CHAPTER 4.

RESEARCH FINDINGS

As mentioned in the research methodology, five interviews were conducted and the findings can be found in the next sub-section. In order to fully understand the individual trends of the purchases made by the EPS moulding companies, as and when it is necessary, space is devoted to recording the relevant explanations given by the managers as regards to certain trends and buying behaviour of each inputs of production. This descriptive style of presentation is aimed at giving an insight on certain companies' purchase behaviour especially when imported inputs are being used rather than locally sourced. Finally, in each sub-section, attempts would be made to answer the two main question raised in this research and comparisons are made with the literature review findings.

As explained earlier, there will be two independent groups under study : Joint-venture (JV) group and Local (L) group. The former is comprised of moulding companies which have some foreign shareholding while the latter group consists of companies owned wholly by locals.

Three purchasing inputs: EPS raw materials, Plant and Machineries and Moulds will be categorically reviewed in this chapter.

To reflect the latest purchasing trend among the EPS moulders, only relevant purchases done in the year 1994 are considered and all values are captured in Ringgit for compatibility in comparison.

4.1 STATISTICAL FINDINGS- WEIGHTAGE PROPORTION OF INPUTS

Group		EPS Raw Material	Plant & Machinery	Mould
Joint-Venture	Max.	87%	15%	5%
	Min.	80%	10%	3%
Local	Max.	85%	16%	5%
	Min.	80%	10%	4%

Table 4.1

Comparison of weightage proportion of the three major inputs between Joint-Venture and local EPS moulding companies

Table 4.1 shows the percentages as declared by the companies interviewed for the amount spent on the three chosen inputs for the year 1994. Percentage figures were used rather than absolute figures because we want to compare inter-companies and with different amount of money spent individually by the various companies, absolute figures may not be suitable.

From Table 4.1, as far as EPS raw materials is concern, the lowest recorded percentage for both joint-venture and local firms is the same (at 80%) while the highest scores differed by only 2%. Here, it can be seen that both groups spent some 80 to 87% of their total purchases on raw materials in 1994.

In comparison to the other inputs, the EPS raw materials purchases appeared to be the most substantial.

In the category of Plant and machinery, some 10 to 16% of total purchases were spent and again, both groups recorded similar lowest percentage score (at 10%). The difference between the highest scores for both joint venture and local firms was only 1% and as such the weightage similarity in terms of plant and machinery investment can be deduced.

This similarity trend continued in the case of Mould purchases whereby both groups recorded only a narrow difference of 3 to 4% at minimum percentages and same maximum scores of 5%.

Overall, it can be summarised that the Joint-venture and Local moulding companies in the central region of Malaysia exhibited quite similar purchasing weightages with respect to EPS raw materials, Plant and Machineries and Moulds for the year 1994.

This finding is important because the similarity would implied that all companies would put the same weighted emphasis on the individual purchase items. The relatively low range between the maximum and minimum percentages in each category showed that all five companies interviewed seemed to agree on the above recorded weightages and generalisation may be possible in this case.

Another deduction that one might draw is that the purchasing weightages is independent of the nationality of the moulders. This makes sense because it is the mode of operation that determines the weightages of purchase items rather than the origin of the company.

The high weightage of EPS raw materials is in line with the claim by some of the companies that EPS raw materials constitute close to 50% of the cost of goods. Bearing in mind that the contribution of labour costs and other variable costs which is not considered in this study, the figure of 84% or so seemed logical. In other words the EPS raw materials, being a direct cost item, are purchased on a regular basis coupled with the fact that these have short shelf life as explained earlier . The slight difference in EPS raw materials weightages among the companies could be due to the varying unit pricing that their suppliers charged. The price variance range had been reported to be around 10 to 20% which could cause the slight deviation in EPS raw materials weightage. One reason for this price variance is that both imports (which can be dumped materials) and local materials are available in the Malaysian market. Further details on this will be discussed in the next sub-section.

For the Plant and Machineries category (which is a capital investment), there was a 6% difference between the minimum and maximum weightages due to the fact that not all companies are expanding and investing at the same rate. But it should be noted that moulders do put in a lot of emphasis on the purchase of Plant and Machineries. The percentage figures may appeared much lower than the EPS raw materials, but this is only due to the reason of lower frequency of purchase (possibly once a year as explained in Chapter 3) but the unit price of purchase can be quite substantial.

Lastly, the Moulds which accounted for 3 to 5% weightage for both Local and Joint-venture companies can be seen as less important component of purchase in view of its higher frequency of purchase (30 times or so throughout the year) than Plant and Machineries. The similarity of weightage could be due to the fact that a large number of mould purchased were from local sources as explained later.

4.2 STATISTICAL FINDINGS -LOCAL CONTENT OF PURCHASES

Having seen the analysis of weightages among the three major inputs for the moulders, we shall now focus on whether the two groups, namely the Joint-venture and Local companies, purchase from local source or import these inputs.

Group	Range	EPS Raw Materials	Plant & Machinery	Mould
Joint Venture	Max.	90%	5%	100%
	Min.	10%	0%	95%
Local	Max.	70%	47%	100%
	Min	53%	0%	95%

Table 4.2

Comparison between joint-venture and local companies on the local content of the three major inputs

Table 4.2 shows the comparison between joint-venture and local EPS moulding companies interviewed with regards to the three major purchased inputs and the percentage figures represent the local content of each input . As in the case of section 4.1, we will present the maximum and minimum percentages of local content of the three major inputs as declared by the two groups of moulders

4.3 EPS Raw Materials

Looking at the wide range of scores (10% to 90%) recorded for the local content in EPS raw materials section, there appeared to be varying support from Joint venture companies. For the Local companies, on the other hand, there seemed to be buying more than half their EPS raw materials from the local suppliers. Using a 50% demarkation tc decide support level, then it can be said that local moulders are more solitary in thei support of indigenous raw material suppliers. On checking the individual records, it wa found that one of the three joint-venture companies actually purchase 90% of its EPS ra materials locally. The other two joint-ventures purchased 10 and 20% respectively fron local sources.

Based on the interviews, it was revealed that nationality is not a factor in deciding th source of EPS raw materials supply. This is confirmed by the following findings :

1) One of the foreign joint-ventures actually supported the local suppliers.

2) In one case whereby the joint-venture company imported up to 80% of its EPS ra materials requirement , the origin of the imported materials was not the home country c the joint-venture company

3) In the case whereby the joint-venture company purchased its EPS raw materials from its home country, the management explained that it was not the case of patriotism because in its home country, the headquarters company actually supported the Malaysian supplier by buying from the latter!

The main reason given by all companies interviewed was that choice of materials depended on the relationship between the customer and supplier. Other valid reasons given for the use of imported materials include :

1) The imported EPS supplies are from the region - Singapore, Korea and Japan or for those from America and Britain, stocked by the related agents and as such there was little fear of disruption in supply, long lead time, higher costs and other complaints related to overseas sources as explained by Dunning(1993) in the literature review.

2) Some companies preferred to support various suppliers and so in some instances, the home production may buy from one supplier but in the overseas operation, the material is sourced from another supplier. The strategy is to maintain relationship with as many suppliers as possible - in case one of the suppliers experience production difficulty. Note that this is in line with Dunning's (1993) statement that the proportion of imported intermediate products would depend on the FDI company's sourcing strategy.

3) One joint-venture company had its supply of EPS raw materials negotiated back home because there was advantages of bulk purchase economies as highlighted by Dunning(1993) during the literature review.

Hence, as far as EPS raw materials is concerned, the findings of this research is that within the EPS foam industry, foreign FDIs would procure its intermediate products (EPS raw materials in this case) from the cheapest and most reliable source if they were left to its own devices. In the case where imports were carried out, the reasons were the almost the same as highlighted in the literature review.

The only difference detected in this research is that the joint ventures (as well as the locals to a lesser extent) were oblivious of the dangers of importing their intermediate products as highlighted by Dunning(1993). On the question of whether the joint-ventures buy more or less than the indigenous firms , it would be difficult to compare because of the variation in local content of EPS raw materials as purchased by the joint-venture moulders. But looking at the local moulders, it was noted that strong support was shown by this group towards the local EPS raw materials suppliers. Basing on the fact that such firm support cannot be found within the joint-venture group, one can arguably say that foreign FDIs buy less EPS raw materials from local sources as compared to indigenous moulders. But the reasons brought forward by the joint ventures in defense of their import tendencies must be considered to get the total picture.

On the unwillingness of FDIs to establish linkages with local suppliers as brought up by Dunning(1993), the statement on the ability of affiliates to use local suppliers could be paternally controlled holds true in one of the joint-venture companies in this study. However, there was no comment by the joint-venture companies on the inability of local suppliers to meet expectations required by them.

This was due to the claim by all companies interviewed that the EPS raw materials offered by both local and overseas suppliers are viewed as acceptable in quality. It seems that price was the main criteria in determining the source of supply for most of the moulders interviewed. The second criteria was the relationship between supplier and customer which indicated that as long as the customer is comfortable with the supplier, the former will buy from the latter. This was not revealed in the literature because it could be a local culture which is not applicable elsewhere.

4.4 Plant and Machineries

For the purchase of plant and machineries, it can be seen that the percentage of local content is relatively lower in comparison to the purchase of EPS raw materials. This observation was made in both the groups of joint-venture and local companies with the exception of one local company.

The reason behind this is that there is very little local sources of plant and machineries as far as the EPS moulding industry is concerned. Of all the major equipment required by a moulding plant, only two items - can be supplied locally that is the oven and the boiler. The most important machinery which is the moulding machine had to be importec from overseas. The interviewees explained that the present know-how of local companies is not sufficient for them to produce moulding machines in Malaysia. Another factor is tha the demand for moulding machines is rather limited in Malaysia and this has discouragec a lot of potential suppliers from embarking into this machine-making business.

In one of the local companies, there was a purchase of a boiler from a local source for the year 1994. When asked if this would be a regular purchase, the management replied that it will not be the case. It was mentioned that a boiler could last for more than 10 years with proper maintenance and the reason for this 1994 purchase was that the plant was undergoing an expansion. It was also confirmed that it is more likely for moulders to purchase a moulding machine (an imported item) rather than a boiler or an oven. Hence, we conclude that the figure of 47% for local content would be reduced in the coming years for the local-owned company.

The local content of plant and machineries purchase for the joint-venture group remained low because the majority of the purchases on plant and machineries were on moulding machines which are imports. It was interesting to note that the joint venture companies need not necessarily buy machines made from their homeland. This was demonstrated by the fact that in one of the joint-venture companies with Japan shareholders, German machines were also being purchased.

On comparing the findings here with the comments made in the literature review by Halbach(1988), as regards to indigenous technological factor and local expertise, the findings here indicate that the EPS foam industry followed Halbach's proposal. The lack of technological ability as far as moulding machine is concern confirmed this observation. As regards to the correlation between local sourcing percentage by FDIs and the length of stay, this cannot be detected here because the joint-ventures are considered new to Malaysia and have only three to four years of establishment todate.

4.5 Moulds

The moulds purchase item seemed to be the most "agreeable" among the three major input in the sense that both groups recorded the same maximum and minimum percentages (100% and 95% respectively) of local content in the sourcing of this item. Also obvious was the fact that a large amount of moulds were bought locally by the moulders. This results further showed that both locals and joint-ventures had the same tendency to support the local mould makers.

When enquiring about the strong support, the joint-venture companies revealed that the local moulds have the following advantages over the imported moulds :

1) Imported moulds take a longer time to complete in view of transporting of finished moulds over longer distances and the lack of priority given by overseas mould makers. The lead time for mould-making by local mould-makers may span from 10 days to eight weeks depending on mould type while the transportation of imported moulds alone may equal the local lead time .

2) Overseas mould-makers from Japan, Singapore or Taiwan usually charge higher for the cost of mould because of higher cost of operation.

3) During the fabrication of moulds, there could be amendments made to the design and if a mould is made overseas , it would be troublesome to transport it through and fro for this purpose.

It was also commented by the EPS moulders from both groups that the quality of local mould-makers had improved throughout the years to an acceptable level by the end-users.

This is in line with the comments made by Dunning(1993) on the ability of local suppliers to meet customer's expectation.

The findings here also supported Dunning's observation that a foreign-owned affiliate would procure its inputs from the cheapest source (but of acceptable reliability). Also the disadvantages of imports in terms of additional costs, longer delivery schedules and monitoring costs as highlighted by Dunning hold true in this case

This findings also echo the survey findings of Halbach (1988) which states that the amount of outsourcing depended on the level of indigenous technology and local labour expertise. In the case of mould making, both are available in Malaysia.