
III. PAYMENTS OF ROYALTIES

This chapter illustrates the current situation in terms of payments in the motor vehicle assembly operations in Malaysia.

A. CKD

Royalty may be defined as a share of a profit given for the right to use an invention, design, technical know-how or other thing of value. It is usually a payment to the licensor, based on the sales price of the product manufactured under licence.

Because there is a minimum of technical know-how connected with CKD assembly most Principals do not charge for this know-how. They absorb its cost along with the sales and service advice costs connected with the selling of their product, in the normal markup on CKD. That is, value "A" or "C" and CKD costs are then represented by one of the four "P" lines in the chart previously discussed.

Only in a few instances in this study was it found that a CKD royalty charge was made, usually by Principals in Japan. In most countries the subject was dismissed by the simple Government statement of "We don't permit CKD royalties" (Philippines, Mexico, Colombia, Argentina).

It is recommended that no royalty payment whatsoever be permitted for CKD assembly. This recommendation then makes redundant any discussion on size of percent, or basis, as net sales price, CKD cost, or other.

An interesting feature of motor vehicle manufacture is the occurrence of the so-called royalties paid for specific product design which is changed when a new product design is introduced into the manufacturing.
If payment is made it should be made on the basis of cost of the deleted item. That is the original CKD price minus the new deleted CKD price, or deletion allowance. It should not be made on the vehicle or component net sales price.

Many Principals provide this data free of charge. Some charge for in-house product manufacture. As they provided the component CKD in order to sell the vehicle, so many feel they should provide the component specifications free in order to continue to be able to sell a quality vehicle.

Most countries in the advanced stages of L/C manufacture do not permit royalty charges to be made for product design information, sometimes called R and D charges. Thailand does allow payments for R and D, based upon deletion value, see Thailand formulas 1, 2 and 3 in the appendix.

If the data is provided in-house it is our recommendation no royalty be permitted. If it is provided for component manufacture by an independent or outside supplier, and if there is truly substantial design know-how value there, Principals may demand compensation. To allow royalty payments, and how much, should be decided by a case by case evaluation. It defeats the purpose of L/C programme if the policy adopted turns away the multinational.

Another statement in relation to royalties charged to assembly operations should be made. In some of the instances, the principals will argue that CKD assembly royalty is a must in view of the necessity to recover R+D costs of design and manufacture of a vehicle.

While it is true that such costs are to be recovered, the mechanics of such recovery are solely sales of CBU and CKD.
This simple truth is illustrated below.

On the above diagram we present the sales curve (increasing rapidly) and the cost curve (also increasing but less than sales).

The cost curve starting point includes all fixed costs (R+D, workforce, utilities, investment) as well as variable costs which raise with increased sales.

At point A at the axis sales, the given amount of sales achieves the so-called break-even point, and any extensions of sales brings in net profit; any sales below the amount of A (i.e. C) result in net losses.
The calculated sales include a forecast of minimum sales to achieve the break-even point, usually moved forward in order to achieve a minimum reasonable profit.

These calculations are based on detailed market analysis, including sales of CBU's, CKD, etc. in all existing and potential markets.

Thus only when sales reach the break-even point, the fixed costs (including R+D expenditures, sales expenses, etc.) will be recovered.

Thus it is evident that only total sales are crucial to the recovery of investments in R+D expenditures.

For this reason also, not all principals are charging such assembly royalties knowing that they can recover their fixed investments only by means of increased sales of CBU or CKD's.

B. L/C

When a multinational provides manufacturing information, in either a joint venture or turn-key operation, value has been received and it should be paid for by a royalty agreement, or in some other form. The size of the royalty should vary with the amount of technical know-how obtained. An average of 4-5% appears to be a normal charge for substantial know-how.

The duration of the agreement should be sufficient so that the time and per cent value are enough for reasonable compensation on one side, and full absorption on the other side. If new technical know-how continues to be provided, in the form of improved design, better equipment or new processes, royalty payments should continue. Thus contracts in principle should be limited to 5 years, but be renegotiable, on a case by case basis.
If the new know-how is minor, the royalty percentage should be reduced or eliminated.

The foregoing then are the royalty recommendations for component manufacture.

Other charges can be made with justification and should be permitted. Up front money to pay for original efforts on market studies, available skill studies, development work and cost studies seems common. Direct charges for startup assistance, manpower training, commissioning and architectural supervision are common. A blueprint fee or other costs may be justified. However, all these charges should be taken into consideration when setting the royalty fee.

Government control over these values is a moot point. There are good arguments on both sides: in practice it has been found both ways. The Philippines controls fees and prices, Indonesia doesn't. Mexico did, but backed off when they found their policy was a short term gain but a long term loss because multinationals were not interested in investing under a limited profit rigidly controlled system.

Competition in the market place usually effectively limits profit. Thus often the controlling measures go to great effort and expense to bring about a condition that would come naturally. Besides, if profit is limited in one area it will be remitted by a different route. Indonesia's concern was not that a profit would be made, but that it would be remitted without proper tax payment by being hidden.

In many countries visited, the feeling of the mission was that entrepreneurs preferred uncontrolled, free market conditions in relation to price structures. It is a view of the mission that this issue, taking into
consideration political implications, should be considered carefully on a case by case basis.

C. Characteristics of an Agreement Sample Collected in Malaysia

1. Technical Assistance Agreement

A. Parties

KAH MOTOR COMPANY SDN (local company)

HONDA MOTOR CO. LTD. (foreign supplier)

B. Subject

(i) Technical assistance for the manufacture/assembling of automobiles, components parts;

(ii) Know-how for the manufacture/assembly of the above;

(iii) Indivisible non-transferable and exclusive right and licence (without sublicence agreement) to manufacture, assemble, sell products and parts; right to appoint assembler is foreseen (General Motors).

C. Limitations

(i) Export rights, outside territory except USA and other countries where Honda has direct investment;

(ii) Tie-out in respect to similar products/parts;

(iii) Tie-in in respect to tools and machinery;

(iv) Quality control according to Honda specifications;

(v) No challenge to Honda property rights.

D. Scope of Assistance

(i) Know-how;

(ii) Advise on the construction of plants;

(iii) Dispatch of technical personnel on separate terms;

(iv) Training by Honda for local personnel on separate terms:
E. Term of Payment

(i) 5% royalty of CIF price of domestic parts (landed price of Honda manufactured products);

(ii) Payments are subject to local taxes.

F. Duration

(i) 5 years from the effective date with automatic extension for a further 5 years.
2. Technical Assistance Agreement

A. Parties

TOYOTA MOTOR Co. (foreign supplier)
(local company)

B. Subject

(i) Manufacturing licence of motorvehicles;
(ii) Supply of CKD parts;
(iii) Manufacture or assembly;
(iv) Non-divisible, non-transferable, non-assignable (no right for sub-licensing).

C. Limitations

(i) Tie-out on competitive products;
(ii) Return of all supplied documentation after expiration of the contract.

D. Scope

(i) Technical information related to the process of manufacturing;
(ii) Engineering and quality control specifications;
(iii) Sample parts;
(iv) Supply of plant layout and list of specifications;
(v) Designing of plant;
(vi) Training of local staff at licence cost;
(vii) Dispatch of licensor technical staff (at his discretion) at cost of licensee;
(viii) Non-exclusive patent licence.

E. Payment Conditions

(i) Royalty subject of local taxes;
(ii) 3% royalty on local value added of each of the vehicles.
Local value added = Showroom price less:

(i) Value of CKD;

(ii) Value of tires, tubes, batteries, safety belts, glasses, body side molds, carpets;

(iii) Sales tax;

(iv) Overhead at 12% of sales price;

(iii) 5% royalty on spare parts made locally.

F. Duration

10 years and the possibility of a further 10-year extension.
3. Technical Assistance Agreement

A. Parties

FORD MOTOR CO. (USA) - licensor

FORD MOTOR CO. MALAYSIA - licensee

FORD ASIA PACIFIC - supplier of CKD

B. Budget

(i) Licence to assemble, use and sell licensed vehicles, non-divisible, non-transferable, non-assignable (no sub-licence rights);

(ii) Supply of technical information;

(iii) Supply of technical assistance for assembling, servicing and selling, plant sites, facility design, plant lay-out, equipment quality control, etc.

(iv) Testing and inspection;

(v) Supply of technical personnel.

C. Payments

- Actual costs for information material;

- Actual costs for technical services;

- DSA plus travel (1st class) for expert advice;

D. Duration

5 years from approval.
4. Automobile Assembly Agreement

A. Parties

TOYO KOGYO (MAZDA) - foreign supplier

ASIA AUTOMOBILE INDUSTRIES - local company

B. Subject

(i) Exclusive licence to: assemble/manufacture of Mazda vehicles;

(ii) To manufacture directly or indirectly, local parts based on technical information of Toyo;

(iii) To purchase locally procured parts;

(iv) To introduce gradual local component program;

(v) To sell Mazda CKD to Toyo exclusive distributor;

(vi) Mazda to sell directly CBU for diplomats, promotion purposes, etc.

C. Scope

(i) Toyo to provide technical information for plant installation, layout, equipment, etc.

(ii) Drawings, patents, flow charts, standards, etc. for assembly/manufacture;

(iii) Supply of technical experts (on separate terms);

(iv) Train AAI staff;

(v) Supply to AAI production tools;

(vi) Local parts require OK from Toyo;

(vii) Sub-licence under prior OK from Toyo;

(viii) Use of Mazda TM;

(ix) Supply of CKD via Sumitomo
D. Payments

CKD Mazda vehicles' price = C and F price plus insurance premium, custom duties, transportation costs (inland), plus price of local parts plus labour plus power plus raw materials plus depreciation, discount charges plus overhead.

Royalties

Gross royalty of 9% (before deduction of Malaysian taxes and duties) on difference between:

(a) Ex works MAZDA motor vehicle price by Toyo for export to Malaysia and;

(b) Ex works price of CKD parts shipped by Toyo.

When (b) falls below 15% of (a) then 9% will apply to ex works price of (a) above.

E. Duration

5 years, automatically renewed for 5 years.
As can be seen from the brief overview of the preceding agreement sample as well as from the information collected in the countries surveyed, the following main conclusions can be drawn:

- the basic terms and conditions for the assembly operations vary greatly among different Principals;
- the majority of the Principals do not charge for the assembly rights, nor for the supply of continuous technical assistance;
- the majority of the Principals do charge for ad-hoc technical services;
- some of the agreements provide severe restrictions which may have an effect on the potential for exports.

It should be stressed that the analysed sample relates to assembly operations, therefore their export potential is very limited; the above considerations should be however fully applied to licence/know-how agreements for components where export potential and economy of scale are much larger.
IV. POLICY IN COUNTRIES VISITED

A. Mexico

Market and Country Statistics

This country of 70 million people has not only the largest city in the world (15 million) but the oldest CKD programme of all countries covered by the study. Vehicle sales in 1981 were 595,700 with 59.7% or 355,000 CKD cars sold.

Car Industry

CKD started in 1925 with Ford, followed soon by G.M. Today there are 7 car assemblers and 7 truck assemblers. The early CKD efforts were supplemented by L/C enterprises during World War II when parts became difficult to obtain. Eventually, in the mid-1960s, mandatory L/C was required at a slowly increasing rate.

All Government officials interviewed in the Vehicle Department fully agreed that assembly plants were too many, even for a production approaching 400,000/year. A maximum of 3 or 4 was the opinion of most, with 1 or 2 desired by some. However, it was pointed out that it is politically unpopular to eliminate established CKD plants and unless controlled by a firm Government with a strong hand, difficult to put into effect. But it is still absolutely essential to a high percentage of local content at a relatively reasonable price and quality to have a maximum of 5 and preferably 3 makes of cars. Because it is politically difficult to reduce that number, most in the Government wished they had started with just 3 or 4 makes. The 7 car manufacturers offer 55 models, so there is a variety of choice.
Government price control was discontinued in 1977. It was found that although the Government had gained a short term benefit with controlled sales price in the long term they had discouraged multinational corporations from investing in the country. Industrialists universally prefer the market-place to set prices and profits. It is of little benefit to assign a component to a mandatory deletion list if no manufacturer is willing to make it locally because of price control leading to either minimized profits or increased rights.

The growth of CKD sales has been healthy, averaging 12% per year for the last 10 years. The future is not expected to be so good, and a 6% per year increase is expected, for despite the large oil deposits found, Mexico has just experienced two sizable devaluations of its currency, as well as a very large extensive debt estimated at ca. 80 billion US dollars.

Local content is set as follows:

CARS  50%
TRUCKS  65%
BUSES  70%

The 50% L/C requirement is at present mandatory. It was decided, early on, to encourage L/C within the vehicle drive train as the investment is lower and changes less frequently than in body and chassis sheet metal. Drive train L/C components are truly local, including castings and forging as well as machinings.

On the remaining 50% CKD pack for cars, there is duty imposed. However, the duty can be waived by producing for export a value equivalent to the cost of the CKD. As a further incentive for export, if the export
value exceeds the CKD cost, up to 15% L/C credit can be realized. Export processing zones have been established and, on a value added basis, additional credits may be accrued in this manner.

The duty structure on CKD is designed to encourage L/C and to support local manufacturers. The duty varies with the component falling in one of the following groups.

1. Mandatory local content. The high duty rate on these items is supplemented by a 400% penalty if item is imported without cause. Permission to import must be obtained.

2. As group one, but no permission to import is required.

3. Deluxe items. Duty is charged (i.e. power windows). If placed on deletion list duty increased 400%.

4. Normal CKD imports. Duty is charged. Duty will be waived if the mandatory 50% L/C is met and exported value is equal or greater than the CKD import cost.

By providing large penalties rather than completely banning components provision is made to continue assembly if a fire or other act of God prevents local procurement. It also permits the manufacture of some luxury cars, although their price is high.

Export value credit can also be generated if the CKD plant exports a Vendor's product.

Because there is no control on selling price, and each vehicle manufacturer is striving to increase sales by setting the lowest possible selling price, all try to avoid paying CKD duty by providing export designed
manufacturing facilities. Bordering the USA, the export processing zones encourages import of raw materials and export of finished products to source countries.

The results of this policy are:

1. Relative economy of scale and low L/C component costs. By exercising slow growth of L/C until a substantial volume of sales was reached before forcing component manufacture, Mexico saw modern, high volume plants with the latest know-how being installed.

2. Technology transfer. The current know-how of modern L/C component manufacture was supplemented by R and D. As the power train design did not change with the same rapidity as in source countries, local design adaptations required establishing a research and design facility to Mexicanize the product and match the local power train to the new body.

3. Retention of profits (discussion to follow). The requirement of 60% local capital now in force automatically retains this percentage of profits. Eventually, as R and D know-how increases and the need to update drive trains is necessary, a Mexican car design may evolve.

Royalty and Profit Policy

Four of the CKD start-up plants are wholly owned subsidiaries; three have some degree of local capital. But for some time now, in order to get approval of any L/C manufacturing facility and the available incentives possible, there must be 60% local ownership. Thus the equivalent profit automatically will be retained within the country. This provision was not introduced until recently when know-how and risk capital were both available in Mexico.
Profit on CKD can be remitted without Government interference, subject to a 42% tax. All in-house manufacture by Principals remit profits for component manufacture on the same basis as CKD profits. There is no royalty paid for CKD activities.

Royalties on L/C average 2.5% of net sales with a range from 0.3 to 3%. There is a 10 year maximum on these contracts, which are renegotiable. Appended is a sample contract with the names of the signatories deleted, see Annex 5.

There are payments on a direct basis for technical information, specifications and blueprints, manpower, training, etc.

There have been over 12,000 contracts reviewed on an individual basis since the introduction in 1972 of a Mexican Law on Transfer of Technology and the establishment of a Technology Transfer Registry. The text of the revised Technology Transfer Law of Mexico is available. Royalties for greater technical know-how transfer are high, with strong support for R and D. All agreements must be in line with national goals. Because each is decided on an individual basis, there have been charges of Government favoritism. In rebuttal, the Government feels some car producers specialize in lobbying rather than production know-how.

The programme has not been without its critics. For several years, vehicles were made with new imported sheet metal but an obsolete drive train. Now, as cars are down-sized and new full efficient drive trains are rapidly replacing old designs, the marriage of new with old is more complicated. A local content rear wheel drive cannot receive front wheel drive sheet metal. Possibly these developments will eventually lead to a local Mexico designed product.
CKD and L/C Goals and Methods

Like many nations with the population and wealth to support a passenger car market of 200 – 500,000 units annually, Mexico is desirous of making most of the cars locally. They realized that in order to do so at world prices and to have export potential they must have economy of scale. This is only possible when export markets are added to their own country’s volume.

By generating a climate that encouraged exports they are now seeing the benefits of high volume production. They have contained their balance of payment losses. They have increased the absorption of technical know-how. They have new modern facilities and installation increases at a growing rate.

Mexico and the Philippines have the two most successful L/C programmes in this report. Both have reached this position by programmes designed to encourage exports. Each country offers a programme with much to study and possibly emulate.

To have reached this position after 57 years of CKD is considered an achievement. Most important, it has been done while keeping the vehicle price within 30 – 100% range of the free market price, depending on the make and model. The average markup is about 43%.

It has not been achieved without difficulties and the 50% pack cost of a French car was stated to be higher than the retail sales price of the same model in France. Today, to receive a licence for CKD or L/C, the proposals must meet the Government goals for that industry, which are:
1) A high degree of technology transfer, especially in the Research and Development field;
2) development of local manufacture, with emphasis on export markets;
3) cost control of vehicle price close to the free market price;
4) retention of profits within the country and to their people.

This fourth point is a more recent goal.

B. Philippines

Market and Country Statistics

The Philippines, a country of 46 million people, started CKD operations in the early 1950s. The greater Manila area has over 6,000,000 people. In 1981 car sales were 29,600 and there were 19,000 trucks sold. Note that like Thailand, the car market is appreciably larger than the truck market. Of the 29,600 cars almost 22,000 were small and medium size. There were close to 6,000 intermediates. Of the total truck sales, 15,000 were Asian Utility Vehicles (AUV) and light commercial vehicles (LCV). Only some 4,000 conventional trucks were sold. In 1980 the AUV sold twice as many vehicles as in the LCV class.

Car Industry

There are five car assemblers licensed to make cars in the country. In addition to the five car assemblers there are 11 truck CKD plants. Credit is earned for the required percent local content by qualifying in three separate areas:

2. Purchasing L/C to a mandatory deletion list in which the domestic L/C price cannot exceed the CKD price by more than fifty percent.
2. Purchasing or fabricating as desired L/C to meet the remaining special percentage for a specific period. That percentage increases yearly.

3. Up to 15% credit can be earned by fabricating for export.

Car CKD requirements are:

<table>
<thead>
<tr>
<th>Year</th>
<th>% Total L/C</th>
<th>% Physical L/C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>45</td>
<td>30</td>
</tr>
<tr>
<td>1983</td>
<td>55</td>
<td>40</td>
</tr>
<tr>
<td>1984</td>
<td>60</td>
<td>45</td>
</tr>
</tbody>
</table>

Thus the CKD plant in 1982 must purchase 30% L/C minimum, and can earn up to 15% in export credits to make the 45% L/C requirement. Most plants have installed an export manufacturing operation to supply local requirements and export to one or more source countries. For example, Ford, in a local high volume sheet metal stamping plant are supplying metal panels to Japan, Australia and others.

Some L/C is in-house, some from local suppliers, and some from international sub-contractors. Dana will build axles for the several models of Asian Utility Vehicles.

Local content percentages were developed in a manner to prevent misunderstanding or argument. A CKD component cost list was obtained from each assembler. If the average transmission cost of a car was calculated at 7.2% of the CKD cost, then any assembler who deleted a transmission was given L/C credit of 7.2%.
The L/C formula is:

\[
L/C = \frac{LCP + NEC}{CKD}
\]

where:

- **LCP** = local component price. Taken from the CKD list (FOB). This is a deletion allowance price.
- **NEC** = net export credit. This is export selling price minus component imports, depreciation, etc. It is a value added concept.
- **CKD** = full CKD price (FOB).

If any of the 5 assemblers should exceed the L/C requirements by a substantial amount they are allowed to import other vehicles with no local content. At times Mercedes, Datsun and Renault have been brought in CKD. If they fail in meeting the L/C requirement the CKD is subject to a high duty rate.

There is no royalty permitted for CKD, only on the L/C. There is no royalty for in-house manufacture in a locally owned subsidiary.

Truck CKD requirements are split into four categories:

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent Local Content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1982</td>
</tr>
<tr>
<td>Asian Utility Vehicles</td>
<td>60</td>
</tr>
<tr>
<td>Light Commercial Vehicles</td>
<td>60</td>
</tr>
<tr>
<td>Trucks up to 4,500 GVW</td>
<td>30</td>
</tr>
<tr>
<td>Trucks 2 - 5 tons</td>
<td>30</td>
</tr>
<tr>
<td>Trucks 5 - 15 tons</td>
<td>25</td>
</tr>
<tr>
<td>Trucks 15 - 20 tons</td>
<td>20</td>
</tr>
</tbody>
</table>

The Asian Utility Vehicle is normally a pick-up type chassis with simplified, locally fabricated cab and front and sheet metal. To reach the high local content requirements it will be required that all makers use common drive components. Engines will be made by Toyota, including block
and head castings; transmissions by G.M., Dana will, via a joint venture, do axles and drive shafts.

Royalty and Profit Policy

Royalties are based on the value of technical know-how transferred, and permitted only for L/C that is not in-house. That is, Ford does not collect royalty on the stamping plant output, nor does G/M. for their transmission. As wholly owned subsidiaries they remit profits based upon earnings, not royalties. Dana will be permitted a royalty for axle manufacture. The royalty is applied to the deletion price not on net sales. The royalty value is subject to approval by the Government. It varies with each component. The maximum allowed is 5%, the average 3-5%. There is a 5 year renewable maximum time period.

The Technology Transfer Board sets the value of the royalty permitted, based upon the amount of know-how provided. They, along with the Board of Investment, also determine pioneer status rating for new industry and determine what other incentives may be given. They control vehicle sales prices.

To encourage maximum manufacture rather than assembly only on L/C products, they developed the concept of "net export credit". That is, the export sales value is reduced by depreciation, component import value, and other relevant factors.

Assemblers are required to list the sources for L/C purchases to support their L/C position. Thus the Government can easily check to determine the value of L/C supplied by calling the supplier. This eliminates the need to check each CKD pack. To qualify as L/C there must be a minimum of 25% value added, and, depending on the component, it may be higher.
Motorcycle sales are relatively low in the Philippines because of the prolonged rainy season, floods and typhoons. Also they have a Jeepney transport system that provides good public transportation. Sales in 1981 were approx. 45,000 two-wheelers, and no three-wheelers. Some of the two-wheelers are expanded, with a body shell or extra wheels. Local content is at 45% with yearly 5% increased increments planned.

It must be noted that in contrast to the approach of other countries studied to date, wherein contracts are freely set by negotiation between licensee and licensor, this government controls the royalty set, the time period and specifies it apply to the component CKD cost, as well as the percentage royalty value of the component. All royalty remittances require conversion of funds by the Central Bank, at which time they are subject to a 55% tax.

CKD and L/C Goals and Methods

By applying net export credit into the L/C formula the atmosphere has been created that generates high technology transfer and reasonable economy of scale in the automotive components fabricated for export, and keeps a reasonable price tag on the L/C purchased by virtue of limited makes and models. The capacity to participate in ASEAN complementation programmes is also built in, with the minimum of change or expansion within the industry, should complementation become a reality.

In June 1982 the ASEAN countries adopted specific measures that should stimulate vehicle complementation programmes. They are: 1) reduction in duties of 50%; 2) recognized brand to brand complementation as a specific. (Thus one car manufacturer could source a major component in each of
5 countries and reap the benefit of economy of scale and reduced duty); and 3) approved multisourcing of CKD.

Previously, L/C could come from any supplier, but the CKD pack had to be from one country. Now CKD can have multiple sources. That is an axle can be sourced in the U.S., Europe or Japan, whichever is least expensive, or in an ASEAN country. If it is ASEAN, credit for L/C is given.

Thus the Philippines has made reasonable progress in L/C even though their total car sales are modest. They have the difficult task of controlling prices at all levels, whereas Mexico permits the market place to set prices. Price control was abandoned in Mexico because it was driving out the multinational corporations. The key to success in both countries has been the encouragement toward high volume production of components by the granting of some form of export credit.

C. Indonesia

Market and Country Statistics

Indonesia is a country of 150 million people. Their economy has been rising rapidly in recent years, due mainly to the sale of new oil discoveries and because they started from a very low base.

Total vehicle production has risen from less than 5,000 units in 1970 to over 215,000 in 1981. In 1981 trucks and commercial vehicles comprised over 75% of total unit sales, cars under 13%, general purpose vehicles (i.e. jeeps, government vehicles) about 12%.

Motorcycle production enjoyed a volume of over 500,000 in 1981, up from a 1974-79 average of 26,000. Honda with almost 40% of the market,
has a plant capacity of 300,000 units/year and over 60% local content. The Government target is 100% by 1984.

Car Industry

Although recent newspaper articles claimed a goal of 100% L/C by 1985 for one truck manufacturer, officials admitted to 85%, with progressive L/C of drive train components from a CKD base. Similarly for motorcycles, engine assembly will start in 1982 with progressive machining and block casting at a later stage.

There are no local content plans for passenger cars beyond those now in effect, namely, paint, tyres, batteries and seats. With a 300% markup on car CKD imports some L/C purchases may be made, based upon price. Not mandatory but available is car glass, shocks, radiators, muffler systems and wire harness. There is no duty on commercial CKD.

The manufacturing policy for commercial vehicles had taken the form of 3 groupings:

1. **I-house:** Specific products for one vehicle such as body or cab sheet metal.

2. **General components:** Available from independent manufacturers such as shocks, glass, batteries or horns.

3. **Drive train components:** Here they have named 5 groups with related interests (i.e. all General Motors world-wide products are one group). Assemblers will be required to tool for common production of different products (a multi-production engine line) or use one common product within the group.
The Government's plans are to base enforcement on a volume rather than on a time basis.

The reasons no passenger car additional manufacturing is planned in the foreseeable future, other than that currently in effect are:

1. The relatively low volume of car sales and the wide variety of products.
2. The high CKD duty will result in some eventual local content on a cost basis.
3. Issuing of passenger CKD licences is used as an incentive for greater L/C in related commercial vehicles.

Enforcement of the Government policy is by issue or denial of a CKD or L/C licence. There are no CBU imports allowed. Only one model in each class is allowed. Even so, it is felt that proliferation is too great. In 1979 there were 32 makes and 90 models being assembled in 27 different vehicle CKD plants. Non-compliance is met by duty rates of 100-150% on import of deleted item.

A photo album system of customs inspection has been in effect for some time to simplify the task of identification. The variety of names given to similar items (bonnet vs. hood, boot vs. trunk), the several languages in use, the various states of component breakdown have common ground in a picture.

Royalty and Profit Policy

There is no control of royalty payments or profit remittance by the Government. There is no control of sales price or dealer or distributor markup. The forces of competition in the market place are felt sufficient to control profits at all levels.
The Government does express a desire to see royalty payments limited to 2% of net sales for a 5 year period, but contracts can be renegotiated. They admit to the extent possible, problems on both sides of this figure; it is too high for simple actions like CKD; it can be too low for the introduction of high technology manufacture.

The Government does not take part in the licensee/licensor contracts, other than (1) a general review to determine the parties are sincere and will carry out their plans if a government licence is offered; (2) to confirm it will be for the good of the nation; and (3) to be sure it meets the law of the land.

The Government does not control the amount or the form of profit remitted, be it royalty, component markup, contracted payment as "up-front" money, technical specifications or know-how payments, or other. They admit to an uncertainty of what is a "just" fee or what profit is hidden in a deletion allowance. They know the Principal wants his licensee to succeed, that he must make a targeted profit or he will not complete the deal, and that whatever the attempted control, if they decided to impose one, it would probably be circumnavigated.

Tax collection on profit is however their just concern and is difficult to enforce if remitted profits are hidden. For this reason, they levy a tax on net sales, called PDBR tax, that presumes to collect their share from profits, interest and royalty.

The several branches of the Government queried could produce no contracts, the L/C and CKD plants were reluctant to do so. In general, the European, Australian and American CKD sources required no royalty for CKD know-how. The Japanese do, usually 1 or 2%. For L/C an average of 2 - 2 1/2% of net sales was felt typical.
Honda pays 1% royalty on the net sales price for CKD, plus 1% for L/C sales, see excerpts from the royalty section of the contracted Appended No. 3.

Chud, a Japanese supplier of Toyota springs has a contract with a local manufacturer based upon 2% of net sales plus a "start-up" fee, plus a technical assistance billing.

Both licensees feel this unjust, pointing out as local content rises prices rise and the 1% CKD remittance increases although the CKD pack cost and help decreases. They propose the fee be based upon the deleted CKD pack cost or eliminated.

Kubota, a manufacturer of diesel engines for agricultural use originally paid "up-front" money, and a 5% royalty (progressively lowered to 1%). On the basis of personal contacts the details were provided and are appended, Appendix No. 4.

Both assemblers and manufacturers alike, are distrustful of placing sub-contracts with competitors. All would prefer to have 2-3 sources of supply. Failure to perform, not an uncommon occurrence, could lead to bankruptcy. Small deletion allowances and cost increases of 200-300% are additional reasons for delayed manufacturing start-ups.

**CKD and L/C Goals and Methods**

Because of the large truck sales over car sales Indonesia plans to encourage L/C in trucks only, using the privilege of CKD car operations as a means of encouraging L/C in trucks. Their goal of 85% L/C by 1985, will be reached in the AUV model only, and even so some will only be assembly of components, not true manufacture.
Compliance with the Government regulations is influenced at times by outside pressures, so there may be a variance between specified and actual results.

The method of encouragement to multinational corporations is, in theory, not to interfere in the licensee/licensor contract in any way, and to put no restriction on remittances of profits in any form. But again, the "desire" of some individuals can carry with it the effect of a published regulation.

D. Malaysia

Market and Country Statistics

In this country of 14 million people, there are over 11.5 million in west Malaysia where all but about 10% for the 1981 car sales of 87,500 were made. In contrast, west Malaysia has only 50,000 sq. miles of the country's 127,000 sq. miles total area.

Car sales have been rising rapidly, being over twice that of 5 years ago and almost four times that of 10 years ago.

Car Industry

The passenger car assembly industry in Malaysia started in the late 1960's with an annual production of under 15,000 in 4 assembly plants. It has since grown to 17 approved CKD plants, of which 15 are in production, for cars and commercial vehicles. They assembled approximately 90% of west Malaysia's 88,400 new passenger car registrations in 1981.
The completely built up units (CBU) are now limited to 1% of the 1976 volume and this figure is soon to be lowered. The duty on CBU ranges from 65% to 100% of the CIF value, whereas CKD is duty free, subject to excise tax only.

Paralleling this assembly growth has been a modest local content programme, induced by a mandatory deletion list. L/C includes tires, batteries, glass, exhaust systems, seat cushions, wiring harnesses and side moldings for the car industry.

Local content is fabricated by both assemblers and independent suppliers alike. The L/C industry is also supported by a progressive deletion schedule for 2-wheel vehicles of 15% a year. By 1983, L/C of 30% will be required for motorcycles, 45% in 1984, etc. Manufacture in heavy industry has also been launched with formation of HICOM, a joint venture of government and private capital for heavy industry.

Although Malaysia is part of the ASEAN complementation programme, and its largest member in terms of annual new car registrations, it is doubtful if an ASEAN major manufacturing programme will be undertaken in the near future. Conceived in 1970, an agreement in principal was not signed until 1981. Recent changes in the programme have made it more attractive to car manufacturers. (See further ASEAN discussion in the section on the Philippines.)

The Malaysian Government, in its efforts to continue to encourage industrialization, is considering an increased mandatory deletion programme in the passenger car industry.
To be effective at high L/C, such a programme normally requires drastic curtailment of the proliferation of makes and models. There are approximately 27 makes of passenger cars comprising 135 different models now being assembled.

One developing country has launched on a similar programme of roughly comparative volume and has limited production to one vehicle of under 900 cc, one of under 1600 cc and a possible third model over 1,600 cc, with a modest L/C schedule. The vehicles are proposed in 4 derivatives, a 4-door passenger car, a van, a jeep and a mini pickup truck, all on a common chassis and power train. Without such strict limitation the lack of economy of scale could result in a sales price rise of 300 - 500 per cent. Indeed, in some developing nations such a rise in price and reduction in customers' choice has resulted anyhow. Even in the best of controlled and well planned programmes a 200 - 275 per cent price rise multiple should be anticipated as basic raw materials and components become available locally.

Alternatively, encouragement by law to manufacture for export has worked successfully in other nations, notably Mexico and the Philippines.

Royalty and Profit Policy

Royalty on CKD assembly is being paid by some dealers or contract assemblers, mainly to the Japanese principals. Most Australian, European and American Principals do not ask for CKD royalty, although some admit to different policies in different countries.

Because little if at all technical know-how is connected with CKD assembly it is thought by most that such royalty is not justified. It is therefore recommended that CKD royalty payments be eliminated.
An argument can be made for paying a fee for the provision of specifications and design know-how on deleted items, but only in cases when they are to be made locally. Know-how for component manufacture will vary considerably and is best based upon individual review, rather than a flat fee. Patents, R+D effort performance, and service records may also be taken into consideration.

In any case, the fee should be based upon the deletion value, that is full CKD cost minus actual deleted CKD cost, not on net local sales price.

Royalty for L/C is being paid, and fees vary appreciably, in basis and percentages. Claims for the percent local content vary appreciably for the same deleted item. For instance, tire deletion, depending on the quality of tire used, can change the deletion allowance for all components.

One solution is to require each CKD principal to provide a component breakdown list of its most popular models. An average is then taken of the per cent value of each component, among all makes, and L/C credit assigned accordingly. Thus a L/C credit of 7.2% may be assigned for transmission deletion, even though one transmission may be more or less expensive than another. This prevents principals from padding the value of those items they plan to delete.

A royalty percentage fee can also be assigned to the component, depending upon the technical know-how transmitted. The basis, again, should be the deletion price of the component, not the local sales price. Much guidance for the above can be obtained from consultations with the Governments of Mexico and the Philippines.
CKD and L/C Goals and Methods

To maintain reasonable price and quality while expanding local content is best accomplished by encouraging manufacture for export. Additional side-benefits are: more modern facilities, reduction in exchange losses, and greater transfer of technical know-how at a faster rate. Retention of profits can also be effected by a specified percentage of local capital - if available - for each new venture.

It is recommended that a detailed study be made of the progress and control methods used by both Mexico and the Philippines and that Malaysia develop their own programme based upon their own goals, taking the most useful parts of each system.

Because of the relatively low volume of annual car sales the rate of entry into local manufacture of car components should be conservative. Manufactures for export can strongly support more rapid progress. Annual volume, not time, is the best basis for L/C increased requirements.

Finally, as advocated by both countries, the makes and models must be drastically curtailed. How to do this is difficult, but some suggestions were made earlier. The Government must decide if it wants vehicle manufacturing or vehicle variety of choice. It cannot have both, at reasonable prices and quality.

E. Thailand

Market and Country Statistics

Bangkok, a city of 5.1 million people, has an estimated 50% of the trucks and 70% of the country's passenger cars. Thailand in 1981 assembled 26,650 cars and 60,500 trucks in this country of 47.2 million people.
Car Industry

CKD are assembled with 54% local content and there are 34 makers of cars; there is 80% duty on the CKD. A CBU duty of 150% effectively discourages such imports. Truck CKD, of the chassis with windshield type, are subject to 10% duty, chassis 30% duty. A CBU truck pays 40% duty, except that pickups must pay 80%, the same as cars. Over 90% of the country's trucks enter as CKD.

Both cars and trucks must meet a modest mandatory L/C list, including:
- tires
- battery
- shocks
- glass
- leaf springs
- radiator
- brake drums (for large trucks)

Motorcycles are CKD with a 70% L/C requirement. The current volume is about 300,000 per year, almost equally divided between 4 manufacturers. They too will be subject to a future mandatory L/C list.

The L/C is admittedly mainly just assembly. The high car L/C requirement was originally used to discourage import of this luxury item. The Government has stated the policy is wrong. With such a limited market and proliferation of makes, true manufacturing of 45% is impractical. Thus in the future they will change to a mandatory deletion list requirement. The value added for assembly only is slight, and there is little economic benefit to the country in this policy - according to some Government officials.

There is a general feeling that allowances for L/C are generous, and the L/C accredited is primarily of an assembly only type. Possibly less than 30% of the vehicle is actually fabricated locally.
Royalty and Profit Policy

There is no Government control or review of contracts in CKD or L/C as to size or terms of royalty payment, or other remittances. Because the Central Bank of Thailand must provide exchange for these remittances they do have knowledge of the contract stipulation. For that reason, using data from sources who had access to Bank records, and from Industrial Clubs, a good picture of contracts and types of agreements was obtained.

Royalty data was provided in detail in Thailand from two sources. The first by Dr. Mingsarn Santikorn in a published book entitled "Technology Transfer", charts from which are reproduced in annexures No. 6, 7 and 8. Although the data is a few years old, Dr. Mingsarn has confirmed that recent studies show it to be still applicable. The second source of royalty data came from the President of the Automobile Assembly Club. There are eight methods used in CKD royalty payments, see annexure D, plus the following CKD description.

CKD

In most cases, CKD royalty formula are actually applied to deletion costs and serve to cover the cost of providing technical know-how for deleted part. Depending on value, compensation for the lost CKD mark-up could be included.

Formulas I and II apply to Datsun, Subaru and Hino, the only difference is tires and batteries are excluded in the first. The average is 3%. That is $R = .03 \times$ deletion allowance. No CKD royalty is charged but there is a normal CKD mark-up built with CKD price.
Formula III, used by Mazda, is a formula designed to replace the CKD profit loss caused by the smaller CKD pack. It is a set fee per unit, increasing at 25% intervals. At no deletion up to deletion 25% a fixed payment of yen 2,000 ($US 9.09) per unit must be paid.

Formula IV, used by Ford, is the same as II, except expressed differently. It also applies 3% to the deletion allowance.

Formula V used by Daihatsu, is 3% of the component price, not the deletion allowance.

Formula VI applies to the net selling price, which in this case is 40% of the free market price. The product is Isuzu.

Formula VII for the large air-conditioned Fugi busses is again formula II except the air-conditioning unit cost is taken into account.

Finally, formula VII amounts to dealer net costs minus local value added. The percentage value is 3%.

These eight formulations represent a wide spectrum of thought and purpose. By themselves they cannot be judged too critically, for the provision of data and purpose or intent of the parties involved can alter their justification considerably. They could be, as in formula I, an attempt to cover the costs of providing technical and product know-how at reasonable cost, without additional separate charges. Those that appear to demand large remittances should be weighed in the light of CKD mark-up size, if any, and technical know-how given.

In any event, the principles are collecting their remittances in the hard light of the market-place, and if sales failter the normal reaction is to reduce compensation to lower sales price.
It is interesting to contrast the current formulations with those of a few years ago. Using the basic data on which Dr. Mingsarns book was based, it was found:

1. Contracts concluded on no royalty payment until deletions reached 40%. Then a 5% charge for royalty, based upon CKD pack cost. (Japanese source)

2. Fixed fee per unit assembled, from 200-400 Bhat ($US 11-22) made quite an insignificant sum. (Japanese source)

3. Royalty of 3% on net sale of vehicle. As the local sale is over 300% more than the free market price this is a sizeable cost for CKD (i.e. US Dollar at source 5,000 will cost $750/unit).

This review of CKD royalties, interesting as it may be, becomes academic if like most countries no royalty is allowed on CKD. It should be noted however, that in many instances the royalty is meant to cover the cost of supplying data for local manufacture.

L/C

Discussion on local content remittances with representatives of the Auto Parts Industries Club reveals another widespread difference in payment. Differences were grouped into independent, local capital manufacturers on one hand and joint venture majority controlled or wholly owned Principal manufacturers on the other hand. A third group was joint venturers with a captive foreign supplier to a foreign principal.

Turn-key operation arrangements normally applied to local capital ventures. They are a one-time-only payment, after which the owners are free to do as they please, in price, customer or manufacturing method, without outside help or interference.
Normally manufacturers for L/C pay an up-front fee for factory start-up, direct billing for expert assistance or foreign training of local personnel, plus a fixed royalty. The royalty was generally 3-5% of net sales for 5 years. The period of agreements was, of course, renegotiable.

In the contract was an in-house one or with a "group", as is often the case in Japan, the contract duration was usually unspecified.

Royalties were found most often in contracts with Japanese Principals, some with European, and very infrequently with Australian or American. Motorcycle contracts most often called for fixed fee per unit. In agreement with majority owned local ownership were most often lower fees than those made by foreign majority manufacturers, who frequently contracted with their Principals.

The concern of industry and government about royalty and other remittances is obvious from the amount of data available, reflecting study on both sides. There was an undercurrent of feeling that government intervention would be beneficial, but how or in what form was not defined during the interview.

CKD and L/C Goals and Methods

Thailand, with 34 makes of cars, unspecified models, and modest annual volume finds it virtually impossible to develop quality L/C. Generous allowances, for assembly only, allows them to claim substantial L/C percentages, but the actual L/C is not high.

The market demands new, modern, fancy cars of a wide variety of makes and models. So it is doubtful if the Government can make much real progress in increasing local manufacture. All things considered, and particularly
the size of the market, the idea for full or substantial L/C should not be pursued from the economic point of view.

F. Costa Rica

Market and Country Statistics

This small country of only 2.3 million people is primarily dependent upon agricultural exports. Its capital and largest city is San Jose, with over 250,000 people, although there are almost one million in greater San Jose. Major exports are coffee, bananas, beef, cacao, sugar-cane and fruits. There are also two export processing zones for processing manufactured goods.

These six traditional items accounted for 70% of exports a few years ago. Today they constitute only 50%, as wood, leather and textile products gain greater prominence in the export market.

Vehicle sales in the mid-1970's approached 15,000 vehicles per year, when coffee prices were high. That has since steadily declined to an estimated 2,500 plus cars this year (1981 = 3,507), and a predicted 1,000 or less in 1983. A decline in coffee export prices, a rise in energy costs and an ambitious government health and public works programme has resulted in drastic monetary devaluation, from 8.1 Colon = $US 1 in 1979 to a maximum 64:1 and a current 52:1 relation. With the devalued Colon vehicle sales have dropped, and most sources have stopped shipping CKD.

The previous administration wanted to eliminate CKD because of revenue losses and high vehicle prices, but objections by the assembly plant owners, supported by the co-operative owner/employees and OEM suppliers prevented the action. The current administration is also considering stopping CKD. The
combination of limited sales, which averaged only 7,166 cars and 331 trucks per year for the last 5-year period; plus the wide variety of makes, 13 makes supplied 86% of the market, makes CKD currently unattractive. The future for CKD looks doubtful. When dropping of CKD was being studied, the Government and the CKD plants both presented facts to support their arguments, so an independent study concerning CKD was made by the University of Costa Rica. The study presented no conclusions or recommendations, noting the decision was a political one. They listed as follows the facts on both sides:

**Advantages of CKD**

1. savings in exchange  
2. local employment and value added  
3. skill development  
4. supporting industrial development

**Disadvantages of CKD**

1. higher vehicle prices  
2. less Government revenue  
3. fewer car choices, fewer car extras  
4. poorer vehicle quality.

Currently, the Government is importing bus chassis to which locally fabricated bodies are attached. Car dealers import CKD from the source countries and have them assembled at co-operative contract assemblers. There are no royalty payments for the CKD, just the standard mark-up. There is no regulation limiting make or model.

The assembler is allowed a gross profit of 18-26% over factory delivered costs depending on size of vehicle, and the total constitutes a fixed selling price to the dealer. His efficiency determines his net profit. The dealer is allowed a 28% mark-up for cars and 15-20% for trucks and that becomes his fixed retail sales price.
Before 1977 there were seven CKD car plants, one of which did SKD trucks. Trucks otherwise were CBU. Now all but one of the CKD car plants are closed, and that one is preparing to close. The few car imports expected over the next few years will be, after current stock is exhausted, on a CBU basis. If predictions prove correct, 1983 sales will be about 700 cars in total.

The start of assembly was SKD in 1963 and CKD by 1965. CKD was encouraged by taxing CKD imports only 10% of the CBU rate the first year, 20% the second and 30% the third through 10 years. After 10 years it was thought CKD should be competitive with CBU costs and full tax would be collected.

Such has not proved the case, and although the law still stands no CKD taxes are collected. Regulations and agreements of the Central American Common Market also support this position. The tax differential is about 85% of CIF price.

Maximum employment in the CKD industry was about 1800 people. Vehicle price increases ranged from 30% to over 100% before taxes, because of the cost of L/C and labour. The plant assembling Toyota is 20% owned by them, otherwise all CKD is local capital. Generally, car prices are 150%-170% of the free market price.

The mandatory L/C list is small, and all L/C manufacture was established for the aftermarket before CKD started. The list includes: tires, tubes, batteries, paint, floor mats, jeep bumpers and bus bodies. No expansion of this list is planned. Most L/C items have a cost markup of 80% or more.

There are no CKD royalty payments. There were no payments for technical know-how to start CKD, the cost being absorbed by the suppliers of CKD.
For L/C, royalties are permitted to be paid, as established by licensee/licensor agreement without much government knowledge or interference. The range is thought to be 2-10% with a 5% average.

Because of the lack of L/C in the car industry, a look was taken at other royalty agreements as follows:

<table>
<thead>
<tr>
<th>Manufacture of</th>
<th>% Royalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cosmetic products</td>
<td>5</td>
</tr>
<tr>
<td>Adhesives, tapes</td>
<td>7</td>
</tr>
<tr>
<td>Paints</td>
<td>3.75</td>
</tr>
<tr>
<td>Soap</td>
<td>5</td>
</tr>
<tr>
<td>Baby food</td>
<td>5</td>
</tr>
<tr>
<td><strong>Average:</strong></td>
<td><strong>5.15</strong></td>
</tr>
</tbody>
</table>

Other payers of royalties are the T.V. and electric appliance industries.

Because no L/C agreement was found in the auto industry none is appended.

Taxes on remittances are:

- Royalty: 20%
- Dividends: 15%
- Profits: 10-50% (progressive)
- Consultants: 30%

To obtain exchange to remit profits the local manufacturer need only prove that the tax on the remittance has been paid. The Government review of the contract is limited to fiscal considerations, that is whether imported taxes have been paid.
Concessions granted to encourage L/C are a 10-year tax holiday, duty free equipment imports, constitutional protection against confiscation or appropriation etc. However, the Government admit their limited internal car market is not encouraging to manufacturers of L/C and unless the product can be exported no automotive L/C is expected to be made in the future.

G. Singapore

Market and Country Statistics

The Republic of Singapore, a small group of islands of 616 sq. km area and 2.4 million people, pursued a labour intensive industrialization programme in the mid-1960's, in part by encouraging vehicle CKD by a preferential duty of 45% as compared to CBU vehicles. In the 1970's this policy changed to one developing high technology capital intensive industry with high value added services for export. The CBU-CKD duty differential established in 1965 was allowed to lapse in 1979, and vehicle CKD died a natural death. CKD was officially banned in July 1980.

CKD car production was never too large, reaching 12-14,000 at its peak. Car sales in 1981 were 25,208 units, and somewhat less in the 1970's. Government policy is to limit total vehicle growth on the island, and currently they have a zero growth goal. A car must be scrapped before a new one is purchased, or the normal duty mark-up of 250% above list price becomes much higher.

Car Industry

The demise of CKD in Singapore was economically insignificant. The CKD labour force was quickly absorbed and the factories used for other purposes. One OEM supplier of tires went cut of business because of lack of duty
protection. As a manufacturer for local consumption, he could not compete with international suppliers without government protection.

There were no specific attempts to encourage L/C by the government. Tires, batteries, paint, deadeners and cleaning chemicals were purchased locally from previously established plants on the basis of cost advantage over dutiable imports. CKD volume, averaging at about 12,000/year, never appeared to justify local component manufacture without appreciable price protection. Total volume in 1981 was only 34,421 passenger cars and trucks. From time to time consideration was given to vehicle component manufacture, more so in Malaysia than in Singapore, but resulted in no additional manufacturing establishments in Singapore.

Royalty and Profit Policy

During the CKD period there was no royalty or technical know-how charges leveled on the assembly plants by any Principal supplying CKD. The recovery of costs related to assembly, technical know-how, provision of data, etc., in addition to profit was presumed to be in the CKD pack charge, as was the cost of marketing in the CBU price. Competition in the market place kept these mark-ups from becoming excessive.

There were no vehicle royalty or technical know-how agreements for L/C because it never got underway. Although the several former CKD executives interviewed all agreed on the type of compensation paid, because CKD activities had ceased to exist for over 3 years, contracts were no longer on file. Most local vehicle distribution business in Singapore, as the London-based INCHCAP Group or the locally-based Singapore Motors Group, also did business in Malaysia. The CKD contracts were very similar, if not identical, so the Malaysian Government will have access to these agreements.
Singapore, in other manufacturing activities permits royalty payments without government interference. They average 2-5% of net sales price, with an average estimated at 3%. It should be stressed that manufacturing in Singapore is very much export oriented.

**CKD and L/C Goals and Methods**

In addition to high technology there were other reasons for abandoning CKD and vehicle L/C programmes. The elimination of unemployment made labour intensive industrialization less attractive. It was realized that for the sake of roughly 1000 jobs the cost of vehicles had to rise by 45%. With the limited population domestic L/C in vehicles would never reach volumes sufficient to justify economy of scale in manufacture, and vehicle costs would continue to rise. Finally as outlined earlier, the country wished to limit vehicle growth to match their road and parking developing programmes, a policy that could be at odds with CKD and L/C encouragement.

Although there is no more CKD or even L/C specifically for the vehicle industry, Singapore does much to encourage local manufacture. It provides many investment incentives such as pioneer status, export incentives, consultancy services, financial supports, investment guarantees, development assistance, expatriot know-how encouragement, etc. It is in effect almost a duty free country. It has the second largest port in the world. If significant developments in ASEAN's complementation scheme are realized, it will be able to participate on a large scale.

It has, however, chosen to compete in world markets at volumes that permit economy of scale, thus avoiding high unit costs that raise vehicle prices. One study underway is considering automotive air compressor manufacture for all of South East Asia, if not worldwide.
V. SELECTED INFORMATION ON LEVELS OF ROYALTIES ETC. IN SOME DEVELOPING COUNTRIES

### Argentina
- tires/tubes: 3.37%
- body parts: 2.00%
- radiators: 3.00%
- wheel rims: 2.00%
- cars and trucks: 2.00%
- car airconditioners: 2.25%

### Republic of South Korea
- batteries: 3% of net sales (Fuji Electrical Co)
- motor vehicle: down payment $211,000 + 3% (Hino Co)
- shock absorbers: down payment $100,000 + 2.5% of net sales (Wood Head Manufacturing UK)
- bus assembly: 3% on FOB of CKD price (Nissan Diesel Motor Co)
- motor assembly: down payment $2,870,000 + $4.2/unit (Mitsubishi Motor Co)

### Colombia
- Assembly operations of cars
  - Renault: L/C
    - R-4, R-6, R-18, Royalties: L/C, ex works export, 46.3%
    - Joint venture with price of vehicles CBU, 50.5% local equity, less CKD x 0.85 x 0.04%/year, and 1.6% on net sales price of locally made components
- Fiat
  - Joint venture 25% local equity, no royalties, 26%
- Chevrolet
  - Joint venture 40% local equity, no royalties, 30%
Components Manufacture

<table>
<thead>
<tr>
<th>Component</th>
<th>Supplier</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>radiators</td>
<td>GM</td>
<td>2.5% on net sales value less CIF of imported components</td>
</tr>
<tr>
<td>wheel rim</td>
<td>Motor Wheel Corp.</td>
<td>2% on net sales for passenger cars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4% on net sales for trucks</td>
</tr>
</tbody>
</table>

Assembly operation of motorcycle

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kawasaki</td>
<td>3% of total export price of components not supplied by Kawasaki</td>
</tr>
<tr>
<td>Yamaha</td>
<td>3% on net sales price</td>
</tr>
</tbody>
</table>

Mexico

<table>
<thead>
<tr>
<th>Component</th>
<th>Supplier</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>batteries</td>
<td>(US supplier)</td>
<td>1% of net sales value</td>
</tr>
<tr>
<td>body parts</td>
<td>(US supplier)</td>
<td>2% of net sales value</td>
</tr>
<tr>
<td>body mouldings</td>
<td>(US supplier)</td>
<td>2.3% of net sales value</td>
</tr>
<tr>
<td>wire harness</td>
<td>(US supplier)</td>
<td>2.0% of net sales value</td>
</tr>
<tr>
<td>shock absorbers</td>
<td>(FRG supplier)</td>
<td>2.0% of net sales value</td>
</tr>
<tr>
<td>safety glass</td>
<td>(US supplier)</td>
<td>0.5% of net sales value</td>
</tr>
<tr>
<td>safety belts</td>
<td>(US supplier)</td>
<td>1.5% of net sales value</td>
</tr>
<tr>
<td>radiators</td>
<td>(US supplier)</td>
<td>2% of net sales value</td>
</tr>
<tr>
<td>wheel rims</td>
<td>(US supplier)</td>
<td>1% of net sales value</td>
</tr>
</tbody>
</table>

The above information is provided for illustrative purposes mainly. However, attached to the present subchapter are data on basic terms of agreements conducted by Malaysian manufacturers of components and therefore some basic conclusions from this sample comparison can be drawn.

One consideration in drawing of conclusions has, however, to be taken into account, namely that the size of individual countries varies, thus is reflected directly at the level of applied royalties.
### List of Agreements Approved For The Motorvehicle Parts And Components Industry

<table>
<thead>
<tr>
<th>Malaysian Company (Licensee)</th>
<th>Foreign Company (Licenser)</th>
<th>Type of Agreement</th>
<th>Duration</th>
<th>Payment Incurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Raleigh Cycles (M) Bhd</td>
<td>TI Raleigh Industries Ltd., U.K.</td>
<td>Technical Assistance</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td>4. NGK Spark Plugs (M) Bhd</td>
<td>(i) NGK Spark Plug Co. Ltd., Japan</td>
<td>(i) Joint Venture</td>
<td>-</td>
<td>(i) 2% of net sales (ii) Technical Collaboration 5 (ii) 2% of net sales</td>
</tr>
<tr>
<td></td>
<td>(ii) &quot;</td>
<td>(ii) Service Contract</td>
<td>-</td>
<td>(iii) -</td>
</tr>
<tr>
<td></td>
<td>(iii) &quot;</td>
<td>(iii) Renewal of Tech. Collaboration Agr.</td>
<td>5</td>
<td>(iv) 2% of net sales</td>
</tr>
<tr>
<td>5. Buchel Vehicles Components (M) Sdn. Bhd.</td>
<td>(i) Private Investment Company for Asia (PICA) - 19%</td>
<td>(i) Joint Venture</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Malaysian Company (Licensee)</td>
<td>Foreign Company (Licensor)</td>
<td>Type of Agreement</td>
<td>Duration</td>
<td>Payment Incurred</td>
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</tr>
<tr>
<td>Lembaga Tabung Angkatan Tentera (LTAT) - 30%</td>
<td>Fahrzeugteilefabrik Karl Buchel OHG (Buchel) 51%</td>
<td>(ii) Sales</td>
<td>-</td>
<td>(ii) Harga assets - DM 4,764,125. Penilaian dibuat oleh pihak Kerajaan German. Cara pembayaran (a) cash DM 1,560,000 when formalities to transfer assets to Co. is completed. (b) allotment of 3,825,000 share or $1 each to vendor</td>
</tr>
<tr>
<td>(iii) Fahrzeugteilefabrik Karl Buchel OHG</td>
<td>(iii) Technical Assistance 5</td>
<td>(iii) (a) technical fees of DM 50,000 every year for 5 years (b) royalty of 2% of net profits every year for 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iv) Buchel &amp; Co. Fahrzeugteilefabrik GmbH</td>
<td>(iv) Sole Distribution 5</td>
<td>(iv) Price of products:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysian Company (Licensee)</td>
<td>Foreign Company (Licensor)</td>
<td>Type of Agreement</td>
<td>Duration</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>(a) cost of production + mark-up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30% = Malaysian f.o.b.p.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(b) mean of 3 prices = competitor price</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(c) the higher of the two shall be the gusled sold to distributor.</td>
</tr>
<tr>
<td>6. Yuasa Battery (M) Sdn. Bhd.</td>
<td>Yuasa Battery Co. Ltd., Japan</td>
<td>(i) Technical Assistance</td>
<td>5</td>
<td>(i) 2% of net sales</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ii) Basic Agr. &amp; Technical Assistance Agr. for expansion project</td>
<td>5</td>
<td>(ii) 2% of net sales</td>
</tr>
<tr>
<td>7. South East Asian Motor Industries</td>
<td>Electrotechnik, W. Germany</td>
<td>Agreement relating to the manufacture of spark plugs</td>
<td>5</td>
<td>Project Cost</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stage 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$530,400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stage 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$592,007</td>
</tr>
<tr>
<td>Malaysian Company (Licensee)</td>
<td>Foreign Company (Licensor)</td>
<td>Type of Agreement</td>
<td>Duration</td>
<td>Payment Incurred</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$115,200 $281,326</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$144,967 average 3.4% of net sales</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(i) Lining &amp; clutch facings from imported billets - nil royalty</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(ii) Lining, clutch facings of disc pads from imported mix - 2% of net sales price</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(iii) Lining, clutch facings, disc pads, bonded shoes made from basic chemicals (raw materials) locally mixed &amp; moulded - 4% on the sales price minus the in-store cost of the metal shoes.</td>
</tr>
<tr>
<td>9. Elgi Marka Sdn. Bhd.</td>
<td>(i) L.G. Balakrishnan Bros. (Pte) Ltd. of India</td>
<td>(i) Royalty</td>
<td>5</td>
<td>(i) 2% 'ex-factory' untuk rantai basikal</td>
</tr>
<tr>
<td>Malaysian Company (Licensee)</td>
<td>Foreign Company (Licensor)</td>
<td>Type of Agreement</td>
<td>Duration</td>
<td>Payment Incurred</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>------------------</td>
</tr>
<tr>
<td>Autoparts Manufacturing Sdn. Bhd.</td>
<td>Tokico Ltd., Japan</td>
<td>(i) License Agreement</td>
<td>5</td>
<td>(i) royalty : 3.16% ex-factory lumpsum : M$46,000</td>
</tr>
<tr>
<td></td>
<td>Ikeda Busan - Japan Tachikawa Spring Ltd., Japan</td>
<td>(ii) Technical</td>
<td>5</td>
<td>(ii) royalty : 2.112% ex-factory lumpsum : M$62,000</td>
</tr>
<tr>
<td></td>
<td>Ohi Seisakusho Co. Ltd., Japan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nihon Radiator Co. Ltd.</td>
<td>(iii) Technical Agreement &amp; Trade Mark</td>
<td>5</td>
<td>(iii) lumpsum : $US 17,600 (M$42,416)</td>
</tr>
<tr>
<td></td>
<td>Mitsui Co. Ltd, Japan</td>
<td>(iv) Sales Contract</td>
<td>-</td>
<td>(iv) 10% of total price</td>
</tr>
<tr>
<td>Hong Leong Lurseen Shipyard Bhd.</td>
<td>Fr. Lurssen Nerft. W. Germany</td>
<td>Technical Service</td>
<td>-</td>
<td>M$500,000</td>
</tr>
<tr>
<td>Auto Ancillary</td>
<td>Vinod Sanghi, India</td>
<td>Technical Know-how</td>
<td>5</td>
<td>2% of net sales</td>
</tr>
</tbody>
</table>
Malaysian Company (Licensee) | Foreign Company (Licensor) | Type of Agreement | Duration | Payment Incurred |
--- | --- | --- | --- | --- |
13. IHC (M) Sdn. Bhd. | (i) N.V. Industrieele Handelcombinee Holland | (i) License | 5 | 4% of net sales |
 | (ii) Mining & Transport Engineering N.V. Holland | (ii) Management | - | DG $60,000 |
16. Malaysian Piston Sdn. Bhd. | India Piston, India | Technical aid/registered user's agreement | - | (i) 3% of net sales for technical fees |
 | | | | | (ii) 1/2% for trademark |
17. Ambali Engineering Bhd. | (i) T.I. Diamond Chain Ltd. & Amsted Industries Inc. (USA) | (i) Technical know-how | 5 | (i) (a) initial engineering for $US 10,000 (b) technical assistance fee 3% of net sales (c) trademark: 1 1/2% of net sales |
<table>
<thead>
<tr>
<th>Malaysian Company (Licensee)</th>
<th>Foreign Company (Licensor)</th>
<th>Type of Agreement</th>
<th>Duration</th>
<th>Payment Incurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ii) Tube Investment of Ltd, India</td>
<td>(ii) Technical know-how</td>
<td>5</td>
<td>(ii) (a) engineering fee Rs. 50,000 (b) technical fee is 2 1/2% of net sales</td>
<td></td>
</tr>
</tbody>
</table>
VI. CONCLUSIONS AND RECOMMENDATIONS

CKD

Malaysia's car volume and economy has progressed to where local manufacture of automobile components can be expanded. The country's skill, manpower and management base is also ready for this expansion.

Sensible progress in some nations in Europe, Asia and in Mexico is being made in car manufacturing at normal prices and with modern high volume installations by a system that makes it profitable to the Principal to export part of his output. If an engine should be produced at 120,000 units/year, and demand for that size engine is only 19,000 then the answer is to export 101,000. Mexico and the Philippines have successful programmes for volumes of 350,000 and 30,000 respectively.

After national goals have been defined, it is recommended that the Mexican and Philippine programmes be studied in detail and the best of each be selected to develop the goals of Malaysia.

Royalty for CKD activities are not paid by the majority of CKD assembly plants in most countries visited. Because the technical know-how imported by CKD is not great and in most instances has been factory absorbed in the past, it is recommended that no royalty be paid for CKD in Malaysia.

The agreements requiring CKD royalties and fees for continuous technical assistance should be revised in line with the majority of surveyed countries. This will eliminate then any possible double royalty payment.

L/C royalty payments for local manufacture of components are justified as seen in all visited by the mission countries. It is recommended, that UNIDO calculation formula is used, by both licensees and Government authorities as provided in UNIDO's document - Development and Transfer of Technology Series No. 12.
When considering the royalty, a critical issue is the proper basis for its calculation. As an example we will consider a torque tube, the component price of which is $US 200,000 the deletion allowance $US 150,000 and the local net sales price $US 450,000. Using the above three different basis, the royalty rate and contract duration will be discussed.

The following chart shows the possible total royalty to be paid with various royalty basis selected.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vol./yr. (000)</td>
<td>Years in effect</td>
<td>Royalty</td>
<td>Piece Value</td>
<td>Money paid</td>
</tr>
<tr>
<td>A</td>
<td>40</td>
<td>10</td>
<td>2%</td>
<td>450 (net sales price)</td>
<td>$ 3,600,000</td>
</tr>
<tr>
<td>B</td>
<td>40</td>
<td>7</td>
<td>3%</td>
<td>200 (CKD price)</td>
<td>1,680,000</td>
</tr>
<tr>
<td>C</td>
<td>40</td>
<td>5</td>
<td>5%</td>
<td>150 (deletion al.)</td>
<td>1,500,000</td>
</tr>
<tr>
<td>D</td>
<td>40</td>
<td>6</td>
<td>4%</td>
<td>300 (local value added)</td>
<td>2,880,000</td>
</tr>
</tbody>
</table>

Column (5) is the total royalty paid, using the different basis of A, B, C, D. When choosing the percent royalty (3), it is recommended that CKD price (B) or deletion allowance (C) be chosen as a basis of the uncertainty of the final net sales value (A), for column (4) and because of the ever-rising value of net sales price. Similar consideration will apply to local value added (D). The deletion or CKD price basis for calculating royalties has been accepted in the Philippines and Mexico, and therefore may be considered in Malaysia.

It is further recommended if the actual technology transfer is continuous such as the new know-how of new materials, new processes or improved equipment the contract may be renewed, possibly at a reduced percent royalty.
Some components, such as a battery or radiator, have little of inventive or original know-how in their design, and no product design royalty is recommended. Others, more complicated, may have certain industrial property rights involved in design, processes or both. The development costs may be considerable, and it is only just that these costs be recovered over the life of the components use. It is thus recommended that product design royalty be allowed on a case by case basis, provided that the promotion is not known already in the country.

It is not recommended that a blanket fee be paid, even based upon deletion value, for the R+D value of all local content, such as referred to in the formulas. It is too likely that these large fees will apply in the early stages when technical transfer is not great, and later be changed to individual components at a still larger royalty payment. In no case where it can be avoided, should net sales value be used, although such is often practised as unavoidable. (Add. 69a)

Finally we should realize that in the motor vehicle industry one usually deals with two potential supplies of the manufacturing know-how.

The first will be the Principal himself, the second will be an independent manufacturer of the components.

In the case when manufacturing know-how is received from the Principal the royalties for component manufacture may be paid, provided that no assembly royalty is levelled. A similar scheme will apply too, when manufacturing know-how is received from independent component manufacturers.

More complicated questions will arise when the local component manufacturer will be planning to supply more than one assembler of different vehicle makes.
The issue here will be two-fold: first who is to pay royalty or design fee (assembler or component manufacturer) and what base should be used for calculation purposes.

It seems reasonable that the assemblers should secure the necessary know-how or design to be provided, perhaps on similar conditions as in subcontracting agreements, as the local component manufacturer usually will possess sufficient know-how to produce given components although of different designs.

The fee for such designs, if any, should be substantially low and be covered by assemblers. The experience shows that Principals will provide assembly designs for free.

Finally one last most bold recommendation. If appreciable industrial expansion is truly the Malaysian national goal, and not just expansion of small local manufacturing of simple components, the first step in this whole programme should be the reduction of the number of vehicles and manufacturers. Possibly one manufacturer each from Europe, USA and Japan. Otherwise volume production is not possible and all new efforts will be based upon high cost low output plants.

The fairest and most effective way to do this, is to announce the new, restricted manufacture for export, high volume programme with the corresponding expert incentives. The way to approach this bold proposal is to attempt to enlist support of all major Principals present in Malaysia, and choose three or four based upon, compliance with national goals, real technical transfer involved, popularity of product and likelihood of future stability and progress of the Principal. This can be done within the framework of the Basic Agreement on ASEAN Industrial Complementation (attached).
This will assure retention of exchange and profits, substantial increase in technical transfer and increase in industrialization as a percentage of GNP. Otherwise, whatever the royalty provisions, progress will be slow and expensive.

In this light the mission strongly recommends that the Government consider setting up a special task force to study in detail the possibility of establishment of a long term L/C programme, taking into consideration the experience of other countries and based on realistic, economic considerations. UNIDO will be willing to provide assistance in this respect.

Another recommendation is made by the mission, namely, that before taking decision of elimination of all running royalties from assembly operatives, the Government should secure from the Principal the detailed cost breakdown of imported CKD (and possible similar data from other ASEAN countries) with the purpose of being able to check in the future whether unjustified (to recover lost royalties/cost increases will occur in the future.

Cost increase may be allowed to the extent justified by rate of inflation in the principal countries.

As a general recommendation - applicable to all assembly industries with very low or nil transfer of technology - the mission is of the view that total ban of royalties in such operations should be introduced.

The mission is of the view, that the decision as recommended in the report, is feasible and can be carried out without impeding the economic and industrial progress of Malaysia.
1. GLOSSARY

**AUV**  Asian Utility Vehicle - A pick-up type chassis with simple, locally fabricated body and front end sheet metal.

**CBU**  Completely Built Up - A car imported as a finished product.

**CKD**  Completely Knocked Down - A disassembled car, one imported in component pieces, packed in boxes. Requires chassis assembly, body welding, paint and trim to be done after importation.

**L/C**  Local Content - Those components of a car manufactured locally. Normally includes paint, assembly labour, and all local purchases.

**OEM**  Original Equipment Manufacturer - One who fabricated components for assembly into a new car. May also supply the spare parts market.

**Aftermarket** - The automobile replacement parts market supplied by spare parts manufacturers. May also supply OEM.

**Economy of scale** - Cost reduction in component manufacture brought about by the efficiencies associated with high volume production.

**In-House** - Manufacture by the Principal in his own CKD or branch factory of components to be used in his cars.

**Know-how** - The technical specifications, materials, processes and/or plant layout, equipment and organization that together permit manufacture to internationally accepted standards.

**Multinational** - A car or component maker who does business in two or more countries. Sometimes called a Principal.

**Powertrain** - The vehicle drive components, including engine, transmission, torque tube and driven axle.

**Principal** - The original car or component manufacturer. The source of CKD or technical know-how. The licensor in a joint venture contract.
2. Indonesia

ARTICLE VII - Royalties and Fees

7.1 In consideration for the license herein granted and the technical information and know-how provided LICENSEE hereunder, LICENSEE shall pay to LICENSOR an initial disclosure fee of US$50,000 and a technical assistance fee equal to two percent (2%) of NET SALES of LICENSED PRODUCTS sold by LICENSEE during the term of this Agreement. Such payment shall be made in U.S. Dollars and shall be net of any taxes or the like which are to be withheld by LICENSEE for LICENSOR under Article X hereof except to the extent that such taxes (or the like) shall be less than the prevailing Japanese corporate tax rate at the time of remittance and creditable against LICENSOR's Japanese tax obligations with respect to the fees hereunder.

It is understood that the tax which may be assessed in Indonesia on LICENSOR's receipts under this Article is cred-

The above is taken from the UTCMO/CHUD Contract, the section on Royalty Agreements.
itable against LICENSOR's Japanese tax obligation if the rate of Indonesian tax is 26% or less and if proper certificate of payment of Indonesian tax is submitted.

7.2 The term NET SALES means gross sales of LICENSED PRODUCTS less (i) any sales taxes, transportation charges and trade discounts shown separately on LICENSEE's invoices; and (ii) the F.O.B. price of LICENSED PRODUCTS or raw materials for the manufacture thereof purchased from LICENSOR. The disclosure fee shall, subject to any necessary governmental approvals, be paid at such time and in such manner as LICENSOR shall designate. Other amounts due hereunder shall be paid to LICENSOR within three (3) months after the end of each quarterly accounting period, namely January-March, April-June, July-September and October-December, with a report of computation of technical assistance fee. For the purpose of computing fees due hereunder, conversion of rupiah into U.S. Dollars shall be at the official exchange rate, if such rate is applicable, and otherwise at the exchange rate used by principal international bankers, in effect on the last business day of the quarterly accounting period for which fees are computed.

7.3 No technical assistance fee is charged or due on export sales of LICENSED PRODUCTS made by LICENSEE to LICENSOR, but this exemption does not apply to any sale made by LICENSEE to any Japanese or foreign subsidiary of LICENSOR, regardless of whether partially or wholly owned.

7.4 No technical assistance fee is charged or due on LICENSED PRODUCTS sold by LICENSEE before the 1st day of April, 1980.
Article 8: KNOW-HOW FEE

KUBOTA INDONESIA shall pay to KUBOTA a total sum in U.S. Dollars equivalent to ¥ 7,200,000.-- in net receipt after tax deduction in Indonesia, in the United States Dollars as Know-How Fee for the technical assistance rendered by KUBOTA as stipulated in Article 1 of this Agreement four (4) months after the day when the Government of Indonesia has approved this Agreement.

Article 9: ROYALTY

(1) During the term of this Agreement, KUBOTA INDONESIA shall pay to KUBOTA a royalty of five (5) percent on the actual cost of local manufactured part the amount which is the "total sales amount (ex-f.a.c. price of KUBOTA INDONESIA)", excluding the total C.I.F. value of imported component parts from KUBOTA.

(2) "Total sales amount" shall be calculated as follows:

(UNITS delivered from KUBOTA INDONESIA'S PLANT) X

(EX-FACTORY PRICE of KUBOTA INDONESIA)

The above-mentioned ex-factory price shall have been set and recognized by the Board of Directors of KUBOTA INDONESIA beforehand.

(3) Income tax due on a royalty specified above by the Indonesian Income Tax Laws shall be borne by KUBOTA. KUBOTA INDONESIA shall deduct the said tax from the remittance of a royalty when actually effected and will pay the tax to the Indonesian Taxation Office on behalf of KUBOTA. In such a event, KUBOTA INDONESIA shall, without any delay, submit to KUBOTA a certificate of tax-payment in order to prove such payment of the tax in Indonesia.
Messrs. KUBOTA Ltd., Osaka
Agricultural Machinery Export Division
Coordination Dept.

Semarang, July 28, 1980

No. 545/KU/VII/80

Dear Sirs,

Re : Royalty for the year 1979

With reference to the above, we have the pleasure to inform you the details for the captioned matter as follows:

1) Calculation table for the said Royalty

a) Royalty
   1% (One percent) on Ex-factory Price for sold Stationary Diesel Engine which are assembled in P.T. Kubota Indonesia Ltd., Semarang Factory.

b) Ex-factory Price
   Our net sales price include following items of expenditures, and therefore, Ex-factory Price shall be equivalent to the amount after deducting this expenditures from Sales Price.

   (1) Sales Commission charge for Main Dealer.
   (2) Transportation charge for delivery engines.
   (3) Sales Tax (PPn = Pajak Penjualan) and Commodity Acquisition Tax (MPO = Menghitung Pajak Crag).

2) Amount of Royalty for 1979

The amount of Royalty for the year 1979 is calculated as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Sales Amount</td>
<td>Rp 2.631,800,511,-</td>
</tr>
<tr>
<td>Sales Commission</td>
<td>Rp 12,835,660,-</td>
</tr>
<tr>
<td>Transportation charge</td>
<td>Rp 10,765,000,-</td>
</tr>
<tr>
<td>Tax (PPn &amp; MPO)</td>
<td>Rp 104,758,495,-</td>
</tr>
</tbody>
</table>

Ex-factory Price (A) - (B + C + D) Rp 2,514,206,256,-
Royalty 1% ........................ Rp 25,142,062,57

T/T on Jul. 16, 1980 = 80% x Rp 25,142,062,57 =
Rp 20,113,650,06 + 623 =
US$ 31,825,40
We hope the above explanation on this calculation is quite acceptable to your good selves and the detail shall be cleared.

Thanking you for your favourable patronage toward us while assuring your best cooperation, we remain,

Yours faithfully,

Seizo HIGAYASU

cc. 1. Ir. Hoeljon Besentaray
   President Director

   Osaka, Tokyo
MEMORANDUM

On this day of 1981, P.T. KUBOTA INDONESIA (Ltd.), a corporation organized and existing under and by virtue of the laws of Indonesia and having its principal office at Jl Setya Budi, 279, Semarang, Indonesia, (hereinafter referred to as KUBOTA INDONESIA) and KUBOTA, LTD., a corporation organized and existing under and by virtue of the laws of Japan and having its office of business at 2-47 Shikitsu-higashi 1-chome Naniwaku, Osaka, Japan, (hereinafter referred to as KUBOTA) agreed to supplement the following addenda to the TECHNICAL ASSISTANCE AGREEMENT concluded between the said companies on the 30th day of September, 1972. (hereinafter referred to as AGREEMENT)

(A) KUBOTA agrees to introduce KUBOTA Small Diesel Engine, ER40N, KND40, ER1200N(1400N), KND(ER)1500 and KND(ER)1700 in addition to the models specified in Article 1. (3) of the AGREEMENT.

(B) In consideration of technical know-how granted, KUBOTA INDONESIA shall pay Yen18,000,000 (KUBOTA's net receipt) to KUBOTA as Initial Payment.

(C) Immediately after receipt of above-mentioned Initial Payment, KUBOTA shall disclose the technical information for KUBOTA INDONESIA, provided however, the technical know-how on methods of producing casting, forging material shall be excluded.

(D) KUBOTA INDONESIA shall pay to KUBOTA royalty on the sales of above-mentioned 5 (five) models. Calculation formula and other conditions of royalty payment shall be according to those specified in the AGREEMENT.
(E) In case KUBOTA dispatch KUBOTA's engineer(s) for technical assistance, KUBOTA INDONESIA shall pay KUBOTA the following dispatch fee and living expense for the period of service net of any Indonesia tax.

- **Dispatch fee**: Yen20,000/day/per capita
- **Living expense**: Yen10,000/day/per capita

Other conditions concerned with dispatch of KUBOTA's engineer(s) shall be according to the conditions specified in the Service Agreement supplemented to above mentioned AGREEMENT.

(F) The royalties payable for the use of tradename & trademark of KUBOTA shall be included in the royalties stipulated in (D) of this MEMORANDUM.

(G) This MEMORANDUM shall expire on the date when the new agreement which is under process of documentation becomes effective.
Considerando que el propietario es fabricante de productos según se definirán en lo sucesivo y el fabricante desea fabricar y vender tales productos, por tanto en consideración de las premisas y los convenios celebrados las partes han convenido lo siguiente:

Artículo 1. Definiciones. El término producto y productos según se usen significarán sólo tornos para pistón fabricados de acuerdo con los procedimientos del propietario pero sin incluir los pernos para pistón manufacturados de acuerdo con el proceso de extrusión del propietario.

Artículo 2. Licencia.

2-A. Propietario otorga al fabricante el derecho especial de licencia de fabricar los productos en México para su venta allí.

2-B. Propietario otorga al fabricante solicitud de fabricante el derecho y la licencia para incorporar en tales productos cualquier cambio modificación o mejora que se incorpore en los productos fabricados por el propietario en los Estados Unidos durante el término de este contrato o que en alguna otra forma se hayan aprobado por escrito por el propietario y conviene en que los derechos y licencias se otorgaran bajo las solicitudes de patente o patentes mexicanas que el propietario tenga sobre tales productos.

2-C. El propietario autoriza al fabricante usar el nombre y la marca B. N. en productos fabricados por el fabricante de acuerdo con este contrato. El propietario está presentando solicitudes para registrar dichas marcas y el nombre en México.
El fabricante conviene en otorgar y el fabricante conviene en aceptar tales documentos escritos según se requieran debidamente para consignar los derechos del fabricante y la licencia para usar tales marcas en México, D. F.. Los productos cuya licencia/s y derechos quedarán sujetos a la terminación en cualquier momento al recibo de aviso por escrito del propietario a lo cual tal derecho y licencia terminará inmediatamente.

El derecho de usar la marca se limitará a los productos fabricados por el fabricante y vendidos de acuerdo con este contrato para su uso en México.

2-D. El fabricante conviene en marcar los productos y los recipientes fabricados y usados por el fabricante el lugar y la forma aprobada por el propietario.

Artículo 3. Información y Asistencia Técnica

3-A. El propietario conviene en suministrar al fabricante la información técnica en forma de dibujos, especificaciones y otra información técnica sobre los productos para irse influyendo consejos y sugerencias sobre los procesos de fabricación sierra y de tiempo en tiempo están en uso corriente por el propietario en la fabricación de los productos y que puedan ser útiles al fabricante en sus operaciones autorizadas.

3-B. El propietario conviene y cuando se lo solicite el fabricante de tiempo en tiempo durante el término de este contrato, en proporcionar al fabricante, cuando sea razonable con los servicios de representantes técnicos competentes y expertos para que asistan al fabricante en relación con la fabricación e inspección proro y servicio de los productos. El fabricante pagará a tales representantes sus gastos, salario y gastos de viaje o viáticos desde su residencia hasta la planta del fabricante
o cualquier otro destino. El tiempo requerido y el número de viajes necesarios se convendrán entre el propietario y el fabricante.

3-C. El fabricante a su costa y con sujeción a todas las reglas y reglamentos del propietario, podrá enviar representantes técnicos a la planta del propietario en los Estados Unidos donde se fabrican los productos para exalar y estudiar los métodos empleados por el propietario en la fabricación, inspección proro y servicio de los productos.

3-D. El fabricante conviene en retener como confidencial dentro de los miembros necesarios de su propia organización, toda la información que le divulgue el propietario y conviene en no divulgar dicha información a terceros en México o en otras partes.

Artículo 4. Manufacturas del Fabricante

4-A. El fabricante conviene en hacer e inspeccionar los productos de acuerdo con los dibujos, especificaciones y extrucciones e información técnica proporcionada al fabricante por el propietario de acuerdo con este contrato y el fabricante conviene en entregar a sus clientes productos que sean sustancialmente iguales en cuanto a su calidad a productos similares hechos por el propietario.

4-B. El fabricante conviene en colocarse en una posición tal que pueda vender y fabricar los productos en las cantidades suficientes para abastecer el mercado en México.

4-C. El fabricante conviene en que será responsable de todas las reclamaciones derivadas de la venta y uso de los productos hechos por el fabricante y este conviene en indemnizar y llorar al propietario de cualquier obligación de reclamaciones o acciones legales instituidas incluyendo los gastos razonables de honorarios legales derivados de la fabricación de los productos por el fabricante o la venta y uso de los productos por este.
4-D. El fabricante conviene en permitir en cualquier momento que los representantes técnicos del propietario tengan libre la planta y operaciones del fabricante que se refieren a los productos de acuerdo con este contrato y permitir a tales representantes que hagan las investigaciones y prueba de los mismos según desee el propietario.

Artículo 5. Reembolsos

5-A. El fabricante conviene en pagar al propietario un honorario de ingeniería por la información técnica y asistencia suministrada de acuerdo con el artículo 3 equivalente, durante cada año durante el término de este contrato y sus extensiones o prórrogas.

5-B. En consideración al derecho de fabricar para vender que se le otorga por medio del presente, el fabricante conviene en pagar al propietario:

(i) Una regalía de licencia de 0.005 por cada producto fabricado y ajustado con pistones por el fabricante y (2) una regalía de 0.01 por producto de todos los productos fabricados para su venta por el fabricante a los que no se han colocado en pistones por el fabricante. El pago se hará de acuerdo con el párrafo 5-C.

5-C. El fabricante conviene en conservar registros y cuentas exactas de los productos fabricados bajo este contrato y enviar en formas ciertos al propietario dentro de los 30 días después de cada trimestre de calendario durante el término de este contrato sobre el número y tipo de los productos dentro del alcance de este contrato, fabricados durante el trimestre de calendario precedente. Las regalías se causarán a la fabricación de los productos. El fabricante conviene en pagar al propietario simultáneamente con el envío de los informes todas las regalías que deba
pagar al propietario. El fabricante conviene en pagar los honorarios de ingeniería por adelantado al principio de cada año durante el término de este contrato y sus prórrogas. Todas las regalías de acuerdo con este contrato deben pagarse serán libres de impuestos sobre la renta mexicana que se retengan las regalías de acuerdo con el contrato y según instrucciones del propietario. Todos los pagos de acuerdo con este contrato se harán al propietario en dólares americanos en Geneva, Illinois.

5-D. El propietario tendrá el derecho de inspeccionar y hacer auditorías en los libros del fabricante y en sus registros de acuerdo con este contrato en cualquier momento mediante aviso anticipado y hacer copias y extractos de los mismos y podrá designar empleados agentes o representantes para que hagan tales exámenes.

Artículo 6. Término

6-A. A menos que se termine previamente según se prevé en este contrato, el mismo podrá ser terminado en cualquier parte mediante aviso previo por escrito por 6 meses de anticipación.

6-B. El propietario y el fabricante tendrán derecho y a su opción podrán terminar este contrato mediante aviso por escrito dado a la otra parte si cuando ocurra cualquiera de los siguientes sucesos: (a) 6-B-1 Si la otra parte es insolvente en cualquier forma resuelve terminar sus negocios. 6-b-2 Si en cualquier de los términos, condiciones o disposiciones de este contrato son violadas por la otra parte y esa violación continúa por un periodo de 30 días contados después a partir de la fecha en que se de aviso por escrito a la parte que ha cometido tal violación.

6-C. Se conviene mutuamente, queda entendido que a la terminación del término de este contrato o en cualquier terminación previa según se provee aquí 6-c-1 todos los derechos y licencias concedidos de acuerdo
con este contrato cesarán inmediatamente y terminarán excepto que el fabricante podrá vender su inventario de productos terminados y continuará liberando al propietario de cualquier reclamación que surge de la venta y uso de los productos que haya fabricado. 6-c-2 El fabricante a solicitud del propietario destruirá o entregará al propietario sin cargo todos los dibujos o presentaciones u otros informes o copias presentadas por el propietario que tengan que ver con los productos a que se refiere el presente y fabricados de acuerdo con este contrato que estén en posición o bajo control del fabricante 6-c-3 excepto que separe lo que se dispone en el párrafo 6-c-1 el fabricante conviene en no usar el de el propietario como nombre comercial o la marca o ninguna otra marca comprendida por este contrato en ninguna forma.

Artículo 7. Disposiciones Adicionales

7-A. El fabricante conviene en que todas las disposiciones y mejoras en los productos hechos por los empleados quedarán inmediatamente notificados al propietario. El fabricante conviene en otorgar al propietario el derecho y la licencia de usar sin costo tales invenciones mejoras y modificaciones en la fabricación y venta de los productos del propietario. Tal derecho y licencia sobrevivirá a la terminación de este contrato.

7-B. El fabricante conviene en que no usará el nombre comercial o la marca o cualquier otra marca amparada por este contrato sobre cualquier artículo que no sea de los artículos autorizados según este contrato.

7-C. El fabricante podrá de tiempo en tiempo efectuar cambios en los materiales de construcción o especificaciones de los productos que caigan bajo este contrato si los productos fabricados de acuerdo con tales cambios son sustancialmente iguales en su calidad a productos similares fabricados por el propietario.
<table>
<thead>
<tr>
<th>Industry</th>
<th>Work time</th>
<th>Up to 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Beverages and breweries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textiles</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>Garments and garment accessories</td>
<td>...</td>
<td>1</td>
</tr>
<tr>
<td>Shoes</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Paper products</td>
<td>...</td>
<td>1</td>
</tr>
<tr>
<td>Chemical and petrochemicals</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Chemical products</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Petroleum products</td>
<td>2</td>
<td>...</td>
</tr>
<tr>
<td>Tyres</td>
<td>...</td>
<td>1</td>
</tr>
<tr>
<td>Construction materials</td>
<td>...</td>
<td>4</td>
</tr>
<tr>
<td>Metal products and equipment</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Electrical, industrial and household appliances</td>
<td>...</td>
<td>14</td>
</tr>
<tr>
<td>Vehicles and vehicle part assembly</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>93</td>
</tr>
<tr>
<td>(%)*</td>
<td>(8)</td>
<td>(37)</td>
</tr>
</tbody>
</table>

Note: * Excluding four incomplete contracts (three in motorcycle, one in fuel). Source: As for Table 23.
<table>
<thead>
<tr>
<th>Duration</th>
<th>From 5 - 10 years</th>
<th>Over 10 years</th>
<th>Indefinite or as long as technology is used</th>
<th>Total no. of contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>...</td>
<td>...</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>...</td>
<td>6</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>...</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>...</td>
<td>...</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>2</td>
<td>16</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>...</td>
<td>...</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>...</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>68</td>
<td>20</td>
<td>50</td>
<td>252</td>
</tr>
<tr>
<td></td>
<td>(27)</td>
<td>(8)</td>
<td>(20)</td>
<td>(100)</td>
</tr>
</tbody>
</table>

(From assembly and one in automobile assembly).
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Royalties and Technology Fees</th>
<th>Duration (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of net sales</td>
<td>% of gross sales</td>
</tr>
<tr>
<td>Electrical goods</td>
<td>0.38 - 12.5</td>
<td></td>
</tr>
<tr>
<td>Electrical industrial apparatus</td>
<td>1.5 - 2.0</td>
<td></td>
</tr>
<tr>
<td>Household appliances</td>
<td>0.5 - 5.0</td>
<td></td>
</tr>
<tr>
<td>Wet batteries</td>
<td>2.0 - 7.0</td>
<td></td>
</tr>
<tr>
<td>Vehicle assembly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automobile assembly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autopart assembly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycle assembly</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:  
Indt = indefinite duration  
RC = reimbursement of actual cost  
f = fixed sum.

Source: As for Table 23.
| Industry                        | % of Gross Sales Local | % of Gross Sales Foreign | % of Net Sales Local | % of Net Sales Foreign | Baht per Unit Local | Baht per Unit Foreign | Duration (years) | Local Sector | Foreign Sector |
|--------------------------------|------------------------|-------------------------|----------------------|------------------------|---------------------|----------------------|---------------------|--------------|----------------|----------------|
| Food                           | 1.0                    | 2.0                     | 14.0                 | 1                      | 0.5                 | 4.0                  | Indf               | 10           | 10             |
| Preserving of pineapples       |                        |                         |                      |                        |                     |                      | 1 - 7               |              | 1 - Indf       |
| Animal feed                    |                        |                         |                      |                        |                     |                      | 1 - 7               |              | 1 - Indf       |
| Textiles                       | 0.01                   | 3.55                    | 0.46                 | 7.5                    | no fees             | RC 2.0               | 10                 | 5            | 15             |
| Paper and paper products       | 2.0                    | 2.2                     | 2.9                  | 0                      |                     |                      | Indf               | 15           |                |
| Petrochemicals                 |                        |                         |                      |                        |                     |                      | 10                 |              | 5 - 15         |
| Chemical products              |                        |                         |                      |                        |                     |                      |                    |              |                |
| Paints                         |                        |                         | 2.0                  | 6.0                   | 1.0 - 6.0           |                      | 1 - 10              | 10           | 10 - 40        |
| Medicine & pharmaceutical      |                        |                         | 2.0                  | 6.0                   | 1.0 - 20.0          |                      | 10                 | 2 - Indf      |
| Tyres                          |                        |                         | 5.0                  | 2.5                   | 3.6                 |                      | 6                  | 6            | 10             |
| Metal products & equipment     | 0.45                   | 5.0                     | 0.37                 | 12.5                  |                     |                      | 1 - 10             | 2 - 10        |
| Electrical products            |                        |                         |                      |                        |                     |                      |                    |              |                |
| Household appliances            |                        |                         | 0.5                  | 3.0                   | 2.5 - 5.0           |                      | 3 - 10             | 5 - Indf      |
| Batteries                      |                        |                         | 3.0                  | 6.0                   | 2.0 - 7.0           |                      | 2 - 5               | 8 - 10        |
| Vehicle assembly               |                        |                         |                      |                        |                     |                      |                    |              |                |
| Automobile assembly            | 2.5                    | 5.0                     | 2.0                  | 6.0                   |                     |                      | 5 - 6               |              | 2 - 7          |
| Autopart assembly              |                        |                         | 1.0                  | 3.0                   | 1.5 - 4.5           |                      | 3 - 9               | 3 - 10        |
| Motorcycle assembly            |                        |                         |                      |                        |                     |                      | 156 - 270          | 220 - 260     |                |

Notes: As for Table 25.
Sources: As for Table 25.
8. ROYALTY SURVEY INTERVIEWS

<table>
<thead>
<tr>
<th>Name, Title, Association</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ministry of Trade and Industry</strong></td>
<td></td>
</tr>
<tr>
<td>Mr. Burkham Abdullah, Director, Industries Division</td>
<td></td>
</tr>
<tr>
<td>Mr. Fazaruddin Othman, Deputy Director</td>
<td></td>
</tr>
<tr>
<td>Mr. Tham Sing Khow, Assistant Deputy Director</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Malaysian Industrial Development Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Chua Eng Seng, Director, Engineering Industries Division</td>
</tr>
<tr>
<td>Mr. Chan of MIDA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ford</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Donald H. Collis, Managing Director Ford Motor Co. of Malaysia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Products: Japanese Fords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity: 12,000/year</td>
</tr>
</tbody>
</table>

Country: Malaysia

The Ministry requested review by UNIDO of royalty payments in the automobile industry in other developing countries, and recommendations for a policy for Malaysia.

Review was made of the purpose and goals of the project and the Government's plans.

Mr. Tham was the Government representative in all meetings.

Review of overall plans and goals for the development of increased vehicle local manufacturing.

CKD

No royalty for CKD. Principal's profits in CKD price. Less profit as deletion progresses. Direct billing for technical assistance possible, not practiced because of plant losses.

L/C

No charge made to date for L/C assistance. Drawings, material specifications and technical know-how furnished free of charge. It may change as more complicated components are undertaken.
Name, Title, Association

**Fiat**

Mr. Ho Tet Kheong, Manager, Group Auto Assembly Division
Mr. Tan Hock Soon, Manager, Group Legal Division
Dr. Mohan Appana, Projects and Research Executive

Products: Fiat: 2,000/year Pt. 1
Mitsubishi: 8,000/year Pt. 2

**Volvo**

Mr. Kaj Nielsen, Managing Director, Swedish, Motor Asm.

Products: Volvo (will do contract asm.)
Capacity: In excess of 10,000/year.
Current volume is 2,500 Volvos/year
Comment

CKD
Franchise holders who appoint CKD assemblers. No royalty charge. Principal profits in CKD price. No price breakdown, with insurance, shipping, etc. included. Government has asked for component price breakdown.

L/C
Royalty charge paid for manufacturing know-how. Royalty also paid for product development know-how (R+D, or research and development charge).

Feel they pay double royalty on "value added" basis which is a rising cost.

Propose royalty be based upon: a) CKD component cost, or b) deletion cost.

CKD
No royalty for CKD. Principal's profit is CKD price. No charge for CKD technical information.

L/C
Currently no charge for product design or technical information furnished. Royalty payments arrangements do exist in some other countries, and could be a future arrangement in Malaysia.

With a L/C programme not only will the price go up but product quality may drop. As CKD content gets smaller, how does principal make a profit to justify value of intangible and direct costs? Price control for L/C may be needed when monopoly exists, but what adjustment can be made for volume or quality variations?
Name, Title, Association

Cycle and Carriage (Mercedes Benz)

Mr. R.N.B. Pillay, Manager, L/C Mfgr.
Programme for Mercedes Benz
Mr. Peter Lim Yoke Cheong, Manager,
L/C Mfgr. Programme for Mitsubishi Div.

Products: Trucks, 2,000/year
Cars, 2,500/year

Mazda and Peugeot

Mr. Phng Hooi Siang, Finance Director,
Asia Motor Co.

Products: Mazda: 10,500/year
Peugeot
Comment

CKD

Franchise holder using contract CKD assemblers. No royalty fee charged to date.

L/C

No royalty charged to date. Mitsubishi normally charges a royalty for product design know-how.

Originally the L/C programme was ambitious and progressive because low volume and high quality standards require a long lead time. Currently little effort made to lead because L/C contains a cost and quality penalty.

Single supplier of L/C has no back-up for non-delivery except non-recoverable CKD penalty import. Single supplier does not make to various designs and quality standards.

Low volume assembler may be last product tooled and incur import penalty because of non-delivery by local manufacturers.

CKD

Franchise holder who imports CKD but requires the contract assembler to pay CKD royalty. Royalty is based upon formula CBU-CKD x 9% x volume. It covers both CKD and L/C know-how. (Note: with high L/C the fee increases.) Also, there is a CKD pack profit.

L/C

Discussions underway for the manufacture of horns from Taiwan. Manufacture in Taiwan wants a 3% royalty for know-how to make their own horn, based upon net selling prices.
<table>
<thead>
<tr>
<th>Name, Title, Association</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Datsun</strong></td>
<td>The Mazda horn design will be used for Peugeot (and others).</td>
</tr>
<tr>
<td>Mr. David K.S. Wong, Dr. Manager, Finance and Administration for Tan Chong Motor.</td>
<td>Government intervention in this negotiation has slowed down progress and Taiwan is now wishing to back out.</td>
</tr>
<tr>
<td>Mr. Steven W.L. Chen, Manager, Purchasing.</td>
<td>Deletion allowances for the horn is small: M $11.00 for Peugeot and M $5.00 for Mazda.</td>
</tr>
<tr>
<td><strong>Honda</strong></td>
<td><strong>CKD</strong></td>
</tr>
<tr>
<td>Mr. Wong Lum Kong, General Manager, Boon Siew.</td>
<td>Royalty payment of 3% of ex-factory price for deleted item proposed possible for future items, not in effect now.</td>
</tr>
<tr>
<td><strong>Product:</strong> Datsun: 32,000 in 1981</td>
<td>Is the cost of product and manufacturing know-how in the deletion allowance, and if so, would a royalty payment be paying double royalty?</td>
</tr>
<tr>
<td><strong>Honda</strong></td>
<td><strong>CKD</strong></td>
</tr>
<tr>
<td>Mr. Wong Lum Kong, General Manager, Boon Siew.</td>
<td>Franchise holder who use contract CKD assemblers. Both 2- and 4-wheel contracts are about the same. Assembly royalty is about 2-3% of CIF component price.</td>
</tr>
<tr>
<td><strong>Product:</strong> Honda 2-wheelers: 72,000/year Honda cars: 10,000/year</td>
<td><strong>L/C</strong></td>
</tr>
<tr>
<td>Deletion allowance is same as CKD component price. All local content for motorcycles is in-house (made by Boon Siew for a royalty of 2-3% of the local sales price).</td>
<td>Two wheel L/C is easier to do because of 1) much greater volume, 2) less frequent changes, and 3) simple design. Four wheelers require high volume for economy of scale. Even so, every design is different and change frequent. Honda questions if the benefits are worth the cost.</td>
</tr>
</tbody>
</table>
Malaysian Automotive Component
Parts Manufacturers (MACPMA)

Mr. Paul Low Seng Kuan, President
Mr. Peter Yeow Soo Hiang, Executive Secretary

(Note: Mr. Paul L.S. Kuan is also manager of the plant that makes safety glass for all CKD cars in Malaysia.)
L/C
Auto glass is made under royalty of 2% of net sales value. Contract is for 5 years with renewal possible upon Government review and approval.

MACPMA
Represents 100% of OEM in automotive field. To date most know-how information has been furnished free. Without mandatory regulation, no principle would approve local manufacture based upon technical reasons because of 1) high selling price, 2) smaller CKD profit. Unit or CKD component cost basis does not have the built-in inflation factor that royalty on net sales price has. Propose royalty decrease when volume increases.

Glass Manufacture
Cost is competitive but small deletion allowances cause vehicle price increases. Variations in specifications cause price increases. Full local license, vs. joint venture, permits the manufacturer to choose type of product and method of manufacture. This is good.
Singapore has no longer vehicle CKD or local content requirements. Discussions held reveal why CKD was introduced, what was made locally and why CKD was phased out.

Singapore Economic Development Board (EDB)

Mr. Yeo Seng Teck, Director, EDB
Dr. Lim Chuan Poh, Deputy Director, EDB
Mr. Gan Chong Cher, Head, Process Eng. and Consultancy Services, Automotive
Mr. Chan Kwee Kee, Sr., Industrial Officer, Automotive

CKD
No royalty payment on CKD, Principal's profit was in the cost of the CKD pack.

L/C
No Govt. voice in local manufacturers agreement. Those manufacturing plants already established to supply the aftermarket became OEM suppliers, if their quality and price was acceptable. Government took no part in L/C development.

Government had no control over L/C or CKD contracts.

Singapore Manufacturers Association (SMA)

Miss Judy Tan, Division Director, SMA
Mr. Han Kian Kwang, Executive Assistant, Research/Investments

The SMA aids manufactures by providing guidelines for contract negotiations but the final agreed price for technical know-how or payment of royalty must be reached between licensee and licensor only.

Royalties paid on sales have the advantage of payment only after sale. High initial royalty, when competition is moderate, may be unbearable later. Limit duration and have an eventual decrease in royalty. Cash payments at stated intervals should wait for production startup.

The businessmen involved, as licensee or licensor, should know better their business than the Government, and be allowed to reach their own agreements.
AMI (former) CKD Assembler

Mr. Brian Henry, General Manager, Sankyo International Auto Airconditioner Manufacturer. Former Plant Manager/General Manager of a CKD contract assembly plant in Singapore and later in Thailand.

Developer of the BTV manufacturing programme in Indonesia for General Motors.

Capital Motors (former) Opel CKD Assembler

Mr. Rodney Seow Kok Ming, Plant Manager; (former) Manager of BTV manufacturing programme for S.E. Asia, GMOC., Managing Director, Bang Chan Motors, Bangkok, Manager, Manufacturing Activities, S.E.A., GMODC.

Mr. Goh Ho Soon, Regional Sales Manager of IMOPC (Isuzu)

Mr. T.E. Rickets, (former) Sales Manager, Capital Motors.

Cycle and Carrage

Mr. Andrew A. Webster, Business Advisor to Cycle and Carrage Group. Formerly Chairman and Managing Director of Motor Investments, owned by INCHCAPE of London and local owners of car dealership.
Comment

CKD
No royalty on CKD. Principal's profit in CKD price for all makes of vehicles. No charge for assembly know-how.

L/C
Tires, batteries, paint and chemical cleaners only. Purchased from manufacturers with earlier established plants for aftermarket needs. L/C technical know-how and Principal's profit margin established by mutual agreement long before CKD introduced.

CKD
No royalty for CKD, Principal's profit in CKD markup.

L/C
No mandatory local content. Tyres, batteries, paint, sealers and cleaning chemicals purchased locally because of duty advantages. Limited CKD approved to 2-3 makes in each size. Tyre manufacturers for OEM went out of business when CKD stopped. Otherwise manpower was easily absorbed and CKD plants put to a different use.

New car registrations in late "60s" about 12,000/year. Duty rates set to encourage CKD because labour intensive industry was wanted then. High technology industry wanted now, so CKD preferential duty lapsed in late 1970's.

Mercedes at Cycle and Carrage assembled until 1980. CBU Japanese cars competed with CKD even with a preferential duty rate handicap.
Garuda Diesel (Bedford Truck CKD)

Mr. Moeljono Boentaran, President Director, P.T. Kubota Java, Maker of Marine Engines; President, P.T. Linqga Wastu Jaya - Manufacturer of land tractors; President, Gapura Intramotor - Isuya Truck CKD Assembler/Manufacturer of parts.

Honda Motorcycle

Mr. Ridwan Gunawan, Operations Director, Federal Motor, Assemblers and Manufacturers of Honda motorcycle.
Mr. Andy Hendradi, Production Manager of Federal Motor.
Country: Indonesia

**CKD**
The Government controls CKD activity by granting CKD licenses. The 23 CKD car plants are now in 5 groups and are asked to combine designs for L/C (i.e. springs). Commercial vehicle goal is 90% L/C by 1985. Free market forces control royalty or other profit markups.

**L/C**
There can be a know-how royalty payment plus a product design royalty. No government control over contract or profit markup. Government is concerned about tax on profits and has a special tax, called PDBR tax, to collect their share of interest, dividends and royalty tax. They assume profit is being made, and collect PDBR tax on selling price of the product.

**CKD**
Produce 300,000/ycar, 40% of the market. Federal Motors is a joint venture, 51% held by Honda. Pay a 1% CKD on sales price for CKD. Do not like, prefer to pay 1% of CKD pack cost. No component cost breakdown, deletion allowance is small. Local costs for L/C rise 100% to 300% of allowance.

**L/C**
Pay royalty of 1% of sales, plus direct billing for technical help. No payment for design know-how because they manufacture for Honda only. No manufacture for others because competition distrusts each other.
Name, Title, Association

Dana

Mr. Sugijo, President, Ultana manufacturers of automotive parts for Dana, an independent supplier
Mr. R.L. Pelupessy, General Manager, Ultana Leaf Spring Manufacturer for Toyota and Dihatsu.

Government

Mr. Suhartoyo, Chairman, the Investment Co-ordinating Board (BKPM)
Mr. F.M. Iqbal, SIDPA for UNIDO in Indonesia
Mr. Pirkka Aula, Jr. Professional Officer, UNIDO in Indonesia

Bureau of Planning

Mr. Mohammad Toyib, Director General for Basic Metal Industries; Chief, Bureau of Planning.
Comment

CKD
When Mr. Pelupessy worked for Multiframe Motors, assemblers of Peugeot and Renault, there was no CKD royalty payment.

L/C
Was Dana Licensee. Changed to licensee of CHUO, the Japanese supplier of springs to Toyota. Royalty payments of 2% of net sales for 5 years. Will probably renegotiate then. Also paid startup sum and for technical help get billed directly.

CKD
Confirms Government has no control over CKD royalty or other payments and do not know what agreements are made. They control CKD by granting licenses. No mandatory deletions for cars, but a 90% L/C goal by 1985 for commercial vehicles which are 85% of the vehicle market (4 wheel). May be voluntary use of L/C in cars to avoid 300% duty tax/markup of CKD parts.

L/C
Have mandatory deletion list, not a percentage. Deletion requirements are tied to volume, not time.

Developed CKD photo album for Customs. Issued decree 168 on commercial deletion programme. Penalty 100-150% duty. No sample contracts. Truck 1985 target is 85% L/C. No change in CKD cars.
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<th>Name, Title, Association</th>
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<tr>
<td><strong>Investment Co-ordination Board</strong></td>
<td>Present Government policy, now law, is to limit royalty agreements to 2% of sales for a period not to exceed 5 years. A booklet is published yearly, &quot;A Guide for Investors&quot;. The 2% limit has problems, high technology may demand more. Some actions require less. No control on sales L/C price. Increased L/C now under study. No L/C for cars. Prefer independent L/C manufactures to in-house suppliers.</td>
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<td>Mr. Mohamad Anwar Ibrahim, Deputy Chairman, Planning and Control, Investment Co-ordination Board.</td>
<td></td>
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<tr>
<td><strong>Legal</strong></td>
<td>All proposals are reviewed by the legal staff to determine 1) is it of benefit to the country, and 2) is it legal, conforming to local law. Royalties are generally 2-2 1/2% of sales.</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>The Government has no control over royalties or other aspects of contracts. Cars are now at 45% L/C. They will use a mandatory system for L/C above 45%. Because there are 34 makes assembled, and sales of only 25,000 estimated for 1982, it may be some time before higher L/C is achieved.</td>
</tr>
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<td>Mr. Samnao Chulkarat, Director, Industrial Economics and Planning Di. Ministry of Industry.</td>
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**Country: Thailand**
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<tr>
<td><strong>Government</strong></td>
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<tr>
<td>Dr. Mingsarn Kaosa-ard, Transnational Corporations Affair Officer, Joint ESCAP/UNCTC.</td>
<td>Provided data from her book &quot;Technology Transfer, A Case Study&quot;. Excerpts: Duration of CKD and L/C contracts were normally for 5 years and renegotiable. Royalty percentage ranged from 1-4.5% for L/C and 2.5-6% for CKD, with foreign-owned enterprises being larger.</td>
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<td><strong>Board of Investment</strong></td>
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<td>Mr. Chira Panupong, Deputy Secretary-General, BOI.</td>
<td>No government involvement in contracts. BOI is empowered to grant tax exemption to attract investment. Concerning royalty, want to keep profits in the country, but still want to attract foreign investment.</td>
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<td><strong>Economic Planning</strong></td>
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<tr>
<td>Mr. Chakramon Phasukvanich, Chief, Industrial Planning Sector, National Economic and Social Development Board (NESDB) Mr. Santi Bangor, Automotive Specialist NESDB</td>
<td>Have stopped L/C at 45% because of the high cost penalty, over 360%. Most L/C is only assembly, little value added and minimum economic benefit. Will now follow compulsory deletion programme. Policy of high L/C was followed to limit imports of this luxury item, but was wrong and will change.</td>
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<td><strong>Automobile Association</strong></td>
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<tr>
<td>Mr. Al-Ram Kotikula, Executive Director, Assoc. of Thai Industries. Mr. Kavee Vasuvat, President, Automobile Assembly Club; Vice President, Siam Motors Co. Ltd. Mr. Wivat Praepringam, President, Auto Parts Industries Club, represented by Mr. Trakoon Jirasuradet, Foreign Dept. Manager</td>
<td>Provided appended data on calculation of royalty for the automotive CKD and L/C industry. Provided existing and proposed new CKD royalty contracts. CKD royalties are based upon deletions.</td>
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<tr>
<td>Name, Title, Association</td>
<td>Comment</td>
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<tr>
<td>Economic and Social Board</td>
<td>Stopped L/C increase because of cost penalty, now averages 360% markup. Most L/C is only assembly with minimum value added, little economic benefit and a high price. High L/C programme for cars is the wrong policy, but it started as a discouragement for importing this luxury item.</td>
</tr>
<tr>
<td>Asoke Motors (Holden CKD Cars)</td>
<td>There is little profit left in the automotive business and vehicle quality is dropping as the L/C requirements keep increasing. General Motors offered to set up a wiring harness plant for export manufacture if given CKD import credit (as in the Philippines) but was turned down by the Thai Government.</td>
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<tr>
<td>Royalty rates have been provided to Vienna. L/C royalties range from 1-5% of net sales, depending on degree of technology involved. Average is 2-3%. If submitted rates are too high and licensor lowers to get licence approval, profits will be remitted in some other form.</td>
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<tr>
<td>Board of Investment</td>
<td>The BOI regulates L/C and CKD with issue of licences, mandatory deletion lists, incentives and per cent L/C regulations. The L/C in 1982 is 45%. Royalty is permitted on deletion price, per cent varies with amount of technology transfer, up to 5%. Some policy for all manufacturers/assemblers.</td>
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Country: Philippines
Name, Title, Association

Canlubang (Mitsubishi)
Mr. Harald H. Hoffman, Exec. V.P. and General Manager of Canlubang (Mitsubishi), President, Automotive Manufacturers Institute.
Mr. J.P. Nagayo, General Affairs Manager, Canlubang

General Motors
Mr. Santiago Y. Ricardo, Works Manager, G.M. Filipinas Inc. (vehicle assembly plant).
Mr. Ramon R. Guevara, Purchasing Manager, G.M. Filipinas (all plants).

Yutivo (Chevrolet)
Mr. Jimmy Yu, Former Plant Manager of Yutivo, G.M. (car assembly plant).

General Motors
Mr. William Mills, V.P. Finance, G.M. Filipinas
Mr. Herbert L. Telshaw, Managing Director of G.M.P.
Government averaged costs of car components to get a per cent L/C for each, and gave credit accordingly. Royalty approval percentage is set for any contract by the government, with a 5% maximum. No CKD royalty. Wholly owned subsidiaries pay no royalties.

Most major L/C manufacturers are wholly owned and do not have licensee/licensor contracts. Many manufacturers of minor technical know-how parts do not have to pay royalties.

Outlined general status of car industry, government programmes people to talk to.

G.M. as a wholly owned subsidiary has no L/C source contract nor pays royalty. All contracts are reviewed by the Technical Transfer Board of the Government. Royalty ranges 1-5% max., average is 2-3%, based upon technical know-how transfer. The CKD component cost list must be certified by the council in the source country.
Name, Title, Association

Ford
Mr. Robert Shockman, V.P. Finance, Ford, for
Mr. John Sagivic, Managing Director, Ford.

UE (Component manufacturer)
Mr. George Co Lim M.D., Vice President
UE Automotive Manufacturing Inc.
Mr. Rolando S. Ramento, Plant Manager,
UE Automotive Mfg. Inc. (lead and
coil springs, wheels, radiators).

Government
Mr. Humberto Mosconi, Director General
of Analysis and Secretary of Programmes
and Budget
Mr. Juan J. Karriva, Asst. Director
General of Analysis
Comment

L/C problems found in variation in listed cost of items, i.e.: Gas Tank=Ford Peso 3,500, G.M. 3,450, Mitsubishi over 7,000 and Toyota only 400. Thus Japanese raised or lowered price according to their plans to delete or not. There is a 35% withholding tax on royalties. Royalties percentages apply equally to all assemblers.

For net sales Gov. permits 3% maximum royalty, 5% is on deletion price. Aftermarket suppliers must set on net sales as there may not be a deletion price. They use Japanese for technical know-how for convenience when supplying local Japanese cars. (Refused to make available sample contract sections).

Country: Mexico

Reviewed detailed history of CKD and L/C in Mexico. Feels there are too many CKD plants (seven) for their volume of 400,000 cars per year. Political pressures make it hard to reduce "Plants specialize more in lobbying than in production". No Government controlled selling price since 1977. Car markup is about 100% over free market price. One CKD price, at 50% L/C, is more than the retail sales price in France.
Government goal is to increase technical know-how, especially of R and D. Must have goals met to get L/C approved.

Although old CKD plants are wholly owned, subsidiaries new L/C applications must be 60% local capital. There is no control on remittance of CKD profits, but royalty range is 0.3 - 3% with 2.5% of net sales average. Case by case review is made of over 12,000 agreements.

CKD duty varies classification but averages near 20%.

No Government interference in profit remittance. All in-house component manufacture profits remitted as consolidated profit. For L/C fabrication as a minority partner would charge royalty and technical know-how fees for specifications, manpower, design, etc.

Country: Costa Rica
**Ecosa (Toyota CKD)**

Mr. Pedro A. Cortez, General Manager, Ecosa, Assembler of Toyota cars, trucks and jeeps, plus other contract assembly.
Capacity 4/hr.

**Government**

Ms. Maria Teresa Elizondo, Chief, Dept. of Industrial Advisory, Ministry of Industry, Economy and Trade

**Coopesa**

Mr. George Ciudad Sanchez, Director of Projects, Coopesa, Bus Body Manufacturers and CKD Contract Assemblers.
Mr. Hugo Castro, Consultant, Coopesa

**College Professor (author)**

Mr. Juan Diego Trejos, Economics Professor, University of Costa Rica. Author of "Economic Study of Assembly Companies of Motor Vehicles in Costa Rica".

**Ministry of Finance**

Mr. Rafael Angel Brenes, Chief, Special Studies, Dept. of Fiscal Audit, Ministry of Finance.

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**Comment**

Cost of CBU is about 85% more than CKD. Mandatory L/C list is small. All CKD plants are shut down or will be soon, because of poor sales. Source countries are not sending CKD. Assembled CKD without taxes runs 30% above CBU price. No royalty for CKD.

CKD plants take in-factory cost plus 18-26% markup, depending on car size, for factory selling price. Efficient plants make more money. No restriction or profit remittance. Dealers add 28% markup for retail sales price. Royalty is paid by tire manufacturer, value not known.

No CKD royalty. Royalty for L/C allowed without Government influence. Many regulations in effect are not enforced, such as CKD duty.

Previous Government wished to abolish CKD, assemblers fought it, both presenting studies to support. This independent study was made, listing advantages to both sides. (See the book for details).

No Government influence on any CKD or L/C contract. Ministry of Industry must review non-financial sections of contract if concessions are requested (i.e. tax, import duty, etc.). Government worries profits are mislabeled for lower tax payment.
Name, Title, Association

Promotion and Investment Board

Mr. Guillermo Vazquez, Director, Dept. of Promotion and Investment.

Central Bank

Mr. Rodrigo Chacon Corella, Chief, Foreign Investments, Central Bank.

Mr. Francisco Chacon Pacheco, Director, Dept. of Credit and Investment, Central Bank of Costa Rica.

Mr. Juan Carvajal, Jr. Asst. Director, Dept. of International Transactions, Central Bank.

Gerber

Mr. Jorge Mora Brenes, General Administration and Finance, Gerber Baby Products.
Comment

There are 2 labour intensive export zones, one on each coast. Wages are US dollars .40/hr. No Government control of remittances except to provide exchange. Usual incentives for L/C. Advises CKD is not good in Costa Rica because of the limited market. Proposes only investment for the export market.

No Government control on type or size of remittance. Must show 1) tax has been paid, 2) proof of the size of royalty. The range is 2-10% with 5% an average.

There is no control by the Costa Rican Government over the type or amount of remittances made outside the country.
Basic Calculation for Royalty on Automotive Industry

I. Royalty per Unit = X% of the sum of FOB Deletion Allowance for those Deleted Parts excluding Tires, Tubes and Batteries

II. Royalty per Unit = X% of the sum of FOB Deletion Allowance for those Deleted Parts.

III. Royalty per Unit = Following Data:

<table>
<thead>
<tr>
<th>Z</th>
<th>Royalty per Unit</th>
<th>US $</th>
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<tbody>
<tr>
<td>up to 24%</td>
<td>2,000</td>
<td>9.09</td>
</tr>
<tr>
<td>25% - 49%</td>
<td>4,000</td>
<td>18.18</td>
</tr>
<tr>
<td>50% - 74%</td>
<td>6,000</td>
<td>27.27</td>
</tr>
<tr>
<td>75% - up</td>
<td>8,000</td>
<td>36.36</td>
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</table>

Note: Z = Local Value Added = \( \frac{FOB_{CBU} - FOB \text{ of imported}}{FOB \text{ of CBU}} \)

IV. Royalty per Unit = X% (FOB FULL PACK CKD - FOB IMPORTED CKD PARTS)

V. Royalty per Unit = X% of sum of Licence Ex-Factory Price for each complete Local Parts.

Note: Less Packing, Freight, Insurance and Sales Export or Commodity Taxes, if there is any.

VI. Technical Fees per Unit = X% on Cash Selling Price

Technical Fees paid by = Assembler which is not Distributor

But CKD imported by Distributor

VII. Royalty per Unit = X% (Ex-Factory price of Complete Unit - (Ex-Factory price of Cooler + Ex-Factory price of imported part)

VIII. Royalty per Unit = X% (Wholesales Price - (Imported Parts (Cost + Local Parts Cost + Taxes +Licencee's Cost).