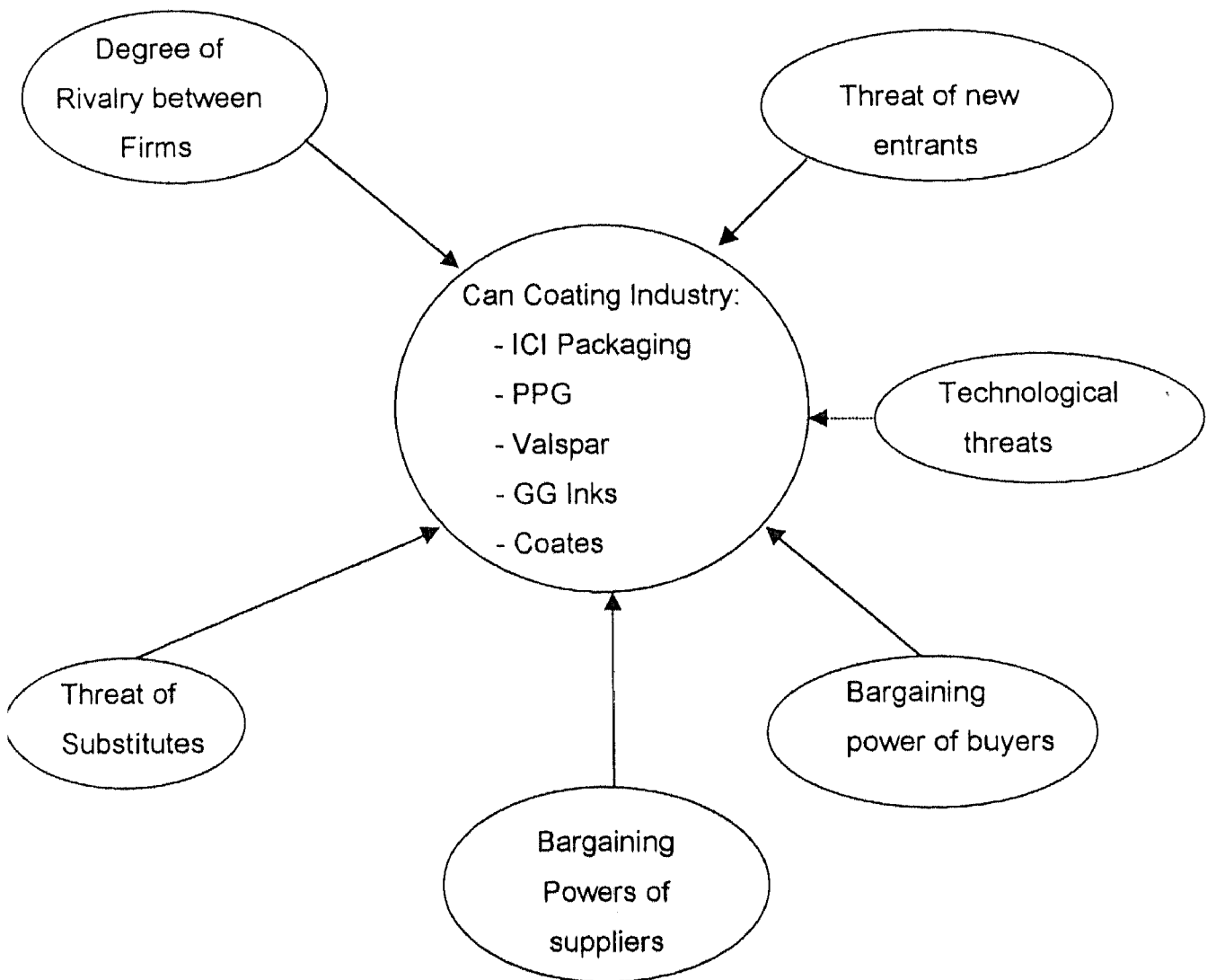


4.0 COMPETITIVE ANALYSIS

We shall proceed with this chapter by using the Michael Potter's Five Forces Model (Stacey, 1996) to examine the competitive environment of the can coating industry in Malaysia. Each of the different market forces is being analysed separately in the following section.

Figure 7: Porter's Five Market Forces



4.1 Threat of new Entrants

Generally the entry barrier to the can coating industry is mixed, depending on the type of coatings manufactured. The entry barrier for new entrants dealing with coatings for food pack is very high. As most of the coated cans are used to pack food for human consumption, the risk factor is extremely high. However, the General Line cans' segment poses less entry barrier.

Therefore, it is not surprising to find very few players supplying to market segments such as the food cans, beverage ends and internal 2-pc DWI cans. The major players in these segments constitute of major lacquer manufacturers with sound knowledge and technology on can coatings. For example, ICI Packaging and PPG are two multinational companies, which are particularly strong in their can coatings' technology. On the other hand, GG Inks licensed its technology from a global coatings manufacturer.

On the contrary, there are many coatings manufacturers, which are capable of supplying to the General Line cans. As mentioned before, due to its less stringent requirements and hence lower risk involved, this segment tends to attract new entrants. In Malaysia alone, besides the involvement of ICI Packaging, PPG, GG Inks and Coates; there is also participation from smaller companies such as Toyo Inks, DIC and Sicpa. This has created an overcapacity in the production of coatings for General Line cans. Subsequently, such situation leads to price competition, which will be discussed in the next discussion on rivalry between firms.

The majority of coatings manufacturers originated from the Europe and USA. However, of late, major Japanese coatings manufacturers are also making inroads into the can coatings industry. This is mainly due to the Japanese investment in the can making industry, which automatically specifies for coatings from these Japanese suppliers to be used. Similarly, coatings manufactured by these Japanese companies will also be given preference for cans produced in Malaysia but exported

back to Japan. Coatings from Toyo Inks, INX Sakata, DIC and Sakuranomiya are the few popular candidates to be specified. Once specified, these Japanese players will normally team up with local partners to set up manufacturing facility in Malaysia, in order to be more competitive. Companies such as INX Sakata and Toyo Inks are classic examples.

4.2 Threat of Substitute Products

The growth in the can coating industry is very dependent on the metal packaging industry. After all, it is a specialised industry, where such coatings are only supplied to the can manufacturers. The can coating industry experienced almost 9-10% annual growth between 1992-1995. However, the escalating growth began to decline from 1996. Between 1996 to 1999, the annual growth of the industry was only averaging at 3.7%. One of the major contributing factors to such decline is product substitution.

For example the 2-pc DWI cans segment, which is used for the beer and beverage drinks. While in the past, cans were the substitute for glass-bottled drinks, they are now being threatened by PET (polyethylene terephthalate) bottles. This is a trend currently observed throughout the whole world. In Europe itself, cans only dominated 19% of the carbonated soft drink market, whereas 57% was packed in PET bottles. In the USA, cans account for almost half the market for carbonated soft drinks. The rest of the market share belongs mostly to the PET bottles (The Canmaker, Nov 1999).

One of the reasons behind the fast gaining popularity of PET bottles is in the convenient feature. Drinks, which cannot be consumed in a single serve, can be easily kept by re-capping the PET bottles closures. This feature is not found in cans. Research in the UK has shown that single-serve cans are the preferred choice for both adults and teenagers as they provide "the right amount to drink" (The

Canmaker, Nov 1999). However, can sales are still suffering at the hands of PET bottles, which are sold much more cheaply in supermarkets.

Another type of pack which is also a threat to the 2-pc DWI and 3-pc Beverage cans, is the tetra-pack. These square tetra-packs are widely used for beverage drinks such as juice, tea, milk, chocolate and coffee drinks. Its small pack size of 200 – 250ml is ideal for single serving. In addition, it is being sold at a much cheaper price compared to cans of similar size.

The General Line cans are also hit by vast product substitutions. This market segment faces various forms of product substitution, from plastic containers, PET bottles, composite materials (packs with a combination of foil and plastic), to boxes. The plastic containers have been used as alternative packs for paints, lubricants and motor oils. The PET bottles are widely used to pack cooking oil, whereas composite materials and boxes have been used for dry food stuff, such as biscuits, crackers, soup stocks, powder beverage drinks etc. The main reasons for these replacements are lower cost and to overcome pack problems like corrosion and dented cans.

4.3 Degree of Rivalry between firms

Competition in the can coating industry has been most intense during the last decade, especially prior to the 1997 financial crisis. This was brought about by growth in the 2-pc DWI cans segment, oversupply of imported cans and excess production capacity in the General Line cans segment.

As the 2-pc DWI cans dominates almost half the total market volume of the cans' industry, presence in this segment is important for the existence of any can coating suppliers. This is why competition has always been stiff among several major companies supplying the internal coatings like Valspar, PPG and ICI Packaging. In this market segment, customers usually adopt a one-supplier policy, due to the high

risk involved. Therefore, for the coating suppliers, it is a case of 100% monopoly of the business or nothing at all.

Hence, such situation often leads to price competition among the competitors in order to capture more market share. This has been clearly reflected in the average selling price (ASP) for the internal coatings in the past decade. For example the ASP for the 2-pc DWI internal coating in the market was RM5.47/lit in 1988, RM4.36/lit in 1990 and subsequently dropped further to RM4.00/lit in 1999 despite after the depreciation of the Ringgit.

Similar trend is also observed in the Beverage ends segment, where the internal coating experienced a price drop of almost 30% over the past decade. The ASP in the market was initially RM14.00/lit in 1988, RM10.00 in 1991, remained almost stagnant throughout the 90s and was recently sold at an average selling price of RM11.50/lit. The price increase is due to the hike in raw material prices after the depreciation of the Ringgit.

On the other hand, the General Line cans segment faces intense competition from local coating manufacturers such as Coates, GG Ink, DIC, Toyo Ink, SICPA and ICI Packaging. As the number of companies supplying the same product is high, excess production capacity occurs resulting in higher supply compared to demand. As companies compete with each other to fill up their production capacity, as well as to increase their respective market share in this segment (note that this segment has one of the highest annual growth rate since 1996), price eventually is being sacrificed. As an example, from 1988 to 1991, there was a gradual increase in the ASP of the external overprint varnish, from RM5.00/lit to RM5.80/lit. However, the increase in price could not be sustained long due to increasing competition. Its ASP finally remained plateau for most of the mid 90's at around RM6.00/lit.

The only market in which price-war is less intense is the can coatings for 3-pc Food Cans segment. The pressure on price eases off due to:

- its higher risk factor compared to the General Line segment
- limited number of local manufacturers for such coatings.
- protection from the government. Imported coatings are subjected to 15% import duty and 10% sales tax.

The ASP for coatings in this segment is currently at a level of RM10/lit. Even with the import duty, suppliers from abroad (such as PPG and Valspar) are constantly making an effort to capture a part of the local market share. Besides the import duty, the depreciation of Ringgit also hinders their effort to sell aggressively into the local market. However, changes can be expected, once the AFTA takes place in 2003. This is because both PPG and Valspar have manufacturing facilities in Thailand and Singapore respectively.

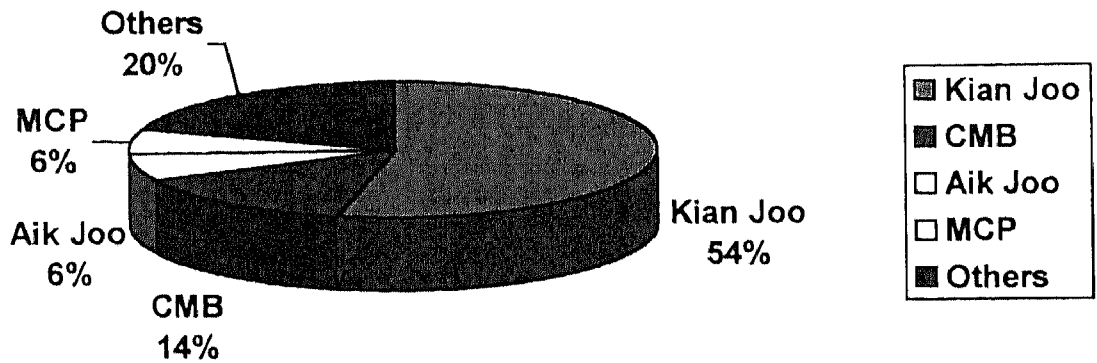
4.4 The Bargaining Power of Buyers

In Malaysia, there are close to 2 million units of cans and ends produced last year. However, the market is actually being dominated by only 2 major can manufacturers (the buyers), namely the Kian Joo and CMB groups. The Kian Joo Group monopolises the market by producing more than 50% of the total cans output, whereas CMB produces about 14% of the cans in the industry.

Therefore, it is not surprising that these 2 companies have great bargaining power against their suppliers, in terms of pricing, technical support and customer service. Hence failure to supply to these 2 customers would mean smaller market share for the suppliers in the cans industry. Even overseas suppliers are vying for a portion of the business with these 2 companies.

Figure 8 of the following indicates the market share of the can industry among the can-makers in Malaysia for 1999.

Fig 8: Can-makers Market Share In Malaysia (1999)



Source: ICIPM Annual Business Review 2000

4.5 Bargaining Power of Suppliers

Most of the raw materials for the can coatings are sourced from overseas. The suppliers for each raw material are few and they are mostly big multinational companies themselves, such as Dow Chemicals, Shell, Hoescht and Ciba. Moreover, raw materials for can coatings are usually not the core business for these suppliers. For example, resins such as epoxy and phenolic which are the major ingredient in the can coatings, are supplied mostly to the electronic industry. Therefore, suppliers often pay very little attention to the grievances, demand and needs of the coating manufacturers.

In addition, there is always limitation to the source of alternative raw materials and suppliers for the can coatings. As most of the materials used for can coatings have to be compliant to the FDA Regulations, replacement of these raw materials is often

a long and tedious process. Due to this, and coupled with the fact that there is only a handful of suppliers which could meet such stringent requirement, the coating manufacturers often lose their bargaining power.

The recent financial crisis led to rampant price increase in all the raw materials due to the Ringgit depreciation against most foreign currencies. This resulted in lower profit margin for local coating manufacturers as they are unable to pass on the increase to their customers.

Discrimination of customers among the suppliers is also very common. As most of the suppliers are huge western multinationals, preference is often given to support their customers in the west rather than their Asian customers. The raw material index shows that prices for raw materials reached a low level in 1994-1996, where economy downturn was experienced in most of Europe but the Asia region was booming then. This is because the excess of supply in the Europe was readily offered to companies in Asia. However, from 1996 onwards, the raw material prices escalated again due to increasing demand in Europe when its economy turned around.

4.6 Technological Threats

Analysis of the environmental forces of the can coating industry will not be complete without discussing the influence of technology. After all, the industry is highly technical and requires much research and development in order to stay competitive.

Coating manufacturers are trying to out-do each other to be the pioneer in introducing new technologies to meet the ever increasing demand in:

- the can-making process, where the coatings have to endure severe bending and handling

- the stringent environmental regulations imposed on these coatings by both local and overseas government. As most of these coatings, are solvent-based lacquers, strict enforcement in the emission level of volatile organic components (VOC), has been introduced by several countries.
- Meeting the pressure by consumer groups over some raw materials, which are used in the coatings and come into contact with food. Among the raw materials, which has created major health concern recently, is the epoxy resins, which consist of an endocrine disruptor chemical. This issue is being elaborated in the Appendix D.