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Galvanised Iron Sheet Industry in Indonesia .

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by

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Government of Indonesia
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This report is prepared for the Ministry of Industry, Government of Indonesia. However, the author is responsible for the views expressed in the report.

Introduction

During the past one year, several industries in Indonesia have been characterised by over-capacity, over-production, stock piling and low capacity utilization. In such a situation, the industries naturally turn to the Government for help. The Government, while sympathetic to the local industry, is more interested in locating the factors that have contributed to the development of this situation. The policies hitherto followed have already been quite favourable to the local industries and in spite of such a preferred treatment the current situation has developed, it is necessary to examine the basic causes responsible for the distress of many industries and to see how far the policies need to be modified to correct the present situation. With this objective in mind, the Secretary - General in the Ministry of Industry suggested that I should examine the galvanised iron sheet industry which is typical in the group of metal-based industries.

To carry out this investigation, most of the field work was done during the period July - October 1975 and hence information contained in this report relates to that period. However, wherever recent data were available, the same have been incorporated. We have examined in detail the various structural aspects of the industry viz capacity, output, quality, prices, costs and returns. Information on some of these aspects was easy to obtain but that on several crucial elements could not be directly collected due to the reluctance of the firms. Hence we had to collect or estimate such information from direct as well as indirect sources.

However, the main emphasis of the report has been to examine how the various policy instruments have affected the development of this industry. We have also suggested certain modifications necessary to direct the industrial development on economically sound lines which is the avowed objective of the Government.

In the preparation of this report I had the cooperation of several officials and non-officials. In particular, my special thanks are due to Mr. Ahmad Slamet, Secretary-General and Mr. Anwar Ibrahim, Chief of Bureau of Planning and Development, in the Ministry of Industry. I am also thankful to officials of the Director-General, Metals and Machinery for providing useful information. Finally I must thank various representatives of firms and numerous dealers for extending the necessary cooperation.

P. S. SHARMA

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1. In pursuance of the objective of promoting import substitution industries, the Government of Indonesia has followed the policy of encouraging the establishment of several industries based on import of raw materials, at least in the first phase of development. The Galvanized Iron Sheet is one such industry that got established quite early under this policy. The policy instruments adopted to achieve the above objective have been largely the following :

- a. Import of G.I. Sheet was completely banned in 1970 ;
- b. Investment in the industry, both foreign and domestic, was closed in 1972.

2. In consequence, the industry developed fast. The current installed capacity is much in excess of the local demand. This has created a large idle capacity in the industry. The viewpoint of the industry is that its main problem is overproduction, some units are working below capacity and hence incurring losses.

This report presents facts about the current state of the industry and examines the effectiveness of the policy instruments in achieving the plan objectives. We would also suggest measures that could be taken to direct the development of this industry on sound lines but more importantly suggest what should be done to prevent such situations developing in other industries in the years to come.

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Introduction

3. In August 1970, the import of G.I. sheets was banned. A few months later, the import of Iron Sheet Roofing² was also banned to prevent clandestine imports under different name. Actually, the two products are similar. The import ban was imposed primarily to protect the domestic industry against foreign competition. In all, a total of 22 licenses were issued. Considering that adequate licensing capacity had been sanctioned, the Government closed this industry for further investment in 1972.

Importance of G.I. Sheet Industry

4. Among metal industries set up in Indonesia, the G.I. sheet industry is quite important as seen from the following output data :

| Production in 1974 - 1975 | |
|---------------------------|---------|
| | MT |
| Iron Bars | 115,000 |
| Steel Pipes | 94,000 |
| G.I. Sheet | 70,000 |
| Steel Wires | 30,000 |

Source : Ministry of Industry

Actually the G.I. sheet industry developed much earlier than the other metal industries and till 1970 - 71 the output of G.I. sheet was highest among such industries (Table 1). Hence the findings about this industry are likely to be relevant to the other metal industries as well.

1. Menteri Perdagangan No. 135/Kp/VIII/1970.
2. Menteri Perdagangan No. 29/KP/II/1971.

Capacity of G.I. Sheet Industry.

5. At present (Sept. 1975), there are 11 plants in production, 5 joint ventures and 6 domestic units. Additionally, another domestic plant currently under construction is likely to go in production by the end of this year. The total annual installed capacity¹ of all these units is estimated at over 250,000 MT, on a three shift basis. Table 2.
6. However, the total licenses approved by the Government were 22 in number with installed capacity of about 350,000 MT. Table 3. The remaining 10 licenses have expired since these have not been renewed. Any way the licensees have no intention of implementing the licenses in view of the over-capacity already installed. A close look at the licenses granted (Table 3) reveals that in Indonesia too (like many other countries where licensing system prevails) certain firms have attempted to pre-empt the capacity by securing several licenses in the same name.
7. A word may be said about the system of licensing (known as investment approvals) in Indonesia. Any entrepreneur desiring to set up an industry has to secure an investment license from the Capital Investment Coordination Board (PKPI). This system is to ensure that the manufacturing capacity in any industry or for any product does not exceed the anticipated home demand (exports not being considered feasible at this stage for several products). This system is supposed to prevent diversion of investible

1. Capacity is related to the thickness of the sheet. The same machinery will produce low output of thick sheets and large volume of thin sheets. Actual output normally consists of sheets of varying sizes of thickness.

resources in saturated industries, at the same time ensuring adequate capacity build-up to meet the local needs. A further advantage (in favour of this system) could also be claimed that by issuing several licenses competition could be ensured there by preventing monopolistic conditions. However, for the system to be effective in realising all these benefits, certain preconditions need to be fulfilled. For instance, the Government (BKPM or the concerned office of the Ministry) should have at least broad idea about the domestic demand current as well as that for the next few years.

This may perhaps be possible for a few major products but it is rather difficult to have such estimates for innumerable consumer products or their parts particularly under the present situation when information about the major statistical variables for estimating demand is grossly inadequate. During our study of the Galvanised Iron Sheet Industry we found that the concerned office had little idea about the demand and hence the investment applicants were asked to submit their own demand estimates. In consequence, for the current domestic annual demand of 70 to 100 thousand MT, licenses were issued for 350,000 MT capacity and the actual capacity already installed is 250,000 MT. Thus it could be said that the situation is just the opposite of what was intended to be achieved by the licensing system. Further, investments have been misallocated and the supply far exceeds the demand. There is in evidence a tendency on the part of the producers to curtail production to match supply with demand. This is in contrast to the spirit of competition which should have encouraged the quality improvement and/or price reduction.

Actual Production

1. The production of C.I. sheets increased fast from 6,650 MT in 1968 to 66,600 MT in 1971 - 1972 and thereafter rose slowly having stabilised at 70,000 MT during the last three years. Table 1.

This is partly due to the fact that this capacity is more than the current domestic demand and also due to the closure of the industry for further investment in 1972.

2. These production figures are obtained from the Ministry of Industry. Since these figures are repeated at 70,000 MT for the last two years, these appear to be very broad estimates rather than actual production statistics. During our visit to ten units (out of 11 in production), we found that there was great variance between monthly production figures¹ and capacity from factory to factory. Some units worked full three shifts while others worked two or only one shift. This was based on market situation and popularity of the products of each factory. We found that in July 1975, actual production for 11 factories was about 10,000 MT. Table 2. If July figures are taken to be normal, the annual production would amount to nearly 120,000 MT.

1. Monthly figures for each could also vary due to repairs, breakdown, shortage of raw material, demand, etc.

This is perhaps overestimate. The actual annual output may be in between these two figures, say in the range of 90 - 100 thousand MT.

The best way to have reliable production data is to regularly get monthly statistics from each unit and get these data centrally tabulated. The current arrangement is rather inadequate for the collection of such information. Even the Association¹ of G.I. sheet producers does not have these data.

10. Another way to test the accuracy of these data is to compare the output with imports of raw materials. For G.I. sheet industry, the main raw material is cold rolled sheet. The major consumers of cold rolled sheet are the G.I. sheet factories but other firms making products such as automobile bodies and metal furniture also use the cold rolled sheets. Relevant figures obtained from the Steel Federation of Japan about Indonesian imports of cold rolled sheet/coil are as follows :

| | 1973 | 1974 |
|-------------------------|---------|---------|
| Total imports (MT) | 152,200 | 122,200 |
| Imports from Japan (MT) | 147,600 | 119,900 |

The figures are in line with the change in the market situation of G.I. sheets in Indonesia from 1973 to 1974. In 1974 the demand for G.I. sheets had declined which led to the curtailment of production in that year. This is well reflected in the above import

1. Association of Galvanised Iron Sheet Producers (GAPSI).

figures. However, the production data supplied by the Ministry at the same level (70,000 MT) in both the years does not reflect the correct situation.

11. The final product coming out of the factory is in two forms, corrugated sheet and plain sheet. The product mix varies from factory to factory and month to month depending on the demand at a given time. Roughly 70 per cent of the sheets are corrugated and 30 per cent plain. Corrugated sheets are used for roofing (say 90 per cent) and fencing. Plain sheets are used for water tanks, containers, utensils, lamps, etc. There is heavy preference for corrugated sheets for roofing purposes all over the country except in Java¹. This is partly because in Java tiles are cheaper than sheets and partly due to customary preference for tiles in Java.

Size of Sheets

12. Width : Java, the factories normally produce sheets 3 feet wide, while outside Java common sizes are 3 and 2.5 feet with heavy preference for the latter.
13. Length : Most of the sheets produced are 6 feet but some factories also make longer sheets of 7, 8 and 9 feet depending on specific needs of special customers.

¹. The clay in Java is suitable for tiles but it is not that good in other islands. In Sumatera, there is a belief that people will not like to live in a house covered by clay (it being considered synonymous with burial).

14. Thickness : Thickness of a sheet is judged in terms of gauge.

Most of the factories use BWG (Birmingham Wire Gauge) while factories in Medan also use USG (US. Gauge) particularly for thin sheets.

According to provisions of license, the local units can produce C.I. sheets in gauge range mentioned in Form B. They are not allowed to produce gauges beyond these limits, normally upto 34 gauge. However, some firms produce sheets of 35 gauge (and some even 37) and these are freely available in the market. The actual production by gauge differs from factory to factory and even for each factory from time to time depending on the demand. In general, the production pattern is on these lines: (a) In Java, factories produce thick sheets, 28 to 34 BWG. A few factories also produce 24 and 26 BWG. However, the most popular size is 34 BWG. (b) In Sumatra and other islands, the tendency is to produce relatively thin sheets¹.

15. Certain observations about thickness may be made at this point.

The demand for BWG 34 is mainly due to its low price. It is well known that thin sheets are weak and hence don't last long but due to their low price there is heavy preference for their use in house roofing. Very thin sheets are considered poor in quality and that is why their production is disallowed or discouraged in many countries such as Malaysia and Singapore.

1. During the course of our field tour, we learnt that sheets as thin as USG 41 and 42 are produced in Sumatra.

Absence of any quality control or of fixation of standards has led to several malpractices by the producers. Certain firms are producing very thin sheets to capture larger share of the market in far off places. Sheets are sold as of certain sizes though in fact these are of lower size (in length and thickness).

Quality

16. Apart from thickness of the sheet, the other indicator of the quality is galvanising itself. This aspect of the quality is determined by the process of galvanising and the thickness of coating. In Indonesia, all the plants use the hot dip method of galvanising. This process is not considered very good and the new trend is towards continuous galvanising process. The hot dip method does not ensure uniform coating over the entire sheet. The thickness is more on the ends of the sheet and less in the middle. The plants in Indonesia (except one) are imported from Japan and it is learnt that these (all or most of these) are discarded plants from Japan. It would not be disadvantageous to Indonesia if such plants are brought here at this early stage of industrial development as old or discarded plants. But since these plants have been imported as new ones it is presumed that these have been priced as such. In this situation, Indonesia has suffered on two fronts : The quality of the products is poor and the price of the final product becomes high.

17. As regards the thickness of coating, there are standard specifications provided by Japanese exporters (of raw material and/or machinery).

The local manufacturers are supposed to use these standards. See Tables 4 and 5. For example, on a sheet (31 to 34 BWC), the zinc coating should be 0.6 oz per square foot.

Apart from unevenness of coating as stated above, it is learnt that the coating by several firms is much below the specified standard.

In many cases, it is said to be as low as 0.3 oz per square foot.

Here again, in the absence of regulation of quality standards the widespread practice has been to produce low quality sheets.

18. There are two ways of checking the quality of the sheets produced.

One is to get the sample sheets tested in a laboratory with regard to thickness of sheet and thickness of zinc coating. Until now, standards for G.I. sheets have not been fixed in Indonesia.

The other way is to test the reaction of consumers about their experience of the use of sheets. The zinc coating is supposed to make the sheets rust-resistant. An ungalvanised sheet, when exposed to rain, may rust soon which may reduce its life. On the other hand, a properly galvanised sheet of thick gauge (say 24 to 26 BWC) can stand rain well and may last 20 to 30 years. During our fieldtrips, we contacted numerous house owners having used G.I. sheets for roofing for varying lengths of time. The general pattern of observation emerging from such interviews was that old G.I. sheets (mostly imported) had lasted 20 to 30 years¹.

1. Imported sheets are thicker than the locally produced ones.

In these cases the rusting had started after 7 to 10 years¹ use.
 But in case of new sheets (mostly made in Indonesia), rusting had started after 3 to 5 years. Thus the direct benefit of galvanising may last for 5 - 10 years while the sheet itself may last for 15 to 20 years¹.
 As such, it appears that the benefit of galvanising is rather limited.

Imports

19. As mentioned above, the import of G.I. sheet was banned in 1970. However, exemptions are allowed for imports under project aid, Government purchases and new investments (both domestic and foreign) on the ground that their quality requirements are of high standard and the local products do not come up to these standards. Actual imports during the last two years were as follows

| | Gross Weight M.T. | C.I.F. value 000 US. \$. | Average value per MT. \$ |
|------|----------------------|-----------------------------|--------------------------------|
| 1973 | 5,444 | 1031 | 189 |
| 1974 | 2,531 | 1320 | 525 |

Source : EPS (B.T.N. 73135000)

1. Depending on thickness.

These imports are very small in comparison to the total market needs and hence offer no competition to the local industry.

Raw Materials

20. The main raw material is cold rolled sheet/coil. Coil is slightly cheaper than sheet (by about US.\$ 5 per MM²) and hence preferred if the factory has the shearing machine. Most of the factories have this facility. Almost all the C.I. sheet firms in Indonesia have connections with Japanese trading or manufacturing firms and rely solely on these fixed channels for import of cold rolled sheets. These firms have licenses to import the cold rolled sheets and hence don't buy them locally. The local importing firms import sheets mostly for sale to non-C.I. sheet firms. Another important raw material is zinc, largely imported from Japan and Australia. Other raw materials required in small quantity are lead, ammonia chloride, hydro chloride acid, sulfuric acid, sulfur, tin, alloy, etc.

Import Duties

21. There is an import duty of 40 per cent (on CIF value) on G.I. Sheet and another PPh tax 5 per cent. However, since there is a complete ban on imports of G.I. sheets, these duties are not operative. The import duty on cold rolled sheet/coil is 10 per cent on CIF value and another PPh at 5 per cent¹. PPh is calculated on CIF plus import duty. Hence the incidence of both duties amounts to 15.5 per cent on the CIF price².

1. PPh is refundable if the firm is under tax holiday.

2. Actual calculation is as follows :

| | | |
|---------------------------------|-------|----------------|
| CIF (Harga Pabrik) | Rp. | 100 |
| Import duty (Bea masuk) 10 p.c. | | <u>10</u> |
| | | 110 |
| PPh formula | | |
| H.E. and R.M. | Rp. | 110.00 |
| P.L. (Marga Laba) 5% | | <u>5.5</u> |
| | | 115.5 |
| PPh 5 per cent on 115.5 | | <u>5.775</u> |
| | Total | <u>115.775</u> |

Thus tax incidence is 15.775 per cent on CIF price.

Check Prices

22. In Indonesia, there is a practice of fixing check prices on all imports by the customs authorities to prevent underinvoicing. Normally this is done by the central office of the Custom Department. However, in case of cold rolled sheets the import prices have been fluctuating widely over the past several months (since the beginning of 1974). Hence the central office has stopped issuing check prices and has authorised the customs officials at the ports to scrutinise the import documents carefully and fix check prices on the spot with discretion to change them as the prices vary. To ensure correct prices the exporters are required to get the documents endorsed by the officials of the Indonesian embassies in the exporting countries (in this case Japan). Though this procedure permits flexibility it is doubtful whether the local custom officials are in a position to know the latest prices, particularly in outer islands where the imports may be irregular. It is learnt that underinvoicing in case of sheets is on quantity rather than on the price front.

Import Price of Cold Rolled Sheets

23. The import prices are calculated in terms of base prices for standard size with additions for characteristics such as width and gauge. Table 6. The average base import prices¹ for cold rolled sheets are as

1. The freight component is about US.\$ 30 to \$ 35/MT from Japan to Indonesia.

follows :

| | US. \$/MT |
|------------------|-----------|
| 1972 | 230 |
| 1973 | 290 |
| 1974 | 320 |
| 1975 1st quarter | 230 |
| 1975 2nd quarter | 220 |

These are average base prices. In 1974, prices rose to about \$ 375 one time but started falling in 1975. Based on above base prices the current¹ price for BWC 34 coil (the most commonly used gauge in Java) of three feet width would work out as follows :

| | US. \$/M.T. |
|------------------------------|-------------|
| Base (CIF) Price | 220 |
| Add for BWC 34 (see Table 6) | 53 |
| Add for packaging | 6 |
| | <hr/> 279 |
| Say | \$ 290 |

24. From examination of actual custom documents, we found that the CIF price used was US.\$ 290/MT for 0.20 mm (BWC 34) and \$ 268 for 0.35 mm (BWC 29) for May 1975 imports. Prices have fallen since then. In Jakarta market, we found that C and F price of cold rolled coil in December 1975 (unchanged since April 1975) was \$ 240/MT for coil of BWC 34 of 3 feet width. Calculating backwards, this would give base price \$ 181. plus \$ 53 for extra thinness and \$ 6 for packing. However, the exporters make these additions for their own use and quote

1. Refers to the last quarter of 1975.

the final C and F price to the importers. Even with this market information it is difficult to calculate the correct import price to the factory for two reasons. First, the element of effective underinvoicing (either in terms of low price or quantity) is not known. Secondly, there is a substantial payment involved for what is known in local parlance, 'the expediting costs' or 'invisible costs'. However, what is incurred on such account is made up by savings on taxes, fully or partially.

Marketing

25. Out of 17 manufacturing firms, 4 firms distribute their products through sole distributors while the rest sell directly to retailers and even consumers. It is interesting to observe that the function of sole distributors is just to recommend sales to distributors without taking any responsibility for financial soundness of the distributors or even stocking goods. Thus the distributor is an intermediary without any economic function. This system is in fact used as a media to divert profits from manufacturing activity to marketing. Of course, normally one of the directors in the firm is also a distributor. The commission ranges from one to five per cent of the sales price.
26. At the level of dealers, there is good competition and the profit margins are rather low. The dealer's margin is about Rp. 25 per sheet but on this margin he can make handsome profits by increasing volume of business. Since factories are well spread over the entire country these take care of the markets of respective

regions. However, Medan factories are offering competition to other factories in Sumatra and Java and their products are available as far as in Central Java. It was complained in many places that Medan factories are producing very thin sheets of substandard quality and hence are able to absorb freight to long distances and yet make profits.

G.I. Sheet Prices

27. The retail prices are by and large uniform all over the country with minor differences on account of location and quality (as reflected in consumer preference for certain brand names). The exfactory price roughly works out at about US.\$ 616 per MT¹ in comparison to the CIF price of about US.\$ 280 of cold rolled sheet which is the chief raw material. The difference would represent the taxes, costs of other inputs, manufacturing costs, depreciation, overheads and profits. The current prices are given in Table 7.

Variations in prices have been given in Table 8. It will be noticed that prices had reached their maximum by the end of 1973. This was due to rise in prices of C.R. sheet. It may be added that though the price of cold rolled sheet is a major component of the final G.I. sheet price, the latter does not necessarily depend on the former. The market situation at a given time (such as sudden spurt in demand or slackness in it) has much greater influence on price of G.I. sheet than the

1. One MT contains 379 sheets of 2.64 kg. each. Ex-factory price of one sheet is Rp. 675.

cost of C.R. Sheet. This also largely determines the terms of sale from firm to dealers and dealers to customers.

Cost Structure

23. During our investigations we found that the firms were very reluctant to supply information on raw material prices, other costs and profits. In case of joint ventures, we found that the foreign partner would keep most of the important information to himself and would not like to provide data on cost structure. He would have information about the actual cost of the plant and machinery imported from his parent country and would also know the correct price and precise quality of the imported raw materials. In some cases we were given to understand that even the local partner would not have access to such vital information. What is revealed in the account books does not necessarily reflect the true position. Since all the firms are private limited companies, their annual accounts are circulated only among the directors who are about three to four in number. Even the tax authorities are not able to assess the correct taxes and this has led to the well known practice of 'negotiation' of taxes between the assessors and assessees. Obviously, it is rather difficult to make very precise estimate of costs and profits.

24. We would, therefore, attempt to make a broad estimate of the cost based on the information we were able to collect during our field investigations. The following calculation relates to the third quarter of 1975, the period of our field work.

| | Per M/T | |
|---|-----------|-------------|
| a. CIF Price of cold rolled sheet US.\$ | 290 | |
| b. Taxes, say 16 p.c. | <u>45</u> | |
| | 325 = Rp. | 134,875 |
| c. Cost of other inputs (see Table 9) | | 50,000 |
| d. Wages (Directors, Office, labour) | | 2,400 |
| e. Expediting costs | | 1,500 |
| f. Miscellaneous (office expenses, etc) | | <u>500</u> |
| | \$ 456 | Rp. 180,275 |

30. It may be pointed out that the above calculation is based on information supplied by firms. From discussions with various persons in the industry, it became clear that the actual cost could be different. For instance, due to underinvoicing the tax element would be less, say by \$ 20. Further, various input costs as given in Table 9 are based on standard specifications as recommended, the actual use being lower. Thus, zinc specification is 0,6 oz per sq.ft but actual use in certain cases could be about its half or a little more. This could reduce the cost by \$ 40 per M.T. Thus these two items alone could bring down the cost to about \$ 396/M.T.

Returns

31. The more common size of G.I. sheet used in Java is of 24 SWG, 3 feet wide and 6 feet long. Currently its ex-factory price is Rp. 675 per sheet. Table 7. As seen above, the ex-factory price of one "M" sheets amounts to US.\$ 616. However, certain firms adopt practices such as selling a sheet thinner than what is marked or even saving in length. This would give additional margin to the firm. For instance,

a sheet of above size should weigh 2.64 kg but due to poor galvanising (and with size manipulation) it may weigh as low as 2.5 kg as was brought to our notice by some of the dealers in the market. This would raise the ex-factory price to US\$. 650/MT¹. With these calculations the gross profit per MT would roughly be as follows :

| | US.\$/MT | |
|---------------|-------------------------|-----------------------|
| | Standard Specifications | With market practices |
| Selling price | 615 | 650 |
| Cost price | <u>456</u> | <u>396</u> |
| Margin | 160 | 254 |

12. Though the margins may look high as calculated per sheet or per MT, actual profit of a firm will depend on its volume of output, investment and capacity utilization. Obviously, a firm working on a three shift basis will have larger profits than that working only one shift. Similarly, a firm with larger capacity and better capacity utilization will have larger margin than small firms with full or partial capacity utilization. Even by taking the lower figure as margin for our calculation, we get the following return on investments in two hypothetical cases.

-
1. The margin would further rise if we consider that very thin sheets (USG 41 and 42) are also produced by certain factories.

Case No. 1Assumptions

| | |
|---|----------------------|
| Output | 12,000 MT per year |
| Fixed Investment | US.\$ 1 mn |
| Working capital | US.\$ 1 mn |
| Borrowing rate ¹ | 3 p.c. p.m. |
| Depreciation | 10 p.c. per year |
| Total Gross Profit @ \$ 160/MT | US.\$ 1.92 mn |
| Less interest on working capital | US.\$ 0.36 mn |
| Less depreciation | <u>US.\$ 0.10 mn</u> |
| Net profit | US.\$ 1.46 mn |
| Return on fixed investment ² : | 146 p.c. |

Case No. 2Assumptions

| | |
|--------------------|----------------------|
| Output | 6,000 MT per year |
| Working capital | US.\$ 0.5 mn |
| Rest | same as above |
| Total Gross profit | US.\$ 0.96 mn |
| Less Interest | US.\$ 0.12 mn |
| Less Depreciation | <u>US.\$ 0.10 mn</u> |
| Net profit | US.\$ 0.62 mn |

Return on fixed investment 69 p.c.

The above returns³ are illustrative. For firms whose investment is higher than one million \$, return would be lower and vice versa.

Further, return in 1974 would certainly be much lower than that in 1975 due to high prices of raw materials.

-
1. Borrowing rates from institutional sources is about 2 per cent and that from private sources is about 3 per cent.
 2. Fixed investment is taken equal to equity capital.
 3. These returns would amount to 350 per cent in case No 1 and 124 per cent in case No.2 if the gross profit of \$ 254/MT is taken representing market practices. (para 31).

33. Our discussions with firms revealed that 600 to 800 MT output per month would be the break-even point in this industry. This is a broad estimate and the actual profits of a firm would depend on the written down value of the investment and actual output. However, applying this principle, we find that only 3 firms would have made losses and other five firms would have made small profits. On the other hand, we were informed that in relatively old firms a partner's share can be sold at three times its original investment after 3 years. This would give a return of about 100 per cent per year. Looking to the high interest rates of 2 to 3 per cent per month for loans in Indonesia, a return of 30 to 100 per cent per year in industry with an element of risk could not be considered unreasonable. Further, the return on investment in industry has to be considered over long period. However, this is not the thrust of our investigation.

Galvanised Iron Sheet Manufacturers Association (GAPSI)

34. As new industries get established in Indonesia, there is a tendency to form associations of producers manufacturing same or similar products. In line with this trend, the GAPSI¹ was formed in June '74. All the 12 manufacturing firms are members of this organization. The main function of the GAPSI is to safeguard the interests of its members and bring to the attention of the Government, problems they may face from time to time. The contention of the GAPSI is that the Government has issued too many licenses without knowing the demand for G.I. Sheets. This has created over capacity in the industry and if factories were to work full capacity, there will be overproduction and stocks will pile up. In consequence to overlicensing and excess capacity in the industry, it is alleged that the firms resort to malpractices by producing sub-standard goods and falsify trade marks. The GAPSI maintains that the industry has been incurring losses mainly due to high raw material prices, underutilisation of capacity and inadequate demand. It suggests that licenses already issued but unutilised should be revoked, no new licenses should be granted and standards should be fixed to ensure uniform quality.

1. The Association is known as Gabungan Pabrik Seng Indonesia (GAPSI). It is located at Jalan Ir. H. Juanda 3, Jakarta.

35. It is true that too many licenses have been issued without knowing the demand. However, we learn that the holders of unutilised licenses have no intention of setting up the factories. It is also true that new firms which commenced production in 1973 and 1974 entered the market when raw material prices were high and hence had hard time.
36. Under conditions of overcapacity it was expected that competition would compel the firms to reduce prices. But this has not happened. It is learnt that the CAPSI had evolved a pricing agreement under which the firms are not expected to cut down prices. Thus the situation of excess capacity has been met by freezing the prices and cutting down output or adjusting it to the given price level. In other words, the industry has created oligopolistic conditions.

Prospects.

37. With nearly a fall of US.\$ 100/MT in the price of cold rolled sheet from 1974 to 1975, the year 1975 has been definitely a good year for the industry. At the current retail price of C.I. sheets the increase in demand is not likely to rise fast and the situation of under-utilization is likely to persist for some more years unless the industry diversifies product lines and attempts to export. However, it is understood that the Government programme of INPRESS is likely to boost the demand for C.I. sheets in the coming months and the capacity utilization is expected to improve accordingly.

G.I. Sheet Industry in Malaysia and Singapore

39. In Malaysia, there are three G.I. sheet factories, two in Kuala Lumpur and one in Penang. These are relatively old factories established during 1963 - 65 period. These have large capacities (800, 1,750 and 2,300 MT per month). Two of these work on 2 lines and three shifts basis. There is no ban on import of G.I. sheets in Malaysia and no import duty on raw materials. However, there is an import duty on G.I. sheets at 3 per cent per square foot, sur tax of 4 per cent and a sales tax of 5 per cent. The incidence of total tax is about 42 per cent but the protective rate is only about 30 per cent since the sur tax and sales tax are levied on imported G.I. sheets as well as locally produced sheets. The Malaysian factories import C.R. coil mostly from Japan. About 95 per cent of their output is corrugated mainly for roofing and rest is for industrial use. Malaysian factories make relatively thick sheets, about 70 per cent (35 USC), 10 per cent of 32, 28, and USC each. The local sheets are entirely used for the home market. According to market information collected in Kuala Lumpur during our field visit the prices of cold rolled coil were as follows :

| | CIF Price US.\$/MT (USC 35) |
|-------------------|--------------------------------|
| March - June 1974 | 343 |
| June - Sept 1974 | 353 |
| Jan - Sept 1975 | 300 |
| October 1975 | 292 |

Thus USC 35 coil price currently is \$ 292. This is equivalent to BWC 33. However, the CIF price in Indonesia for BWC 34 is \$ 240 which probably reflects underinvoicing and freight difference.

39. The ex-factory price in Malaysia for 35 USC of 3' x 6' per sheet varies from M \$ 3.54 in Kuala Lumpur to M \$ 3.62 in the interior (Kota Bahru) Table 10. This would amount to US \$ 492/MT¹ as compared to US \$ 600/MT in Indonesia² (for same thickness). Thus we find that the consumer in Indonesia has to pay far higher price than his counterpart in Malaysia and that too for an inferior product. Roughly the breakdown of final price is as follows:

| | Malaysia US.\$ (USC 35) | Indonesia US.\$ (PUC 34) |
|---|----------------------------|-----------------------------|
| CIF price of cold rolled coil per MT | 292 | 290 ³ |
| Import tax | - | 45 ⁴ |
| Local taxes | 65 ⁵ | 14 ⁶ |
| Total | 310 | 339 |
| Sale price | 492 | 616 |
| Difference | 174 | 277 |

40. Thus the difference would represent cost of other inputs, office expenses, depreciation and profits. The crucial point is that the industry in both the countries is based on imported raw material and yet the consumer price in Indonesia is much higher than that in Malaysia.

This clearly reflects the impact of different policies followed in the two countries. Free imports (with duty of 30 per cent) compel the Malaysian producers to economise on costs and keep the prices down while in Indonesia, the import ban takes away this incentive.

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1. USC 35 is equivalent to PUC 33. At the rate of 345 sheets (of USC 35) in a MT (table 5), one MT will cost M \$ 1221.3 or US\$. 492
 2. PUC 32 sheets cost US.\$ 532/MT and PUC 34 sheets cost US.\$ 616/MT. Hence PUC 33 sheets would approximately cost US.\$ 600.
 3. Price mentioned by Indonesian importers is \$ 240/MT. But since freight and handling costs are higher in Indonesia and also invisible costs are incurred we assume \$ 280 to give benefit of doubt to Indonesian firms.
See Page 29.
 4. At 16 per cent.
 5. Sales tax 5 per cent and sur tax 4 per cent.
 6. Sales tax 5 per cent.

41. In Singapore, there is no duty on import of the G.I. sheets or the cold rolled sheets. At present there are two firms manufacturing G.I. sheets. These produce sheets of sizes BWC 22, 24 and 26 mainly for construction of factory buildings and warehouses. They export G.I. sheets to Indonesia as building material for construction of factories on contract. These sheets are very thick and hence do not compete with Indonesian products. Further, the Singapore firms have no galvanising facility since the scale of operation is considered too small in view of the limited market. Hence these firms import cold rolled galvanised coil, mainly from Australia. The firms do corrugation locally. It is interesting to observe that without any import duty the factories can compete with imported sheets and even export to other countries.

SECTION III

FINDINGS AND RECOMMENDED ACTIONS

1. Findings
 - A. Summary
 - B. Policy implications
2. Recommendations
 - A. General
 - B. Policy measures

1. FINDINGS

A. Summary:

42. The G.I. Sheet industry is among major metal based industries established in Indonesia. Its output rose from about 4,000 MT in 1968 to around 70,000 MT in 1972 - 1973. Thereafter, the production has stabilised at this level.
43. In all, 22 licenses were issued for a capacity of 350,000 MT. Of these, twelve have been utilized with installed capacity of over 250,000 MT. However, due to limited demand the actual output is around 70,000 MT.
44. Estimates of demand and information about actual production are not easily available with the Ministry. This makes it difficult for the concerned authorities to issue proper licenses. Establishment of capacity far in excess of the demand is the natural consequence of such a situation.
45. Due to the absolute ban on imports of G.I. Sheets, we did not find any clandestine imports as is seen in other products. However, small quantities do get imported under the category of building materials, particularly for construction of factories on contract.
46. Roughly 70 per cent of G.I. Sheets produced in Indonesia are corrugated. These are mostly used for house roofing, largely outside Java.
47. In general, the sheets produced are thin. These are of EWG 34 gauge and upwards. In Sumatra, the factories produce even thinner sheets, 36 and 38 EWG.
48. There is keen competition among the producers since they cater to the limited market. However, the competition is not on the price front since the producers have an informal pricing agreement. Hence competition takes the form of popularisation of brands and more through producing substandard products in terms of size, thickness and quality.

49. Absence of any quality control or fixation of standards is a serious handicap to the development of quality products. Consequently, the consumer has to pay high price for poor quality products.
50. The process of galvanising used in Indonesia is the hot-dip method. This is an old method and does not ensure coating of uniform thickness. It is learnt that plants in Indonesia are the discarded plants from Japan where this method has been replaced by more modern techniques such as electrolytic galvanising process (and other process). If these plants are imported as new plants at inflated price, as probably is the case, the industry suffers from over capitalisation, thereby pushing up the price of the final product.
51. The process apart, some firms don't conform to specified standard with regard to the use of zinc coating, thereby lowering the quality of sheets.
52. During our investigations, it was found that the sheets start rusting after 3 to 5 years use, but the sheets as such may last 15 or more years. Thus the benefit of galvanising is very limited.
53. The main raw material for G.I. Sheets is cold rolled sheet/coil imported from Japan. Another important material is zinc, also imported. Thus the industry is mainly based on imported raw materials. The local content is very insignificant.
54. As stated above, the industry enjoys complete protection from foreign competition since there is a total ban on imports. However, there is an import duty of 15 per cent (bea masuk) and sales tax per cent (P.Pn) on the imported cold rolled sheet.
55. For changing correct import duty, there are no fixed check prices for cold rolled sheets due to wide fluctuations in their prices over short period. However, the custom officials are authorised to fix the check price on the spot. Notwithstanding this system and other checks, there is under-invoicing practiced by the firms, perhaps more on quantity than on price front. This reduces the incidence of tax on the raw materials.

56. In the last quarter of 1975, the CIF price of cold rolled sheet was around US \$ 240/MT while the ex-factory price of G.I. Sheets works out at about US.\$,616/MT. Broadly even after making liberal allowance for various costs, their composition would work out as follows :

| | US. \$/MT |
|-------------------|-----------|
| Cold rolled sheet | 280 |
| Taxes | 45 |
| Other inputs | 120 |
| Other costs | 11 |
| | |
| | 456 |

This gives a margin of US \$ 160/MT. However, if we make allowance for underinvoicing, use of inputs below standard specifications and other malpractices, the margin would rise to US. \$ 251/MT.

57. Though these profits may look high on a per MT basis, the return on investment will depend on the size of the factory, rate of utilization of capacity and the life of plant and machinery. Using above margin figures, we find that the return on investment works out at 146 percent per year for a factory working three shifts while it is around 68 percent at 50 percent capacity utilization. Our discussions also corroborated these return rates.
58. Out of the total profits, a substantial share is retained at the manufacturing (and/or exclusive distributor) level. The competition at the retail level is quite keen and consequently profit margins low.
59. In comparison with Indonesia, the G.I. Sheet industry in Malaysia is set on different lines. The imports of G.I. Sheets are subject to a tax of 30 percent with no tax on raw materials. Thus under the pressure of foreign competition (with 30 percent protective duty), the industry is able to compete with imports. Making allowance for taxes, the Indonesia price of G.I. Sheet is about US.\$ 100/MT more than the Malaysia price. The products of Malaysia are of better quality and of thicker gauge as compared to those produced in Indonesia.

B. Policy Implication

60. Among the major policy instruments adopted by the Government of Indonesia for directing the industrial development on planned lines as enunciated in the Five Year Plans, industrial licensing and protective tariffs are the more important ones. As in many other developing countries, these measures have influenced the nature and extent of industrial development in Indonesia too. The major objective sought to be achieved through these policies has been import substitution and in that there is considerable success recorded. However, it is necessary to examine whether through these policies an economically efficient industrial base is being built up which is the ultimate aim of the Government plans. Our findings pertaining to this aspect based on the study of the galvanised iron sheet industry are presented below :

Industrial Licensing

61. It is not clear as to what purpose the licensing system is supposed to serve in Indonesia. One often cited function of licensing is that the Government wishes to match supply with demand thereby ensuring adequate availability of goods at the national level (also at the regional levels) and also by directing investments in conformity with national priorities. If the Government thinks that adequate licensing capacity has been sanctioned in the country, further investment in that line may be closed to foreign and even to domestic capital at the same time or later on. The closure may be effected at once or in stages at various. In G.I. Sheet industry, investment was completely closed in 1972. However, we find that licensing has created over-capacity in G.I. Sheet industry and in fact has created a situation quite opposite to that intended.

1. Licensing in Indonesia has been in existence for long.
2. Other measures include tax incentives, development of industrial estates, provision of industrial finance, etc.

The capacity sanctioned is almost five times the demand and the installed capacity nearly over three times. Obviously the investment has been misallocated if considered in terms of national priorities and the investment has been fragmented too which was sought to be avoided through licensing. The main reason for this situation is that the Government is not in a position to estimate the demand and is not sure whether the licenses granted will fructify. Hence to play on the safe side, the authorities over-estimate the demand and also overlicense to allow for failures in implementation.

Sometimes the argument shifts from current demand to future demand and from local demand to exports in that the domestic demand may rapidly rise and that if domestic output exceeds the home demand the excess could be exported. In thus arguing, it is forgotten that exports depend not merely on availability but on other crucial factors, such as competitiveness in terms of quality and price which the protective policies themselves undermine.

62. Another argument advanced in favour of licensing is that the Government would not like to allow investments in certain industries which are not accorded priority in the plans. It is not clear as to what such industries are but if there are any such industries, their list could be publicised and their registration refused. Similarly, it is also argued that since capital is scarce the Government would like to give preference to labour intensive industries over the capital intensive industries through the licensing system. However, in practice it is found very difficult to define precisely the capital intensive and labour intensive industries and further it is much more difficult to scrutinise each application on that basis. That is why there is a general feeling that inspite of preference given to labour intensive industries in the plans and the scrutiny of the licensing authorities, bulk of the industrial investment in Indonesia has been capital intensive. One way to discourage the establishment of capital intensive industries would be to make the capital expensive. But in Indonesia, the interest rates are already very high and it is doubtful whether upward revision of these rates will discourage capital intensive industries so far the policy of import ban and high protection continues. **Actally** any increase in the interest rates would push up the price of the domestic products under the present situation.

63. Investment allocation based on estimated demand may be justified in case of major products where the Government wants to invest directly (such as fertiliser, cement) but to issue licenses to several firms in the private sector for products which vary widely in quality and whose demand is based on several continuously changing factors, the justification appears to be rather vague. This is particularly so when the information base of the concerned department for making demand estimates is almost nonexistent. That is why very often the applicant for license is required to furnish his own demand estimate. Obviously, his estimate is on the high side since he has vested interest in getting the license. On the other hand, those already in production argue for low demand because they do not want more licenses to be issued.
64. Another handicap of the licensing system is that the concerned department does not know the optimum investment at the firm level for different industries and hence in fact it goes on issuing licenses until the licensed capacity touches the level of estimated demand. Thus it favours those who come first rather than those who are efficient. In C.I. Sheet industry, all the five foreign investments are early starters having the benefit of low cost machinery and large capacity. These have put the domestic investors at a disadvantage which was at least not the intention of the licensing authorities. Of course, it could be argued that even without the licensing system this situation would have occurred but then it would have at least avoided the fragmented production.
65. An incidental disadvantage of licensing system is that inspite of streamlining the administrative machinery involved in licensing and various other improvements announced and effected from time to time, it takes lot of time/energy of the applicant entrepreneurs to pursue their applications, incur extra costs in pushing the applications and defer vital decisions till the license is obtained. In recent times, the delay in sanctions has resulted in escalation of costs of plant and machinery due to the worldwide inflation which ultimately gets reflected in the high price of the final products.
- /and

66. Closure of further investment in an industry is the extended form of licensing system. If the authorities had the estimate of demand and closed the investment as soon as the licensed capacity equals that level, the resulting situation would be that of monopoly or oligopoly. In the industry under study, we found that the industry feels well protected against foreign competition (due to ban on imports) and against increased internal competition due to closure of further investment in the industry. The situation of over-capacity is well met by the pricing agreement among the existing producers. Those units which are small and new are at a disadvantage vis-a-vis large and/or old established units. Hence they resort to malpractices such as producing goods of low quality.

Protection

67. As stated above, the industry is fully protected against foreign competition by the ban imposed on import of G.I. Sheets in 1970. However, there is an import duty of about 15 percent on raw materials. Since the government wants to develop this industry there is little justification for levy of import duty on raw materials. It makes the local products expensive and incompetent imports in case the government intends to promote such exports as is the object of the Government of Indonesia. The argument advanced in favour of import ban is that if import of sheets is allowed (even after levy of duties) these will be smuggled in the country through underinvoicing . But this happens even in case of raw materials as we have seen above. Thus the argument for ban does not hold water. The underinvoicing practice is universal and has to be tackled independently as an administrative measure rather than used as an argument for another unjustifiable policy of import ban.

68. As seen above, the policy of import ban provides undue protection to the industry and encourages the establishment of units without regard to economic size. This finally results in high prices and poor quality of products. In this situation when the domestic industry is not able to compete with the imported products it is obvious that the country will not be able to export such products which is one of the major objectives sought to achieved through planning. Not only that, it has other adverse implications for Indonesia.

In the Asean group, there is a move to liberalise trade among the countries and give preferential treatment to imports from the member countries. If this idea is accepted and implemented, Indonesia with its high cost industries will be at a great disadvantage vis-à-vis other members. For instance, if G.I. shoes are freely allowed (or even with nominal duties) from one member country to another, Malaysia and Singapore (and perhaps Thailand and Philippines too) will export their G.I. shoes to Indonesia without any difficulty. On the other hand, Indonesia may find it difficult to take advantage of the trade liberalisation unless it changes the policies as discussed below.

2. RECOMMENDATIONS

A. General

69. We suggest the introduction of a system of collecting information in the Ministry of Industry about each industry and each major product with regard to the number of firms licensed and engaged in production, level of investment, output, stage of implementation of license and employment. Some of the required information gets generated in the course of routine administration. This should be properly classified and tabulated on a regular basis. Arrangements for collecting other information through compulsory registration and regular submission of returns should be made.
70. It is further suggested that a statistical cell in the Minister of Industry should be created in consultation with the Central Bureau of Statistics. This cell should be manned by properly trained economists and statisticians. It should be entrusted with the task of estimating demand for major products. If the licensing system is to continue in this would help in taking rational decisions in the sanction of licenses, but if the system is to be modified, the estimates would be of help in watching the availability of goods from local sources, in imposing duties on imports, in checking duty realisations and in encouraging investment in the desired lines of production.

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71. For judging the performance of the local industry and for safeguarding the interests of the consumers, we suggest that comparable price data for major products from nearby foreign markets should be collected and made available. The Indonesian prices, particularly of several locally manufactured products, are way out of line with international prices. The above cell should be entrusted with the task of collecting such prices.
 72. In G.I. sheet industry there is an urgent need for ensuring standardization of products. This is well recognised by the Ministry of Industry, the GAPBI and the consumers. Hence it is suggested that standards about size and quality of G.I. Sheets should be laid down and the facilities for testing the standards should be provided for. It is understood that such facilities do exist in Indonesia but these are currently scattered. It is, therefore, suggested that these facilities and the standards should be established on a legal basis.
 73. Different firms have introduced the element of quality in their products through brand names. The products of well known firms command high price but there is no way to judge their quality in terms of specified standards. New and small firms, whose output is small and cost high, are producing very poor quality sheets and consumers are tempted to buy these because of low price. But these sheets do not last long. In this situation, it is not enough that standards are fixed but these standards should be adhered to. To ensure this, the legal obligation to conform to standards should be established and the implementing authority should see to it that no violations occur. However, under the currently prevailing conditions it is questioned whether the introduction of one more government control in the industrial administration system would result in adding to invisible costs thereby defeating the very purpose of this measure. Hence it will be necessary to introduce a system with built-in checks against administrative malpractices.
 74. Lack of demand is a serious handicap to the industry. So far it has relied heavily on house roofing. The demand for G.I. Sheets for industrial and other uses could grow but it would need sheets of thicker gauge and better quality. The industry should adjust the production capacity accordingly. With improvement in quality and reduction in prices, export possibilities should also be explored, particularly to the Middle East region.

B. Policy Measures.

75. It appears that there is a strong case for reviewing the licensing system. The existing system has not been able to avoid excess capacity, establishment of uneconomic units and investment in saturated industries. Actually the licensing system in combination with the policy of import ban has created this situation in the G.I. Sheet industry. Hence a detailed review of all economic implications of the licensing system is called for by examining a few more industries. This should be given priority. But based on the study of this industry it could be said that licensing system needs drastic adjustment. Investment decisions regarding the establishment of industries producing numerous goods in varying shapes, sizes and quality depend on detailed market information which is not easily available to the Government authorities who are overburdened with routine responsibilities of day to day administration. It would, therefore, be logical to limit the function of the licensing authorities¹ to seek information about the units on such points as location, capital, employment, output, type of machinery etc. But the function of judging the demand and closing investment based on that should be done away at least for such products. Thus the choice to decide what, where and how to produce should be left to the entrepreneurs who should take their decisions on economic considerations within the overall policy framework formulated by the Government rather they be lured by high profits arising out of monopolistic situations and tax benefits. However, the Government should introduce the system of compulsory registration of firms and seek detailed information about location, employment, capacity and investment. This has been discussed fully above. Further, it would be legitimate for the licensing authorities to apply restrictions with regard to location of units in certain areas on health, pollution or town planning considerations.

1. Or investment approval authorities as better known in Indonesia.

76. To give practical shape to the suggestion of limiting the role of licensing system, it would be most helpful if to start with the above principle is applied to foreign investment requiring investments below five million US dollars¹. This would reduce considerable paper work of the departments involved in licensing and allow them more time to look after important projects with greater care. In Indonesia, several projects currently under negotiation are estimated to cost US \$ 100 to 1,000 million each and hence the limit of five million US dollars is not high and have to be raised after some time. The limit may be kept at one million US dollars for domestic investment in view of their small size.

77. Many countries have adopted the licensing system to conserve foreign exchange by imposing restrictions on investment. Though it is a dubious argument in favour of licensing, this does not have validity in Indonesia since it has adopted the free foreign exchange system.

1. For the manufacturing sector, average investment per foreign investment project amounted to US \$ 4.29 million during the period ending 1975.

78. We have seen that the imposition of import ban on G.I. Sheets has provided undue protection to local industry and has resulted in poor quality and high price of the sheets. We found that in Malaysia protection to the industry has been provided through import duty which has enabled the industry to develop on economically sound lines. The possibility of competition through imports has kept the prices down and enabled the industry to use modern techniques and improve the product quality. In Indonesia too, there is general reluctance to impose import bans and the Ministries of Industry, Trade¹ and Finance appear to support this view but the individual industries try to pressurise the Government for such bans on the ground that imports if (allowed) may enter the country in large quantities in an unauthorised way or dumping may be resorted to by exporting firms. While it is necessary to examine such complaints and take remedial steps in individual cases, the policy of imposing bans on imports needs to be reversed. Proper import duties should take care of such situations. In case of G.I. Sheets industry, the import ban appears to have little justification and there will be no harm if the ban is lifted and proper import duties levied.

1. Trade Minister explained that duty tariff regulations are a better mechanism in controlling imports than a total ban or quota system. Business News, 1 August, 1975, P.5.

79. The ban on import of items has been imposed from time to time by various decrees of the Ministry of Trade. However, a complete list of banned items is not easily available. From the information we could gather, we find that import of 30 items has been banned, some completely banned and others with conditions regarding size and other specifications. See Appendix A. In addition, the import of a large number of pharmaceutical products is banned on the ground that these are produced in the country. Actually most of the drugs are processed and packed in the final saleable form in Indonesia but these are either imported in bulk or in many cases the main ingredients are imported while very little real manufacture takes place in the country. Neither any basic drugs are manufactured nor any important raw materials produced in the country so far. This renders the country completely dependent on imports. This is similar to the case of electronic products, automobile industry and other metal based industries. In all these cases, the retail price is much higher than the import prices even after making allowance for local taxes. In the process the consumer is the real sufferer. Actually the best accepted principle of encouraging industries is to favour those which generate high value-added. But in most of these industries the value-added is negative at the international prices which means that the economy has gained little by this type of industrialization. Hence we recommend that the present policy should be reviewed and there should be a clear announcement that no additional import bans will be allowed and the Government will review even the existing bans.

80. The current import duties of 15 percent on raw materials have no justification particularly since the Government considers this industry important. It has only the revenue raising function but it pushes up the cost of production. Hence it would be better if import duty on cold rolled sheet is abolished and replaced by a suitable import duty on the import of G.I. Sheets and by abolition of the import ban. An import duty of 40 percent on G.I. Sheets, which is already on the statute (but inoperative due to import ban) would provide adequate protection to the local industry. Even this level would be higher than that in Malaysia (30 per cent) and hence the effort should be to gradually reduce the level to 30 percent after studying the impact of this change in policy.

SECTION IV

TABLES

Table 1
PRODUCTION OF METAL INDUSTRIES IN INDONESIA (MT)

| Year | Iron Bars | G.I. Sheet | Steel Wires | Steel Pipes |
|-----------|-----------|------------|-------------|-------------|
| 1968 | 4,500 | 6,650 | - | 1,800 |
| 1969 - 70 | 4,500 | 9,500 | - | 1,957 |
| 1970 - 71 | 10,000 | 34,400 | - | 2,922 |
| 1971 - 72 | 74,000 | 66,600 | - | 6,000 |
| 1972 - 73 | 75,000 | 69,600 | 18,000 | 34,000 |
| 1973 - 74 | 100,000 | 70,000 | 30,000 | 40,000 |
| 1974 - 75 | 115,000 | 70,000 | 30,000 | 94,000 |

Source : Director-General, Metals and Machinery.

Table 2.

| Name of Factory | Year of Commencement license of commercial production (July '73) | No. of commercial production (July '73) | No. of shifts (a.a.) | Licensed Capacity (a.a.) | Actual production July '73 (a.a.) | Plant | No. of workers per shift. |
|---|--|--|----------------------------|--------------------------------|--|--|------------------------------|
| 1. PT. Andar Steel, Surabaya | - | July 1974 | 1 | 32,400 | 2,700 | 500 1. Elephant 2. Swallow 3. Camel | 35 |
| 2. PT. Tambora Baja, Surabaya | - | 1973 | 1 | 12,000 | 1,000 | 1. Cherry | 20 |
| 3. PT. Purwa, Semarang | - | 1973 | 2 | 36,000 | 3,000 | 11. Moon Elephant | 66 |
| 4. PT. Semarang Baja Sakti, Semarang | - | Production expected in Oct. 1975 | 1 | 21,600 | 1,000 | 1. Lion 2. Tiger | 15 |
| 5. PT. Sermani Corb. Juno Bantul | 69 | Sept. 1974 | 1 | 12,000 | 1,500 | 11. Deer | 32 |
| 6. PT. Kriemas Sukses, Jakarta | 73 | Jan. 1974 | 1 | 24,000 | 2,000 | 1. Marismas 12. Nara 13. Banteng | 23 |
| 7. PT. Tumbakmas, Jakarta | 69(DI) 67(SI) | August 1967 | 2 | 17,500 | 1,465 | 1. Cherry Tumbakmas | 35 |
| 8. PT. Sandus Steel, Palembang | 74 | Dec. 1973 | 1 | 12,000 | 1,500 | 11. Buffalo Head | 34 |
| 9. PT. Industry Polycuna Musantara, Padang | 72 | April 1972 | 1 | 12,000 | 1,000 | 3 stars Gold Fish VII no. | 42 |

| Name of Factory | Year of commencement of commercial production (July '75) | No. of licensed commercial lines (3 shifts) (July '75) | Capacity (M.T. p.a.) | Actual production (July '75) | Brand | No. of workers per shift |
|---|--|--|----------------------|------------------------------|-----------------|--------------------------|
| 10. PT. Industry Ltd. Garuda Bales | April 1970 | 2 | 24,000 | 1,200 | 1. Sugar | 35 |
| 11. PT. Intan Nasional Iron Industry, Medan | Nov. 1971 | 2 | 24,000 | 1,500 | 1. Iron Diamond | 60 |
| 12. PT. Kalimantan Steel Co. Pontianak #) | | 1 | 13,000 | 500 | | |
| | | | 57,500 | 21,450 | | |

Source : Data Collected from BIR - in September - October 1975.
 *) Information about unit no. is based on secondary source.

Table 3
INVESTMENT LICENSES APPROVED FOR C.I. SHEET PLANTS IN
INDONESIA

| <u>Foreign Investment Projects</u> | | Capacity (MT) |
|-------------------------------------|-------------------------|---------------|
| 1. P.T. Tumbakmas | Jakarta | 32,000 |
| 2. P.T. Industry Baja Garuda | Medan | 24,000 |
| 3. P.T. Fumira | Semarang | 15,000 |
| 4. P.T. Sermani Steel Corp. | Ujung Pandang | 13,000 |
| 5. P.T. Kalisco | Pontianak | 13,000 |
| <u>Domestic Investment Projects</u> | | |
| 6. P.T. Tumbakmas Jasa | Surabaya | 24,000 |
| 7. P.T. Iron National Industry | Medan | 13,000 |
| 8. P.T. Polycuna | Padang | 12,000 |
| 9. P.T. Indokaya | Jakarta | 6,000 |
| 10. P.T. Respati Jaya | Jakarta | 16,000 |
| 11. P.T. Semarang | Semarang | 12,000 |
| 12. P.T. Amien Steel Works | Pekan Baru | 35,000 |
| 13. P.T. Tumbakmas Cipto | Semarang | 6,000 |
| 14. P.T. Tumbakmas Luhur | Lampung | 24,000 |
| 15. P.T. Tumbakmas Mulia | Jakarta | 12,000 |
| 16. P.T. Tumbakmas Jaya | Jakarta | 6,000 |
| 17. P.T. Sarna Steel Works | Jakarta | 12,000 |
| 18. Fa. Karunia | Pekan Baru | 6,000 |
| 19. P.T. Mitiko | Bitung (North Sulawesi) | 5,760 |
| 20. P.T. Malaysia Galvanised Sheet | | - |
| 21. P.T. Sastra Steelworks | Jakarta | 12,000 |
| 22. P.T. Inwal and Posna | Jakarta | - |
| | | 327,760 |

Source : Director General, Metals and Machinery.

N.B. These are the original figures when the licenses were granted.

The capacity figures of some of the firms are at variance with those given in Table 2. The latter figures are up to date.

Table 1
 Technical Ratios for G.I. Sheet (M/G)
 3' x 6' feet (914 x 1820 mm)

| M/G | Gauge | | Weight of zinc coating | | Weight per sheet (kg) (No. of sheets per M/T) |
|-----|-------|-------|--------------------------|-------------------------|--|
| | 1 | mm | 1 Oz per ft ² | 1 mm per m ² | |
| 35 | | 0.127 | 0.6 | 195 | 1.97 (598) |
| 34 | | 0.178 | 0.6 | 195 | 2.64 (379) |
| 33 | | 0.203 | 0.6 | 195 | 2.97 (357) |
| 32 | | 0.229 | 0.6 | 195 | 3.31 (302) |
| 31 | | 0.254 | 0.6 | 195 | 3.64 (275) |
| 30 | | 0.305 | 0.7 | 216 | 4.36 (279) |
| 29 | | 0.330 | 0.7 | 216 | 4.69 (213) |
| 28 | | 0.356 | 0.7 | 216 | 5.03 (199) |
| 27 | | 0.406 | 0.8 | 246 | 5.74 (174) |
| 26 | | 0.457 | 0.8 | 246 | 6.41 (159) |
| 25 | | 0.508 | 1.0 | 305 | 7.18 (139) |
| 24 | | 0.559 | 1.0 | 305 | 7.86 (127) |
| 23 | | 0.635 | 1.0 | 305 | 8.94 (113) |
| 22 | | 0.711 | 1.0 | 305 | 9.86 (102) |
| 21 | | 0.813 | 1.0 | 305 | 11.2 (89) |
| 20 | | 0.890 | 1.0 | 305 | 12.2 (80) |

Table 5

Technical Ratios for G.I. Sheet (USG)

3' x 6' (914 x 1829 mm)

| USG | Gauge | | Weight of zinc coating | | Weight per sheet (kg) |
|-----|-------|-------|--------------------------|---------------------------|------------------------|
| | 1 | mm | 1 Oz per ft ² | 1 gram per m ² | (No. of sheets per 'T) |
| 43 | | 0.124 | 0.6 | 193 | 1.93 (518) |
| 42 | | 0.129 | 0.6 | 193 | 2.00 (500) |
| 41 | | 0.136 | 0.6 | 193 | 2.06 (495) |
| 40 | | 0.139 | 0.6 | 193 | 2.13 (469) |
| 39 | | 0.149 | 0.6 | 193 | 2.26 (442) |
| 38 | | 0.159 | 0.6 | 193 | 2.39 (418) |
| 37 | | 0.169 | 0.6 | 193 | 2.52 (397) |
| 36 | | 0.179 | 0.6 | 193 | 2.66 (376) |
| 35 | | 0.193 | 0.6 | 193 | 2.90 (345) |
| 34 | | 0.212 | 0.6 | 193 | 3.17 (315) |
| 33 | | 0.233 | 0.6 | 193 | 3.43 (292) |
| 32 | | 0.258 | 0.6 | 193 | 3.69 (271) |
| 31 | | 0.279 | 0.6 | 193 | 3.95 (253) |
| 30 | | 0.312 | 0.7 | 214 | 4.53 (221) |
| 29 | | 0.357 | 0.7 | 214 | 4.04 (199) |
| 28 | | 0.397 | 0.7 | 214 | 5.57 (180) |
| 27 | | 0.437 | 0.9 | 244 | 6.14 (163) |
| 26 | | 0.476 | 0.9 | 244 | 6.66 (150) |
| 25 | | 0.556 | 1.0 | 305 | 7.31 (129) |
| 24 | | 0.635 | 1.0 | 305 | 8.84 (113) |
| 23 | | 0.714 | 1.0 | 305 | 9.58 (101) |
| 22 | | 0.794 | 1.0 | 305 | 10.9 (92) |
| 21 | | 0.873 | 1.0 | 305 | 12.0 (83) |
| 20 | | 0.953 | 1.0 | 305 | 13.0 (77) |

Table 6

Basis for Calculating Prices of Cold Rolled Sheets (in coil)

| Thickness mm | Width | | Gauge | |
|-----------------|-----------|-----------|-------|-------|
| | 24" - 30" | 30" - 49" | 11-20 | 14-19 |
| 3.0 | 8 | 8 | 11 | 11 |
| 2.8 | 11 | 6 | 12 | 12 |
| 2.6 | 9 | 4 | 13 | 13 |
| 2.4 | 7 | 2 | 14-20 | 14-19 |
| 1.2 - 2.0 | 5 | 0 | 21 | 20 |
| 0.9 | 6 | 1 | 21 | 21 |
| 0.8 | 7 | 2 | 23 | 22 |
| 0.7 | 9 | 4 | 24 | 23 |
| 0.6 | 11 | 6 | 25 | 24 |
| 0.55 | 13 | 8 | 26 | 25 |
| 0.5 | 16 | 11 | 27 | 26 |
| 0.45 | 19 | 14 | 28 | 27 |
| 0.40 | 22 | 17 | 29 | 28 |
| 0.35 | 25 | 20 | 30 | 29 |
| 0.30 | 29 | 23 | 31 | 30 |
| 0.28 | 32 | 26 | 32 | 31 |
| 0.26 | 36 | 30 | 33 | 32 |
| 0.24 | 40 | 34 | 34 | 33 |
| 0.22 | 44 | 38 | 35 | 34 |
| 0.20 | 49 | 43 | 36 | 35 |
| 0.19 | 54 | 50 | 37 | 36 |
| 0.18 | 59 | 58 | 38 | 37 |
| 0.17 | 64 | 67 | 39 | 38 |
| 0.16 | 69 | 77 | 40 | 39 |

NOTE. 1. Above figures are in US.\$ These represent additions in US.\$ to base price which is 0.

2. There are extra charges for special packing. For ordinary packing the charge at the maximum is \$ 6/MT.

Table 7
Prices of corrugated sheets (3 ft wide) Pn./sheet

| BAG | Ex-factory Price | | | | Retail price | |
|-----|------------------|---------|-----|------|--------------|------|
| | length | | | | length | |
| | 6' | (US.\$) | Rp. | 7' | 6' | 7' |
| | | 'T | Kc. | | | |
| 24 | 1700 | 520 | 216 | 1033 | 1725 | 2050 |
| 26 | 1550 | 500 | 245 | 1200 | 1600 | 1900 |
| 28 | 1325 | 635 | 263 | 1545 | 1350 | 1600 |
| 30 | 1150 | 634 | 263 | 1342 | 1175 | 1400 |
| 32 | 900 | 522 | 242 | - | 915 | - |
| 34 | 675 | 616 | 255 | - | 700 | - |

V.B. These prices relate to July - Oct. 1975

Source : Data collected from market.

Table 3

Detail Prices of G.I. Sheets

(size USG 37: 2.5' x 6')

| | Rp./sheet |
|----------------|-----------|
| December 1971 | 274,60 |
| December 1972 | 297 |
| December 1973 | 466,20 |
| December 1974 | 400 |
| January 1975 | 400 |
| February 1975 | 400 |
| March 1975 | 400 |
| April 1975 | 400 |
| May 1975 | 400 |
| June 1975 | 400 |
| July 1975 | 400,40 |
| August 1975 | 420,40 |
| September 1975 | 420,40 |

Source : A firm in Sumatra.

Table 9
Cost of Inputs per T/T of C.F. sheet

| | Rp | GIF Price US.\$/RT | Rp. |
|------------------------|-----|-----------------------|--------|
| a. Zinc Ingot | 100 | 900 | 45,000 |
| b. Ammonia Chloride | 10 | 100 | 1,000 |
| c. Lead Ingot | 4 | 300 | 1,200 |
| d. Alloy Steel | 0.5 | 2,500 | 625 |
| e. Hydro Chloride Acid | 10 | 150 | 50 |
| f. Sulfuric Acid | 2 | 100 | 100 |
| g. Glycerine | 2 | 100 | 100 |
| h. Oil | | | |
| | | | 49,435 |
| | | say | 50,000 |

NR. conversion rate used above is at Rp. 500 to US.\$ to take care of import taxes/other expenses.

Source: Data collected from firms.

Table 10
 Price of Corrugated Iron Sheets in Malaysia
 (size 3' x 6', USG 35)

| Towns | Price per sheets M \$ | Price per MT M \$ | Price per MT US \$ |
|--------------|--------------------------|----------------------|-----------------------|
| Kuala Lumpur | 3.54 | 1221.3 | 492 |
| Malacca | 3.56 | 1229.2 | 495 |
| Johore Bahru | 3.55 | 1233.5 | 499 |
| Kota Bahru | 3.62 | 1248.9 | 504 |
| Ipoh | 3.56 | 1227.2 | 495 |
| Taining | 3.57 | 1231.6 | 497 |
| Muar | 3.59 | 1233.5 | 499 |

Source : Data collected during field trip.

N.B. 1. One MT has 345 sheets, see table 5.

2. Conversion rate : 1 US \$ = M \$ 2.43

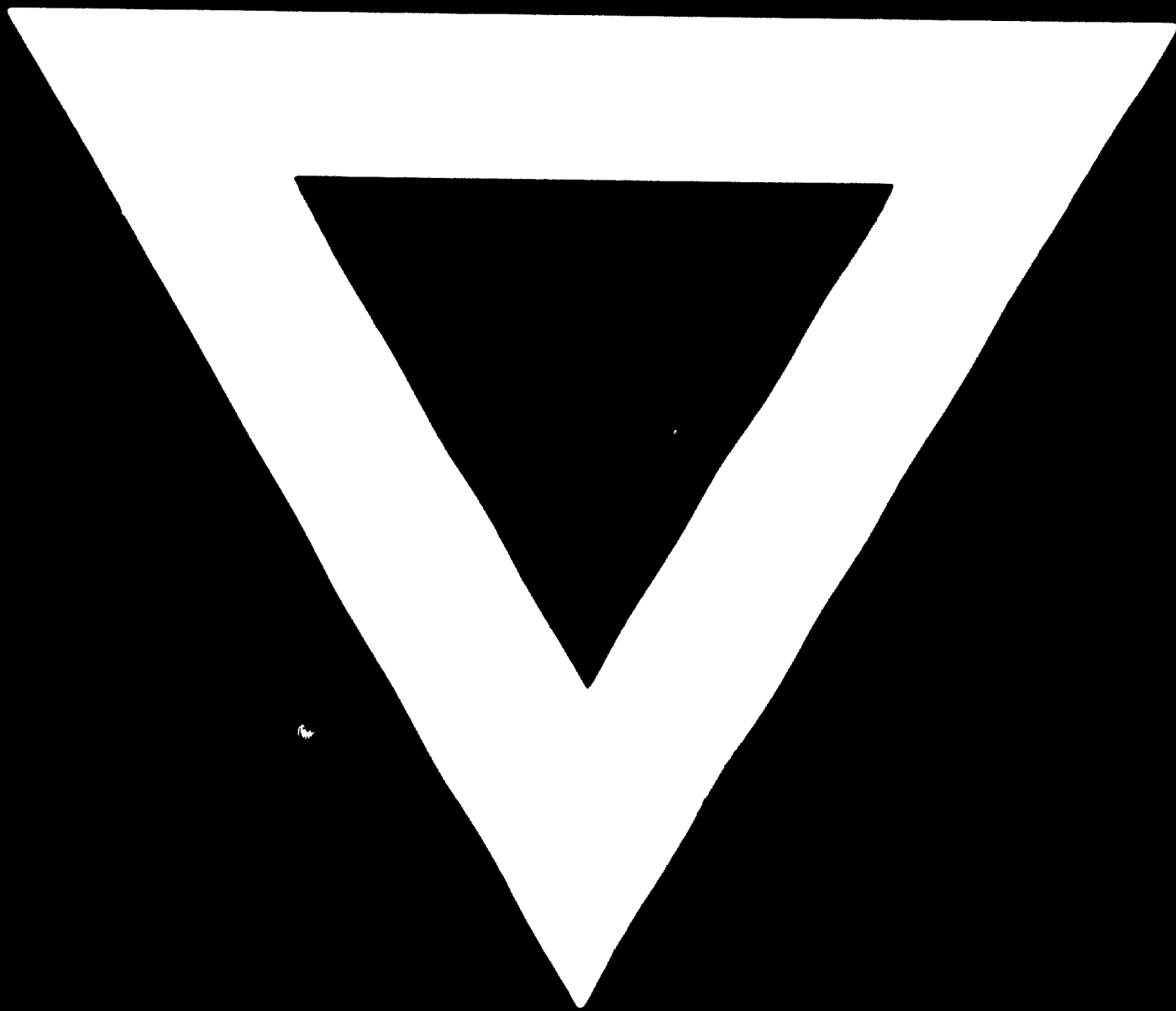
APPENDIX A.

LIST OF ITEMS WHOSE IMPORT IS BANNED

| No. | Description of Goods |
|-----|--|
| 1. | Vetzin (mono sodium glutamate) |
| 2. | Mosquito coil incense |
| 3. | Tyre for passenger cars and trucks (certain sizes) |
| 4. | Matches |
| 5. | Cover for book |
| 6. | Writing and drawing book |
| 7. | Books and magazines in Indonesian language |
| 8. | Cambrics |
| 9. | Hand woven fabrics |
| 10. | Cele (special sarong) |
| 11. | Sarong |
| 12. | Batik |
| 13. | Secondhand bottles and glass (certain sizes) |
| 14. | G.I. sheet |
| 15. | Iron sheet |
| 16. | Mattress and mat |
| 17. | Mousetrap and other traps |
| 18. | Advertisement and announcement board |
| 19. | Advertisement and name plate |
| 20. | Volume meter for solids and liquids |
| 21. | Paperclips |
| 22. | Office seal |
| 23. | Dry cell battery (certain sizes) |
| 24. | Electric light bulb and tube lamp (T.L) (specified voltages) |
| 25. | Radio and television set (built up) |
| 26. | Completely built up commercial cars (except Java & Sumatra) |
| 27. | Completely built up motor cycles |
| 28. | Automobile (specified sizes) |
| 29. | Offset Printing matter |
| 30. | All sedans in built up form |

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