

## **1-5 . Marketing**

### **1-5-1. Industry in General**

The Thai toy industry started out by copying overseas products, and today OEM products account for the bulk of toy exports. As a result, the industry concentrates on the manufacture of goods which have already been sold, and there has been no need for manufacturers to develop their own brand name products at their own risk. This means that the manufacturers know little about trends and fads on overseas markets. Furthermore, they have limited means for obtaining this sort of information.

The ability to perceive potential demand determines whether or not it is possible to develop products which meet market tastes. That is, when something sells well it is essential to do analyses and to grasp what sensibility lies behind its success. To carry out intermittent and also systematic analyses thought must be given to what sort of elements the trends in latent demand should be divided into, what sort of data should be used for analysis, and also how to obtain the required data. Because Thai toy manufacturers carry out almost no analysis of these demand trends, they do not fully understand the reasons why products do and don't sell. Products which sell are developed by analyzing potential customer emotion, dividing that into individual elements, and then making specifications for products. The technique of being able to embody in a product the various individual elements of customers' latent emotions is required for the steady creation of popular products.

Although the accumulation of data is necessary in order to analyze trends in demand, Thai toy manufacturers appear to have an inadequate data base. To supplement the lack of a data base during the preliminary stage, it would be useful to use data from Japan or other countries. It is first necessary for Thai toy manufacturers to cultivate a technique for grasping the trends in demand relating to the domestic market. It will then be possible to adapt this to the international market.

Recently some manufacturers have used overseas trade fairs organized by the DEP and displays in DEP showrooms as a means of publicizing their own products. However, opportunities to carry out this sort of activity are limited. Furthermore, no constructive efforts to develop new customers are made as the companies' business activities are very passive and tend to wait for enquiries from customers.

Not only are efforts by individual manufacturers necessary in order to speed up the growth of exports, but it is also essential that the Thai toy industry as a whole launches public relations activities aimed at overseas markets and establishes Thailand's

identity as a world toy manufacturing base. The first step which needs to be taken is for the industry as a whole to plan an overseas publicity campaign.

### **1-5-2. Plastic Toy Industry**

#### **(1) Outline**

Because the Thai plastic toy industry is largely dependent on OEM production, manufacturers are mainly concerned with meeting the requests of their customers for OEM products, and therefore they have no clear understanding of the necessity or meaning of developing their own products. This tendency is stronger with larger companies as the bigger the company the greater the reliance on OEM production. Rather, there are some medium and small companies which are very keen to develop their own products because of the necessity to become independent.

There is not really any product planning or development departments to be found within the plastic toy companies. This is due to a lack of understanding and necessity, and at the same time, it is the result of the manufacturers' incapacity to develop their own products as well as inadequacies in the capability and numbers of development experts. This means that the companies do not have the desire to develop markets at their own risk, and instead there is a tendency for them to want governmental organizations, parent companies, and customers to provide information and technology, as well as wanting them to bear all the risks.

In general, manufacturers put not much effort into selling their products. As OEM production comprises the bulk of production there is no need to involve themselves with sales. Therefore, with the exception of some companies, no catalogs or materials, which are the tools used for selling, are prepared, and there is only scant knowledge as to how their products are selling on overseas markets or how they are used.

#### **(2) Export Markets**

The Thai toy industry has yet to carve out for itself a position within the international market. Nonetheless, large Thai manufacturers receive orders for character OEM products from leading American toy manufacturers such as Mattel, Hasbro, Tonka and Illco and also from Japanese toy manufacturers. Judged on international standards, these products are of medium standard and are medium price range, mass-produced products aimed at the markets of Europe and the United States.

The quality of these products is compensated for by their low shipping price compared with other toy producing countries, and Thai-made toys are just beginning to be appreciated for this quality. Considering that Thailand is eligible for preferential duties in

the United States, it can be expected that demand for Thai toys on the international market will become even greater. Most of the Thai large and medium-scale toy manufacturers are already operating at full production capacity, and there are some which are currently building new factories and production equipment.

If it is possible to improve quality levels while simultaneously meeting demands for large volumes from overseas markets, the rating given to the Thai toy industry will rise, and it should be possible for it to establish a position for itself on the international market. At the present time, the countries producing for the international toy market, Hong Kong, Taiwan, South Korea, etc, are faced with the harsh realities of increasing production costs and the deterioration of the export environment. The Thai toy industry is now provided with an ideal opportunity for expanding its sales channels.

### (3) Product Outline

There are very few plastic toys produced in Thailand today which have high level mechanisms or contain electronic parts. Thai-made toys which have a high degree of completion and have a relatively high added value are OEM products aimed at the European and American markets. Still, these products are made up of only a small number of parts and are aimed at the lower age group.

Thai toys closely resemble toys produced by Asian NIES. However, even though they might be of similar design and are similar in function, the molding precision of the various parts is low and the finishing off such as the finishing of the gatemark and the removing of the edges is very rough. Processing and assembly precision is similarly rough so that there is no consistency in quality, the condition of finishing, or outward appearance. Therefore, even though it is possible to supply the overseas market for cheap mass-produced products, the present situation is such that the industry cannot hope to supply goods which are of a higher standard.

Thai-made plastic toys have been divided into three different groups, A, B, and C, based on the standard of the finished product and market price, and are shown in Table III-10. However, the product standards shown in this table are classifications pertaining to only Thai-made toys so that the "A" rated products are equal to the medium range on the international market.

### 1-5-3. Stuffed Toy Industry

#### (1) Outline

The product planning of Thai stuffed toy manufacturers generally centers around the concept of single products. There are no signs of carrying out product planning using

**Table III-10. Current State of Plastic Toys by Merchandise Level**

Item	Merchandise Level		
	Class A	Class B	Class C
Summary of merchandise	Almost all production is OEM for major overseas manufacturers. Products are made based on customer specifications and standards. Mass production according to set flow from parts production to assembly and inspection of finished product. Very little of production reaches domestic market, but what does appears in department stores etc.	Most exported products are of the OEM type, but little is for large manufacturers. Production is by lot. Further, in some cases, same product is packaged differently and sold to different customers. Products have merchandise value as they meet specifications and needs of customers. Most products are sold on the general domestic market through wholesalers.	These are cheap toys of a poor quality and low price. The manufacturers do not have a grasp of the market covered and lack knowhow on quality and functions. They merely produce under the control of the wholesalers, who place the orders. Some of their products are exported, but most is for the domestic market for inexpensive toys and general regional markets.
Price (invoice)	50c.-\$15/pc Central price: \$5	10c.-\$3/pc Central price: 50c.-\$1	5c.-50c/pc Central price: below 10c.
Manufacturers	Products of large companies are of this level. Some medium sized companies also producing same.	Medium sized companies are predominant and deal directly with overseas customers or through manufacturing wholesalers.	Small companies are producers.
Destinations	To large toy manufacturers of North America (U.S. and Canada): 50%; Western Europe (U.K., FRG, etc.): 30%; Asia and Australia: 10%; Japan: 5%; Domestic: 5%	North America (U.S. and Canada): 30-40%; Europe: 30-40%; Asia (including Japan): 10-20%; Others (Middle East etc.): 5-10%; Domestic: 10%	Exports (U.S., Europe, Middle East, etc.): 40-50%; Domestic (most is for regional markets): 50-60%
Packaging	Packaged and boxed according to customer specifications.	Packaged and boxed according to customer specifications or packed in plastic with cardboard backing.	Packed in simple plastic bags. Some even not packed when shipped out of factory.
Plastic used	PS (HI, GP, domestic and imported) and ABS (imported) constitute main plastic used. PE, PP, and PVC are imported and produced domestically, but no used much.	PS (HI, GP, domestic and imported) and ABS (imported) constitute main plastic used. ABS, PE, PP, and PVC also used.	PS (GP) and PE are prevalent. Will use anything supplied by dealers.

Merchandise  
value

These toys are recognized to have merchandise value on the market as they are OEM products of brands of large overseas manufacturers. On the other hand, there are few products incorporating advanced functions or high technology. The accumulation and demand for manufacturing technology knowhow are low, so entry by competing countries into the market would be easy. These toys cannot be said to be high in added value.

These products make full use of the cost merits of production in Thailand. There are many copy type products seen, but these toys have a merchandise value appropriate for the demand from the market at this level. However, the level of technical expertise of the products is low, so the only merit enjoyed over competing countries is in cost. The added value is low.

Prices are very low, so while quality is poor and product is simple, the toys are suited for sundry good and give-away level to market. Demand is also great in domestic regional market. However, almost none have merchandising value on international market.

model lines. In other words, they have not adopted the method of developing a line of items from the elements of the best selling products as a basis for deciding what range of products to manufacture.

Also, there are few Thai-made stuffed toys which rank along with European or Japanese stuffed toys in terms of quality. Exports will not increase if Thailand does not show to potential overseas customers that it has some good products. The fundamentals of technique, which determine whether a product is good or bad, can be cultivated by making original product plans, producing, and selling for the domestic market. If techniques for planning and controlling quality which meet the tastes of consumers on the domestic market does not reach a certain standard, it will be difficult to earn confidence from overseas and no progress will be made in expanding exports. The substantial planning of products aimed at the domestic market must be worked upon urgently.

## (2) Exports Markets

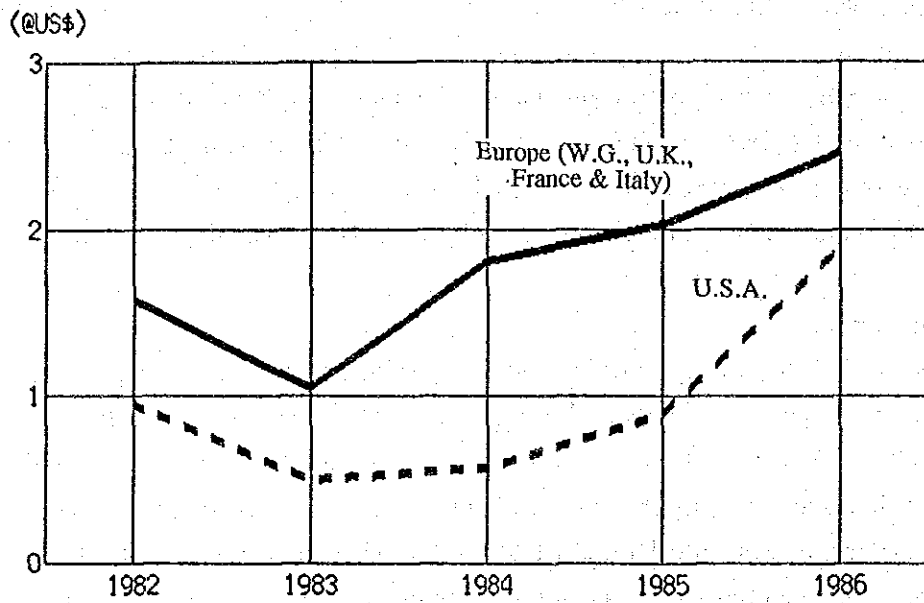
Thai stuffed toy manufacturers tend to regard the European market, which buys good quality products at relatively high prices, as the best overseas market. It would also appear that the Thai manufacturers are somewhat negative about the American market due to the overwhelming strength of low-priced goods from South Korea, Hong Kong, and China. However, making the United States, the largest importer of stuffed toys, the primary target is essential for increasing the volume and value of exports. Chart III-2 shows the average export unit price of Thai-made dolls exported to the American and European (West Germany, Great Britain, France, and Italy) markets over the past five years, and bears out the above trend.

## (3) Domestic Market

At the present time doll counters in department stores and doll corners in toy shops comprise the main sales points within the Thai domestic market. As a result, manufacturers are only concerned with the large retailers and specialist stores. However, these sales counters are not very active, and the doll sections in department stores seem relatively empty. In contrast to this, among the places which sell goods related to stuffed toys, those showing signs of activity are the stores in Bangkok selling gift mascots and fancy interior goods aimed at young women. A notable characteristic is that the sales environment presented in these stores has a coordinated atmosphere. Such stores have the potential of being a promising market for stuffed toys. By developing products aimed at this market, it should be possible to achieve new growth.

Many of the stuffed toy manufacturers accept the reactions and opinions of retail stores concerning their products without question, and then proceed to make their next

Chart III-2. Trends in Average Unit Export Prices of Thai Dolls by Destination



Source: Foreign Trade Statistics of Thailand, Department of Customs

product. There are some cases where the sales methods used in retail stores are not appropriate for the goods which are sold. Because the way in which a product is sold to the consumer is an important element in maintaining a long product life, it is important that manufacturers give guidance to retail stores. Instruction in selling methods is particularly important in the case of original products.

#### (4) Outline of Products

It is observed that Thai-made stuffed toys are devised by using stuffed toys from the United States, Europe, and Japan which are found in Thailand as models and/or as something to go by. But because customer feeling which lies behind the individual products is not sufficiently understood, there is a lack of quality when it comes to detail even though the products resemble products made in developed countries to some extent. It is necessary to grasp what are good products and what are bad products using the feelings of the customer as a basis.

Most of the products from advanced countries which are used as models and for reference are tried designs which have become standard goods in the markets of those countries. These standard goods are products that are always being put on the market, and their sales are always small but of a steady fixed amount. Although they have a basic appeal, that appeal is rather limited. It is therefore necessary for the manufacture of standard products to come up with plans for products which have their own identity and which are more noticeable than those made by other manufacturers. What is more, if one wants to come up with a best seller, it is necessary to consider products other than standard products. Because standard products are basically not very interesting; if only these standard are produced consumers will lose their enthusiasm, and the desire to purchase will wane. Product development which activates purchasing is required.

At present, stuffed toy manufacturers are not aware of the market for goods for foreigners who visit Thailand as tourists, so there is no development of products aimed specifically at this market. The fact that little, if anything, has been done concerning this market means that in the future it will be possible to develop and cultivate this market. This is a promising market if one takes into account the increasing number of foreign tourists visiting Thailand. What is more, it will become possible to sell high quality goods aimed at tourists in overseas department stores and specialty stores, and while simultaneously as influencing sales, this should serve as good public relations for the Thai stuffed toys.

It would seem that stuffed toy manufacturers do not have a full grasp of the potential demand from domestic consumers. From the observation in an shopping center in Bangkok, it seems that the consumers themselves are asking for products which are not



standard products, but the manufacturers only produce standard goods. Thai manufacturers have a preconceived idea as to the demand for stuffed toys on the domestic market. For example, their products are mainly aimed at children in the lower age group, and there are very few products which are aimed at other age groups such as young women.

## **1-6. Technical Capacity**

### **1-6-1. Plastic Toy Industry**

#### **(1) Outline**

Because the manufacture of plastic toys in Thailand is dependent on OEM production, the domestic market is small and undeveloped. Related industries such as the mold and die and metal parts industries are of a poor standard and manufacturers largely rely on the introduction of production techniques from abroad. During the course of the survey in Thailand, most of the manufacturers visited were found to not have design or development departments.

The Thai plastic industry has been expanding at a rapid pace in recent years, but because education in related basic technology is in its early stages and there are few training facilities, there is an insufficiency in both the quality and quantity of technical experts in plastic manufacturing. This tendency is particularly strong in the area of plastic toys, which is no more than a subsidiary of the plastic industry. One of the main reasons for the inferiority of technical experts is that manufacturers do not feel the necessity for employing such specialists.

The numbers of technical experts and the situation concerning overall technical capacity of the various manufacturers which were visited as part of the survey are shown in Table III-11.

#### **(2) Product Development and Design**

The order for product development is generally as shown by the flow chart in Chart III-3. The development and design of products involves most of the stages from initial development through to actual product form. However, in the Thai toy industry today, it is the overseas customers or parent companies who perform the tasks from product planning through to market surveys and the bringing in of molds. As a consequence, it is not necessary for companies to have their own product development and design departments. This means that experts in product development and design, even if they have graduated from university or a technical institute, have almost no opportunity to join a toy manufacturing company. And it seems that there are very few incidences where toy manufacturers cultivate this sort of technical department or accumulate technology within their own companies.

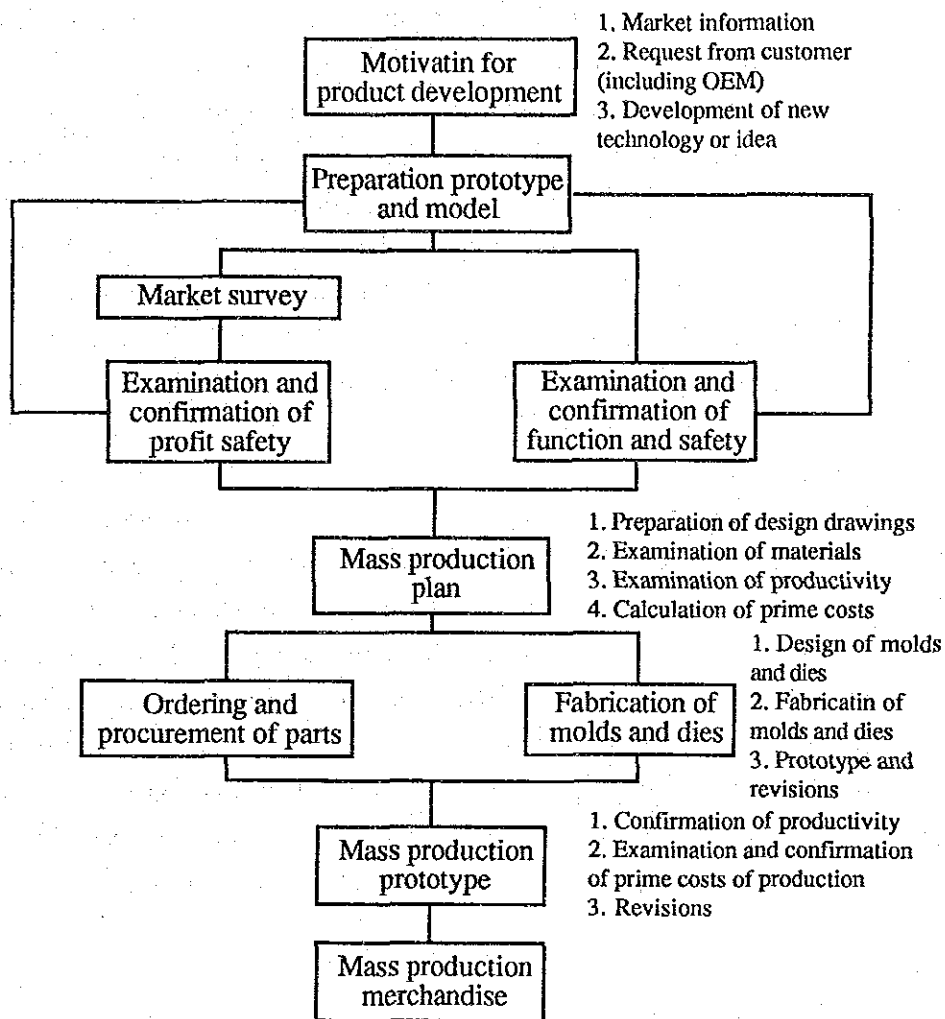
Technical capacity relating to product development and design cannot simply be added to a company's capability, but it is something which can be made full use of only

**Table III-11. State of Technical Capability by Companies Visited**

Company	No. of engineers in each field				Overall technical capability
	Planning and development	Design	Production control	Quality	
<b>Large companies</b>					
Company A	—	(*1)	(*1)	(*1)	A
Company B	—	(*1)	15	20	A
Company C	—	—	(*1)	(*1)	A
Company D	(*1)	—	(*1)	(*1)	A
<b>Medium companies</b>					
Company E	—	—	2	4	C
Company F	(*1)	—	1	4	B
Company G	(*1)	(*1)	1	—	B
Company H	—	—	—	6	B
<b>Small companies</b>					
Company I	—	—	—	—	C
Company J	1	—	1	4	C

Note: 1. (\*1) means that engineers present, but number unknown.  
 2. A: Superior, B: Usual, C: Inferior

**Chart III-3. Flow of Merchandising of Plastic Toys**



as a result of years of accumulation. The poor state of technical capacity is a serious problem which the Thai plastic toy industry must work on in the future.

At the present time the industry is making the most of its price competitiveness and is in the process of taking over a certain part of the world toy market which has up until now been held by the major exporting countries such as Hong Kong and Taiwan. But if the existence of China and other countries which will enter the export market is taken into account, in the medium to long-term it will be difficult for Thailand to retain its superiority in the manufacture of OEM products which are largely low cost. During the course of the next several years it will be necessary to accumulate technology from the present production of toys, and using that as a basis, to manufacture OEM products which have a higher added value and also to establish their own brand of products.

### (3) Production Control

With the exception of the large and some of the medium-scale companies, process control and cost control is not carried out. Generally there is a low level of consciousness regarding production control. One aspect of the present production system which makes use of an abundant low cost labor force is that it makes it difficult to heighten awareness concerning the raising of production efficiency. In the future, the manufacture of high quality goods and high added value goods will be necessary, and if there is more cooperation within the industry, the re-evaluation of production systems and quality control systems will be required and detailed attention will need to be paid to the control of parts and semi-finished parts, the control of stocks of products, etc.

### (4) Quality Control

The large companies which export OEM products have introduced sound quality control systems. These companies make a distinction between the inspections carried out on the lines where quality is checked at each processing and assembly step and the inspection of finished products. They also recognize the importance of such inspections. For the inspection of finished goods they out mainly breakage tests and function checks. Some of the medium-sized companies adopt the same control systems as the large companies. However, rather than testing the quality of the product itself, they pay attention to breakage and functions. Although there are some small companies which do carry out tests of finished products, they involve no more than simple operations such visual inspection and the testing of functions. In general, quality control in Thailand concentrates on the testing of functions and testing for breakage, and little attention is paid to the condition of the finer details of products and parts.

### (5) Technical Knowledge

In addition to the necessity of having a feeling for product development and marketing, the technical knowledge required of plastic toy manufacturers includes many areas such as general engineering technology, technology concerning raw materials and machinery components, and molding, and processing know-how. The technologies which Thai plastic toy manufacturers are lacking in, or are required to possess, are as follows:

#### a. Knowhow concerning raw materials

- types of plastic: manufacturers, brands, price;
- physical properties of plastic: intensity, shock resistance, heat resistance, chemical resistance, hardness;
- qualities of plastic: molding and processing, luster, adhesiveness, color fastness, plating.

#### b. Molding technology

- molding methods: injection molding, blow molding, vacuum molding, rotary molding;
- molding machines: manufacturer, types, specifications;
- molds: types, quality;
- molding characteristics and molding efficiency.

#### c. Product design and production

- design technology: drafting, mechanisms, machine components;
- productivity;
- processing technology: processing and assembly lines, jigs processing equipment;
- production control and process control;
- quality control.

#### d. Other

- analysis, absorption and evaluation of new technologies;
- overseas negotiations: customers, subcontractors.

### (6) Production Environment

The large companies have plants in the outskirts where siting conditions are good. The working environment of the plants of the small companies and workshops which are scattered around the city are bad, and the road access for bringing in and shipping out goods also appears bad. However, there are many which intend to obtain land in the outskirts and shift their plants there. This trend is expected to continue in the future.

As for utilities for manufacturing plants, power cuts and water stoppages are rare. The situation concerning electricity is good, and there are no serious problems in the supply of water or fuel.

## **1-6-2. Stuffed Toy Industry**

### **(1) Staff**

Most of the manufacturers have hardly any staff on the production site. This function is either fulfilled by the manager himself, or by a young woman who follows by example. With the exception of the relatively large manufacturers, there is hardly any product planning, development or sales staff to be seen, and there are many cases where the manager is in charge of planning and sales. There is a limit to the range of tasks which the manager can perform. Also, in many cases the manager himself does not have enough know-how to perform these tasks. Consequently, staff are required if production volume is to be increased.

### **(2) Quality Control**

Importers in advanced countries supply manufacturers with specifications and designs which clearly show which quality standards are to be met. Thus, the importers expect manufacturers to carry out strict quality control in line with their requirements. But because the requirements for the original products of Thai stuffed toy manufacturers are vague, quality control is also very vague.

The larger the scale of production, the more the manufacturers have a system for incorporating quality control into the various processes. However, in general terms the standard of quality control is lower than that in advanced countries which produce stuffed toys. One reason for this is that standards and product specifications for the basis of quality control have not been clearly established. There are no clear quality standards or methods relating to basic techniques such as sewing, binding, stuffing, and sewing on. As a result, a lack of attention to detail can be seen where seams are rough and uneven, hardness is inconsistent (e.g. the head is hard but the body is soft), etc. There are many cases where quality control relating to aspects of design, such as facial expression, puffiness of toys, and the positioning of eyes, have been overlooked, and it is felt that there is a particular weakness in know-how for this sort of control. Establishing check points is one way of conducting quality control for design.

Concerning the control of materials in stock, the larger stuffed toy manufacturers store materials in storage rooms. However, most of the medium and small manufacturers leave materials more or less outside, and there is the fear that extraneous substances will

get mixed in the materials and that quality will deteriorate because of rain, etc. Also, the unfavorable impression which overseas stuffed toy buyers would gain if they saw this sort of materials control would work against the promotion of exports.

### (3) Production Technology of Related Products

Because stuffed toy manufacturers have produced a certain type of single product up until now, they lack knowledge about production methods for products which can be made with existing equipment. It is easy for bottlenecks to occur when efforts are taken to produce more cross-business types of goods.

## 1-6-3. Access to New Technologies

### (1) Introduction of and Capacity for New Technologies and Know-How.

Although there are some Thai toy manufacturers who show an interest in the introduction of new technologies from overseas, none of the large companies except the Japanese companies display any interest in this. For companies to raise the added value of their products and to improve their standards it is essential that they acquire from overseas new technologies and know-how concerning other fields. But prior to this, the companies must have in place the capacity to understand and adapt these new technologies. This is not something that can be achieved overnight. Because in Thailand the layers of peripheral industries are thin and the industry is immature, there is some unfamiliarity with collecting and handling information derived from other fields, other companies, and from overseas.

### (2) Means of Obtaining Information on New Technologies

There are basically no toy manufacturers who have taken positive steps for obtaining information relating to new technologies. The situation is such that no room is given to activities other than immediate production activities, and there is no sign of any efforts to obtain information.



## **1-7. Standards**

### **1-7-1. Foreign Countries' and International Standards**

There are no uniform international standards governing the quality and safety of toys. Therefore, it is necessary to have they export products meet the standard of the destination country. However, international organizations and individual countries are in the process of standardizing standards and certification among countries and as there are no major differences in concepts concerning standards, the standards of different countries are basically similar on many points. Still, there are some discrepancies concerning some details such as testing methods and specifications for standards.

Safety is the top priority of the present standards of various countries and organizations. They can be summarized as listed below:

a. ST mark: This is the industry's voluntary standard which the Japan Toy Association has established for the industry. Basically, it is an industry regulation for toys sold within Japan to display the ST mark. Discrepancies between the ST mark and other international standards are in the process of being amended.

b. CEN standards: These are standards which have been set by the European Standardization Committee (CEN) for the standardization of standards within the region. Included are the most balanced set of standards concerning test and inspection methods, and the setting of a full range of standards is very near completion. Great Britain, France, West Germany, etc. follow these standards.

c. ANIS standards: These are toy industry safety standards which have been adopted as voluntary product standards by the American toy industry. On the basis of action taken by the Consumer Product Safety Committee (CPSC) they are in the process of being standardized throughout the country.

d. ICTI standards: These have been set as international safety standards for toys by the International Committee Toy Industry. Based on the CEN standards and having adopted CPSC testing methods, they are aimed at international standardization. Major toy exporting countries belong to the committee, and the standards reflect safety standards of individual countries.

e. Other: There are also moves by the International Standardization Organization (ISO) to enact safety regulations for toys.

### **1-7-2. Toy standard of Thailand**

In 1987, Thai Industrial Standard Institute (TISI) established the Standard for Toys. This standard consists of three parts. It is expected that this standard will be come wide-spread in the Thai toy industries and the domestic market.

#### **Standard for Toys:**

- Part 1            General Requirements
- Part 2            Packages and Labelling
- Part 3            Methods for Test and analysis

### **1-7-3. Company Standards**

In general it is usual for companies to establish their own operational standards and quality standards in order to standardize the quality of manufactured goods. However, none of the Thai toy manufacturers were seen to have their own standards. The setting of a company's own operational standards and quality standards based on more than just production activities which conform with quality standards required by customers not only plays a significant role in the company's accumulation of technology, but also leads to having their own brand goods in the future.

## **1-8. Supporting Industries**

### **1-8-1. Outline**

The scale of the toy industry is small, but it is an industry which combines many different sectors. Therefore, if the foundations of the various sectors are expanded, the toy industry is in a good position to make advancements. Because the level of other industries is varied in Thailand, there are cases where it is not possible to obtain simple parts within the country. This means that imports are required for parts and materials which are hard to obtain within Thailand, and there are cases where investment in plant and equipment is needed for in-house production.

### **1-8-2. Parts Industry**

Although plastic mold parts make up the bulk of parts used in plastic toys, parts from many other areas are also required. These include small metal parts such as springs

and screws, motive power-related parts such as gears and motors, and rubber parts. Manufacturers who process these parts must make use of other industries. But as is the case with toy parts, there are few manufacturers who will process extremely small parts. As a result, the cost of small parts is comparatively high, and instead there are cases where it is cheaper to import from specialist manufacturers in countries such as Taiwan and Japan. But if imports are relied upon, it is necessary to have a large quantity of the same part at any one time, and problems can arise concerning delivery. In the future the situation for the supply of parts should improve if the toy industry increases in scale, but it is also necessary for companies to put some effort into developing cooperative plants.

### **1-8-3. Mold Industry**

One of the largest problem areas facing the plastic toy industry is the substandard capacity, in both terms of quality and quantity, of the domestic mold industry. It is due to this that toy manufacturers have to import good molds from overseas. Also related to this is the introduction of machinery and equipment required for repairing and remodelling molds.

The reason why Thai toy manufacturers do not develop their own products is not only because of insufficient technical capacity, but also because of the large risk involved in investing in mold manufacture. Much is expected in the way of growth of domestic mold manufacturers for future development.

### **1-8-4. Raw Material Plastics**

Polystyrene is the raw material which is the most used in the manufacture of plastic toys. This is followed by GP polystyrene (general use) and HI (used for shock resistance). For both of these a mixture of domestic and imported products is used. As for other major resins, ABS is mainly imported from Japan, and a combination of imported and domestic PP, PE, and PVC is used.

Although the cost of domestically produced plastics is low, the quality of some is not so good due to the mixing in of recycled products. Though the quality of imported plastics is good, the price is high, and delivery is not always stable. Nevertheless, there are few problems concerning obtaining plastics for raw materials in Thailand.

The findings of the survey relating to the source of raw materials (domestic and imported) are as shown in Table III-12.

Table III-12. Origin of Plastics by Company

Company	Domestic	Imported
<b>Large companies</b>		
Company A		PS (HI,GP), ABS
Company B	PS (HI,GP), HDPE	ABS, PVC, PP
Company C		ABS, HIPS
Company D	PS (HI, GP)	ABS
Company E	PS (HI, GP)	ABS, PE, EVA
<b>Medium companies</b>		
Company F	PVC	PS (HI, GP), HDPE
Company G	PS (HI, GP), PP, LDPE	
Company H	PS (HI,GP)	HDPE, PP
Company I	HDPE	
Company J		Soft PVC
<b>Small companies</b>		
Company K	PP,PS	
Company L	PS (HI, GP)	ABS

Note: Company A and Company B are Japanese affiliates.

#### **1-8-5. Packaging and Printing**

The packaging used for OEM plastic toys is mostly cartons. Plastic bags and cases made from vacuum molding PVC sheets are also used. Though the quality of the boxes cannot be said to be high, most of them are very tidy packages. However, printing techniques are not very good. Furthermore it was observed that in other industry areas, there was packaging case and printed matter which was of the highest technical level.

#### **1-8-6. Materials for Stuffed Toys**

It is difficult to produce first class stuffed toys using only domestically produced materials. There is a special problem in using domestically produced furs, felts, ribbons, and beads for eyes as materials for stuffed toys. If materials which fit the required image are not used it will not bring out the degree of realism which is vital for stuffed toys. It will also be difficult to make the toys correspond to the sensitivity of consumers.

In the United States, Europe, and Japan many types of materials are available, and it is possible to receive supplies of ready-made goods. And because production lots are large, materials can be ordered which are made according to original specifications. But in Thailand, the requirements of stuffed toy manufacturers relating to cloth manufacture for stuffed toy production cannot be met due to the smallness of lots as well as price and delivery constraints. If the Thai stuffed toy industry is to expand in size it must be realized that the quality of materials determines the value of goods, and supply routes for suitable materials need to be established.

#### **1-8-7. Development and Design**

Many design offices are to be found within Bangkok City. The technical level of the design offices is fairly high and their work relating to the design of products in accordance with manufacturers' requests, samples, and manufacturing plans is of a high quality. Free-lance designers, and university students working part-time are also involved in the design of products. In the Thai toy industry there are few companies which have their own product development and design departments, but it is rare for them to consign designs outside. This is due to the high degree of caution taken to prevent the theft and copy of designs and the low value attached to product development.

### **1-9. Metal Toy Industry**

In Thailand there is only one manufacturer of metal toys, and that is Yat Ming Toys Factory which is a Hong Kong joint venture company. It manufactures zinc alloy die cast and plastic mini-cars. Spring gear boxes are used in most of the mini-cars.

The Hong Kong parent company takes charge of product development, mold and die manufacture, and production technology control, and it has a division of production system with Yat Ming Toys. All of the zinc alloy is imported from Australia. The company's own supply ratio for parts is very high. It imports parts for the smallest size gear boxes from Japan, but the assembly of these parts is conducted within the company's own plant. Painting, plating, and printing are all carried out by the company's own lines.

Full use of Thailand's cheap and abundant labor force is made in the labor-intensive assembly process for gear boxes. Also, the quality is such that parts, are also exported to Hong Kong.

## 2. Present Situation of Other Toy Producing Countries

### 2-1. Outline

Quite some time has passed since such Asian nations and areas as Hong Kong, Taiwan, South Korea, and Japan became the world's major toy exporting countries. In the past, these Asian nations and areas, along with the European nations of West Germany, England, and Italy made up the world's two major export groups. But since 1981, the share held by all the nations and areas of Asia together exceeded 50%. Since that time steady expansion has continued until their share grew to 63% in 1985 (see Table III-13). The growth ratios and share of Asia's major export countries and areas are shown on Charts III-4, 5. World toy exports including Taiwan exceeded \$3 billion in 1977, grew to \$4.8 billion in 1979, have been in the \$5 billion range since 1980, and rose to \$5.8 billion in 1985.

Among these Asian nations and areas, Hong Kong recorded an average annual export growth ratio of 25% during the 1960s. In 1964, it surpassed West Germany to become the world's No. 2 export country, and in 1972, it surpassed Japan to the position of world's No.1 export country. Taiwan experienced sudden growth during the 1970s, and in 1979, it temporarily passed above Japan to reach No. 2 position, but during the 1980s, it dropped back into 3rd place. Then in 1983, it exceeded Japan once again to take 2nd place which it has maintained ever since. The unique feature held by both Hong Kong and Taiwan is the fact that the U.S. receives the overwhelmingly largest share of their export products. In passing, the ratio of Hong Kong's exports that went to the U.S. reached 54% (in 1986), and that of Taiwan reached 57.5% (in 1987). As the main export items are U.S. major toy maker OEM products, the height of the export reliance ratio on the U.S. including original products is due to none other than the fact that the U.S. is the largest export market in the world.

South Korea is known today as the world's largest supplier of stuffed toys, but its sudden growth into his position came during the latter half of the 1970s. Exports exceeded the \$1 billion mark in 1987, and during 1980, they grew from \$200 million to more than 5 times that figure. The main export product is sewn toys, with 70% of the total. Even in the case of South Korea, the main export customer is the U.S., with a ratio of 67.6% in 1987.

Japan's toy exports got their start soon after the end of the war as collateral export goods to the U.S., exerting overwhelming strength in the field of medium quality products. For more than 20 years, Japan has reigned over the international market, developing as a stable export oriented industry. It peaked in 1982 with \$730 million, and

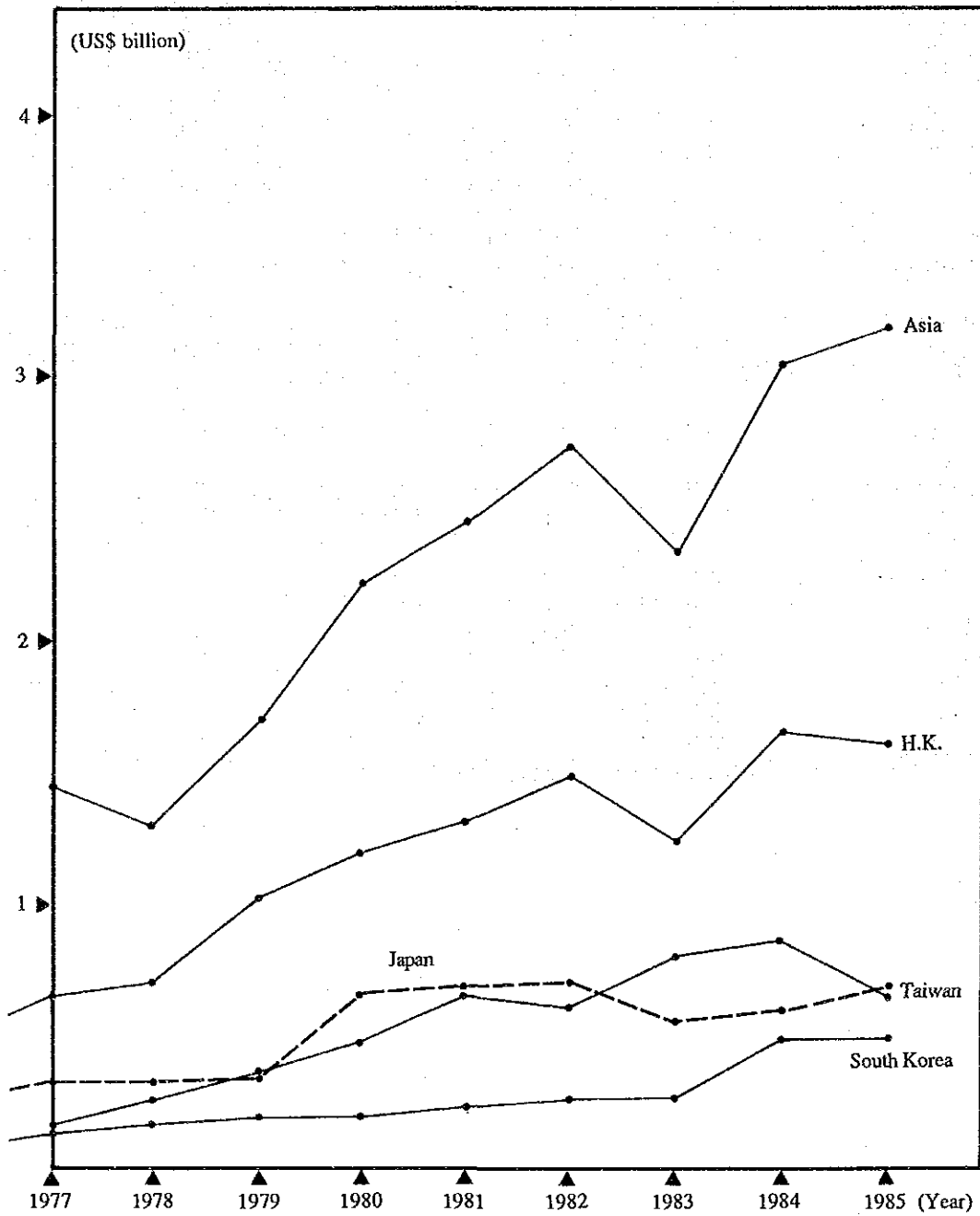
Table III-13. Share of World Toy Exports by Country

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Africa	0.1	0.1	0.1	0.1	0.1		0.1	0.1	0.1	0.3
North Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
America	12.9	12.1	14.2	15.2	14.5	15.0	11.4	13.6	9.5	8.4
LAIA	0.6	0.7	0.8	0.8	0.8	0.9	0.5	1.3	1.2	1.8
CACM	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Asia	42.5	46.1	43.0	43.3	47.5	50.9	56.8	52.5	61.8	62.7
Middle East	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1
Europe	44.3	41.5	42.4	41.1	37.7	33.7	31.4	33.4	28.3	28.4
EEC(Ten)	37.7	35.7	36.4	35.9	32.8	29.0	26.6	28.3	23.1	23.1
EFTA	3.1	2.7	3.0	2.7	2.7	2.6	2.5	2.8	2.6	2.9
Oceania	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3
Hong Kong	24.2	25.3	23.7	26.6	25.8	27.7	31.9	28.5	33.7	32.0
Japan	12.7	13.0	11.0	9.3	14.4	14.6	15.0	13.3	12.2	13.5
U.S.	11.3	10.7	12.8	13.8	12.7	13.2	10.3	11.4	6.6	5.3
South Korea	4.0	5.8	6.1	5.2	4.5	5.1	5.8	6.3	9.7	9.5
FRG	11.8	11.4	11.3	10.2	8.9	8.0	7.4	7.5	6.4	7.0
Italy	8.6	8.0	8.2	8.4	7.5	6.5	6.1	5.7	4.9	5.1
U.K.	9.0	8.3	8.8	8.7	7.4	5.8	4.9	5.1	4.3	4.5
France	3.3	3.1	3.3	3.2	3.4	3.2	3.3	4.3	3.0	2.7
Spain	3.0	2.5	2.4	2.0	1.6	1.5	1.7	1.9	2.1	1.9
Singapore	0.8	1.4	1.4	1.3	1.7	1.9	1.7	1.7	1.9	1.9

Source: UN International Trade Statistics Yearbook 1985



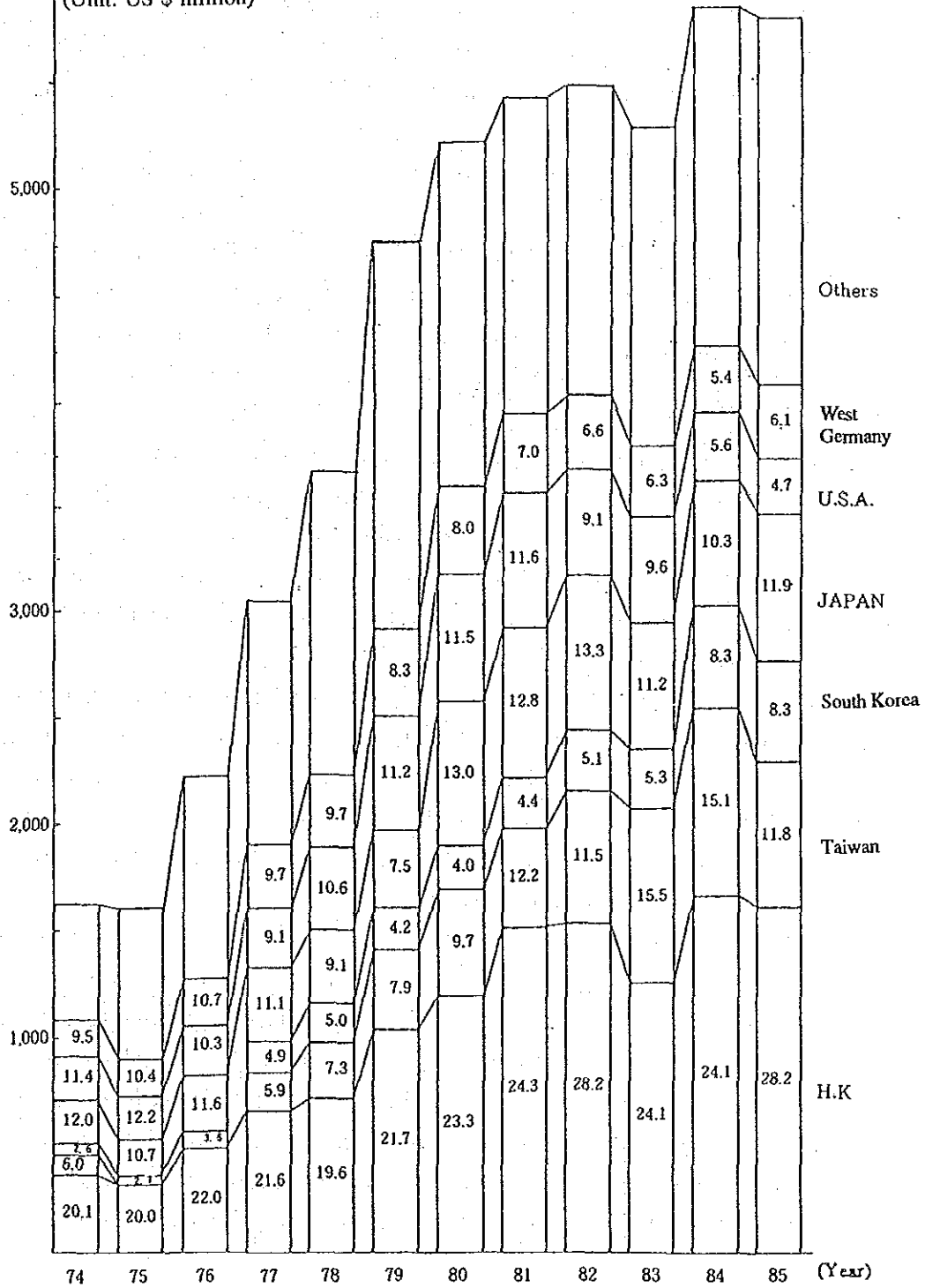
Chart III-4. Groth Rate of Main Toy Exporting Nations & Areas of Asia



Source: UN International Trade Statistics Yearbook 1985

**Chart III-5. Export Amount and Share of Toy Production in the World**

(Unit: US \$ million)



Source: UN International Trade Statistics Yearbook 1985

it dropped by 19% in 1983 with a total of \$590 million. In 1985 it showed a recovery to \$680 million, but along with an appreciated yen and the resultant intensification of price competition, it slumped into a 32% negative growth in 1986.

The main item among the export items of the major export nations and areas of Hong Kong, Taiwan, and Japan is plastic toys. Their share ratios are 71%, 68%, and 33% respectively for those countries.

A look at production trends reveals that Hong Kong's toy enterprises number 2,264, with a total of 56,164 employees (as of September 1986); Taiwan has 1,570 enterprises; and Japan has 5,350 enterprises with a total of 42,896 employees (according to industrial statistics of 1985). Due to the character of the products, the toy industry is made up almost entirely of labor intensive enterprises, and those among them that have a staff of over 100 persons is a low 3.3% in Hong Kong and around 1% in Japan. Recent trends in the world's largest toy producing region of Hong Kong are [1] a raising of the level of products and a movement into production of high quality toys; and [2] rises in wages and raw materials, resulting in a shift of production into China. Taiwan is faced with the serious problems of rising wages and labor shortage, on top of which has come a rise in the Taiwan dollar exchange rate. Up to this time, Taiwan has relied mainly upon copy products, but it will be necessary to develop original products and plan for value added items in the future.

In the case of Japan as well, the drop in domestic demand has brought on severe conditions, and a severe war of survival is being waged at each level of maker, wholesaler, and retailer. Other problems are the stagnation in toy consumption per child, the main consumers, and the year by year drop in birth rate. To solve these problems, Japanese manufacturers are making plans for unique new products and for producing value added versions of their present products.

An indispensable element in the development of the toy industry is the existence of peripheral industries. Taking Hong Kong as an example, we see that there is a wide range of peripheral industries, including molds and dies, electric plating, parts, printing, etc. The level of technology is particularly high and there is a large number of molds and dies, electric plating, parts, printing, and mold and die makers for plastic toys, etc. This is the main support behind Hong Kong's major product, plastic toys. In Japan as well, there is a sufficient number of peripheral industries producing such items as molds and dies and parts (including ICs and motors), and there are toy factory industrial estates in operation.

The reasons these Asian countries and areas were able to develop into major toy export nations in a mere 20 to 30 year's time lie not only in the cheap labor and the OEM specialization of the U.S.'s major toy makers. Important roles were also played by the

perfection of export inspection systems and a strengthening of quality inspections. Paint inspections have been carried out in Hong Kong since 1976; SGS (the world's largest inspection company which has its headquarters in Switzerland) has been utilized; the Taiwan Toy Safety and Inspection Center has been established; South Korea has set up sundries inspection centers (such as KITI) and Japan has established the Japan Recreation and Miscellaneous Goods Safety Laboratory.

## **2-2. Hong Kong**

### **2-2-1. Development Pattern**

The Hong Kong toy industry has succeeded in growing speedily into the world's largest toy export area in a mere 40 year's time. Let us take a close look at its development pattern and the reasons behind that development.

The toy industry was born in Hong Kong during the late 1940s. The industry remained relatively insignificant until the early 1950s when plastic toys began to be manufactured by mass production. The reasons for this phenomenon were [1] the cheap labor cost and abundant labor force in Hong Kong, [2] the presence of mold and die makers with technical strength, [3] the ease of importation of raw materials due to a laissez faire policy, and [4] the worldwide popularity of plastic products.

If we consider the above mentioned period the 1st Phase, then the 2nd Phase was from the latter 1950s through the early 1960s. During this period, moving (motor) toys and battery operated toys appeared, making this a time of progress in product diversification. Also, taking advantage of the application of the United Kingdom's Commonwealth Preference System made England Hong Kong's largest export destination market up to 1957. This was another unique feature of this period. After 1957, the United States outstripped England and has remained the largest market up to the present.

The 3rd Phase from the early 1960s through the 1970s was a period of high growth. The Hong Kong toy makers have price competition strength, and they serve major foreign toy makers centered around those in the United States under license and subcontract production agreements. At the same time, they have exhibited numerous products at international toy sample fairs and succeeded in implanting the image of Hong Kong as a production center for quality toys in the minds of foreign buyers. Hong Kong overtook West Germany in 1964, and Japan in 1972, to become the world's largest exporter of toys and has maintained this position ever since.

Since the beginning of the 1980s, Hong Kong's toy industry has demonstrated two major trends. They are [1] amplification of production capability and applicability strength, making it possible to produce such high quality, value added items as electronic toys and games and sonic (speaking) toys, and [2] along with the rises in wages and raw material costs, a shift is being made toward movement of production centers to China.

## **2-2-2. Present Conditions in the Toy Industry**

The number of Hong Kong's toy enterprises and employees showed increases from the 1960s and into the 1980s, along with the development of the toy industry. During the 1960s there were 204 enterprises with a conglomerate total of 7,430 employees, and in the 1970s this increased to 2,128 enterprises with 55,644 employees. The peak came in 1984, and as of September 1986, there were 2,264 enterprises (constituting 4.7% of the whole manufacturing industry) with 56,164 employees (6.5%). In terms of employment absorption strength, the toy industry constitutes the 3rd largest employment sector next to textiles/clothing and electric appliances.

The employee scale distribution of the above mentioned 2,264 enterprises is seen in Table III-14. It shows that the number of enterprises with less than 50 employees is 2,079, or 92% of the whole. Those with 50 to 299 employees represent 6.7%, and those with more than 200 employees number only 33, a mere 1.5% of the whole.

Table III-15 shows the distribution of toy enterprises by type of product. In Hong Kong's case, the number of plastic toys enterprises is 1,776, or 78% of the total, with 47,280 employees, or 84% of the whole, making plastic toys the mainstream of Hong Kong's toy industry. There are only 200 other types of toy producers. These are in the metal and other types of toys (dolls and stuffed toys). The number of employees in metal and electronics toys is 3,400.

Also, the average number of employees per enterprise was 40 in the 1960s, 30 in the 1970s, and 25 at the beginning of the 1980s, indicating a decreasing tendency which reflects the recent rise in wages and shortage of labor in Hong Kong.

One of the unique features of Hong Kong's toy industry is the fact that the majority is made up of locally owned enterprises. There are only 18 foreign owned enterprises, and their total number of employees is a mere 3,000. Out of the total foreign investments of HK\$279 million, the United States holds 70% with HK\$196 million, making it the largest investor nation.

## **2-2-3. The Export Market**

Hong Kong's toy exports showed a sudden increase from HK\$114.9 million in 1960, to HK\$1,050 million in 1970, and HK\$5,529 million in 1980. In 1986, the toy industry exported HK\$11,157 million. Exports of toys increased at an average annual rate of 25% for the 1960s, 18% for the 1970s, and 12% for the 1980s (from 1981 to 1986).

**Table III-14. Employment Size of the Factories**

Employment Size	Total No. of Toy Factories In Hong Kong (as at Sept 1986)	Share in Total (%)
1 - 49	2,079	91.8
50 - 99	111	4.9
100 - 199	41	1.8
200 - 499	19	-
500 & above	14	-
Total	2,264	100.0

Source: Hong Kong's Toy Industry, Hong Kong Government Industry Department, November 1987

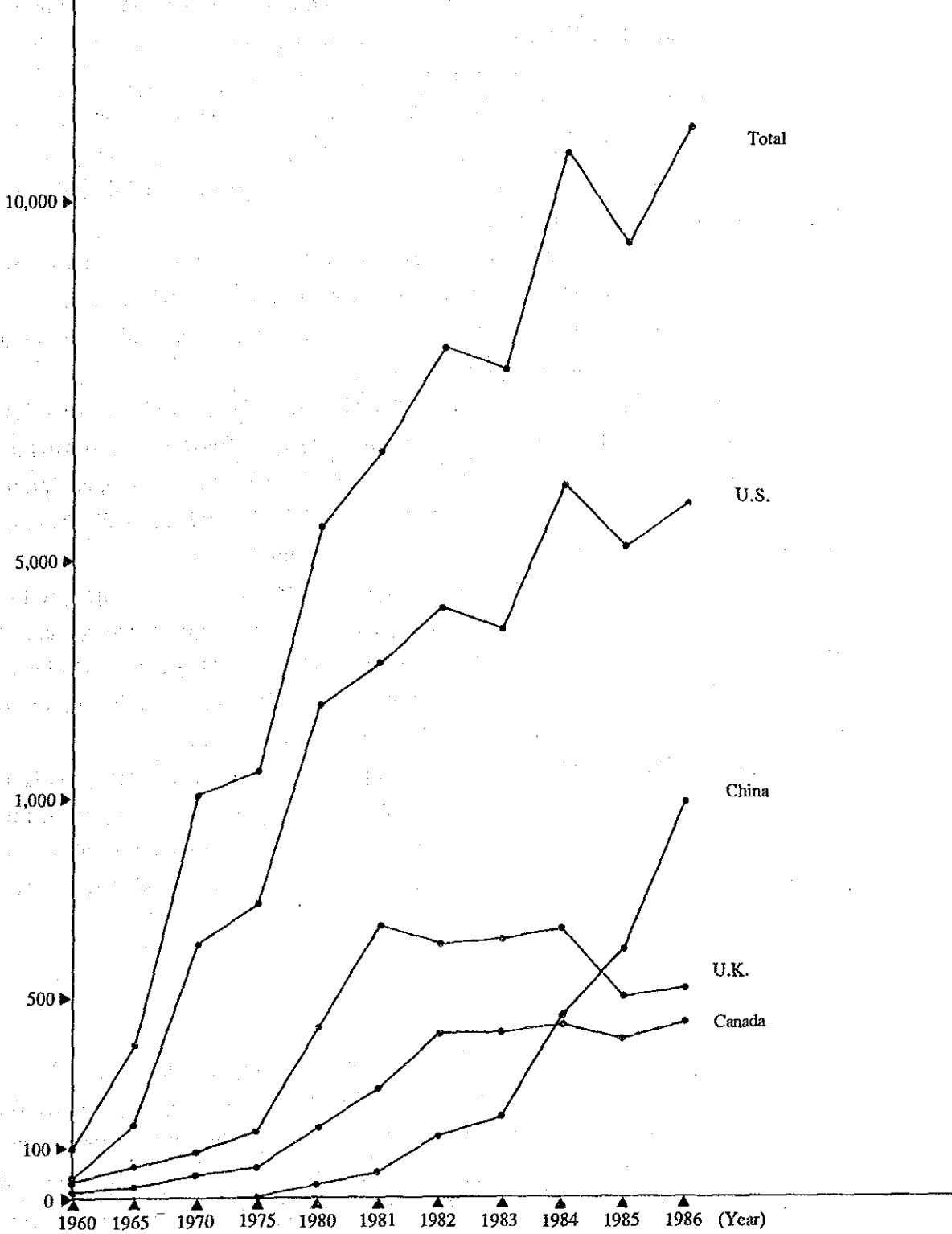
**Table III-15. No. of Companies and Employees**

	No. of Companies	%	No. of Employees	%
Plastic	1,776	78	47,380	84
Metal	217	9	3,406	6
Electronic	69	3	3,416	6
Wood	2	1	N.A.	-
Others (dolls and stuffed toys)	200	9	1,954	4
Total	2,264	100	56,156	100

Source: Hong Kong's Toy Industry, Hong Kong Government Industry Department, November 1987

(Unit: HK\$ million)

Chart III-6. Export Amount of Toys from Hong Kong (by Country)



Source: Hong Kong's Toy Industry, Hong Kong Government Industry Department, November 1987



The United States is the largest export destination market with 54% of the total. But the United States share has shown a slight downward trend since 1984, reflecting the recent slump in the United States' toy market.

Since 1985, China has been Hong Kong's 2nd largest export nation, but this is mainly due to the export of parts that is accompanying the move of Hong Kong toy enterprises into production centers in China. Exports to China are mainly parts, with completed products making up a mere 1%.

The United Kingdom is the 3rd largest export destination nation, with a share of 4.8%. It is followed by Canada with 4%, West Germany with 4%, Italy with 2.3%, and Australia with 1.9%. Thus we see that the overall trend is toward the United States and Europe as the main export market (see Table III-17).

A breakdown by product type shows 71.4% of the whole for plastic toys, 7.1% for electronics and TV games, 3.3% for metal toys, and 7.6% for dolls and stuffed toys (see Table III-18 for further details). Plastic toys are the main export item, and among them, those that do not have electric motors make up 73% of the whole, while those that have electric motors but do not have radio controls constitute 18%.

The trends and special features of the export market according to major products are seen in Chart III-6. Among metals toys, die-cast cars make up the mainstream. In 1984, stuffed toy exports saw a sudden increase thanks to the Cabbage Patch Doll boom in the United States. And, the scale of the China market as an export destination for toy parts is large. These are the points that are illustrated out in the figure.

The Hong Kong Government Industry Department carried out a survey on Hong Kong's toy industry in December 1986, and 62 enterprises filled out and returned the questionnaire. Table III-19 indicates the export ratios of each of these companies. 70% of these enterprises have a 100% export ratio, while 27% have a 50% to 99% ratio. Thus their export ratio is extremely high.

#### **2-2-4. Production**

Toy production is divided up into two production arrangements. The first is contract manufacturing, where products are designed by and produced for others, The other is the production of proprietary products which are of the manufacturer's own design. The former has the advantages of dodging the high costs that go along with product development, avoidance of risks due to the leaving of marketing up to outsiders, and gaining of production technology improvements that come along with subcontract production. In actual fact, almost all Hong Kong's large toy makers are engaged in

Table III-16. Domestic Exports by Market

Value: HK\$ Million

Major Market (in order of importance in 1986)	1960	1965	1970	1975	1980	1981	1982	1983	1984	1985	1986
USA	43.4 (37.8)	177.6 (47.2)	639.3 (60.9)	739.0 (50.1)	2,602.5 (47.1)	3,277.6 (48.5) [+25.9]	4,264.8 (49.8) [+30.1]	3,850.4 (47.1) [-9.7]	6,314.4 (58.4) [+64.0]	5,279.1 (56.6) [-16.4]	5,998.9 (53.8) [+13.6]
China	— (—)	— (—)	— (—)	# (neg- ligible)	30.0 (0.5)	63.5 (0.9) [+111.7]	163.1 (1.9) [+156.9]	208.7 (2.5) [+28.0]	466.0 (4.3) [+123.3]	623.3 (6.7) [+33.6]	1,050.1 (9.4) [+68.5]
UK	38.3 (33.3)	77.5 (20.6)	107.9 (10.3)	166.3 (11.3)	429.2 (7.7)	689.3 (10.2) [+60.6]	647.9 (7.6) [-6.0]	668.4 (8.2) [+3.2]	686.4 (6.4) [+2.7]	511.5 (5.5) [-25.5]	532.5 (4.8) [+4.1]
Canada	4.4 (3.8)	22.4 (5.9)	55.2 (5.3)	74.3 (5.0)	180.5 (3.3)	283.3 (4.2) [+57.0]	422.0 (4.9) [+49.0]	421.6 (5.2) [-0.1]	445.8 (4.1) [+5.7]	408.9 (4.4) [-8.3]	443.9 (4.0) [+8.6]
FRG	2.4 (2.1)	11.5 (3.1)	49.3 (4.7)	105.8 (7.2)	397.4 (7.2)	344.3 (5.1) [-13.4]	432.4 (5.1) [+25.6]	445.9 (5.4) [+3.1]	412.8 (3.8) [-7.4]	377.7 (4.1) [-8.5]	409.8 (3.7) [+8.5]
Italy	0.2 (0.2)	5.0 (1.3)	13.9 (1.3)	26.3 (1.8)	246.9 (4.5)	204.0 (3.0) [-17.4]	272.7 (3.2) [+33.7]	250.5 (3.1) [-8.1]	236.3 (2.2) [-4.9]	205.4 (2.2) [-13.8]	262.6 (2.3) [+27.8]
Australia	4.0 (3.5)	17.3 (4.6)	28.9 (2.7)	56.0 (3.8)	153.1 (2.8)	209.7 (3.1) [+37.0]	197.4 (3.5) [+41.8]	312.5 (3.8) [+5.1]	298.3 (2.8) [-4.5]	234.8 (2.5) [-21.3]	219.6 (1.9) [-6.5]
Others	22.2 (19.3)	65.3 (17.3)	155.6 (14.8)	307.8 (20.8)	1,489.4 (26.9)	1,689.9 (25.0) [+13.5]	2,055.7 (24.0) [+21.6]	2,025.2 (24.7) [-1.5]	1,941.0 (18.0) [-4.2]	1,680.2 (18.0) [-13.4]	2,239.5 (20.1) [+33.3]
Total	114.9 (100.0)	376.6 (100.0)	1,050.1 (100.0)	1,475.5 (100.0)	5,529.0 (100.0)	6,761.6 (100.0) [+22.3]	8,556.0 (100.0) [+26.5]	6,183.2 (100.0) [-4.4]	10,803.0 (100.0) [+32.0]	9,320.9 (100.0) [-13.7]	11,156.9 (100.0) [+19.7]

Note:

( ) Figure in parenthesis denotes share in % terms of total

[ ] Figure in square brackets denotes change in % terms over preceding year

# Less than HK\$0.05 Million

Source:  
Hong Kong Trade Statistics, Census and Statistics Department

Table III-17. Domestic Exports by Item

Item/Market	1980		1981		1982		1983		1984		1985		1986	
	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.
A. Plastic Toys	HK\$ Million	'000	HK\$ Million	'000	HK\$ Million	'000	HK\$ Million	'000	HK\$ Million	'000	HK\$ Million	'000	HK\$ Million	'000
	3,882.2	n.a.	4,189.2	n.a.	4,680.8	n.a.	5,019.0	n.a.	8,301.1	n.a.	6,932.9	n.a.	7,966.1	n.a.
	450.9	n.a.	475.0	n.a.	489.1	n.a.	442.5	n.a.	734.0	n.a.	452.3	n.a.	608.7	n.a.
	2,890.5	n.a.	3,119.8	n.a.	3,466.7	n.a.	3,888.1	n.a.	6,141.3	n.a.	5,173.0	n.a.	5,822.2	n.a.
Toys plastic containing electric motor	540.8	n.a.	594.4	n.a.	725.0	n.a.	602.2	n.a.	1,334.4	n.a.	1,236.6	n.a.	1,462.8	n.a.
Toys, plastic containing electric motor, not radio controlled	409.6	n.a.	600.2	n.a.	415.0	n.a.	340.1	n.a.	356.2	n.a.	333.5	n.a.	370.1	n.a.
	0.2	n.a.	0.1	n.a.	#	n.a.	#	n.a.	—	n.a.	#	n.a.	—	n.a.
Toys, metal containing electric motor, radio controlled	5.4	n.a.	4.7	n.a.	12.6	n.a.	2.7	n.a.	2.2	n.a.	1.5	n.a.	2.7	n.a.
Toys, metal, not containing electric motor	404.0	n.a.	595.4	n.a.	402.4	n.a.	337.0	n.a.	353.9	n.a.	332.0	n.a.	366.1	n.a.
C. Other Toys	1,237.2	n.a.	1,972.2	n.a.	3,460.2	n.a.	2,824.1	n.a.	2,145.7	n.a.	2,405.5	n.a.	2,818.7	n.a.
	14.9	n.a.	20.9	n.a.	16.7	n.a.	32.9	n.a.	335.1	n.a.	394.8	n.a.	243.5	n.a.
Dolls, stuffed	23.0	n.a.	28.7	n.a.	19.9	n.a.	45.0	n.a.	140.6	n.a.	137.7	n.a.	204.4	n.a.
	#	n.a.	#	n.a.	#	n.a.	0.1	n.a.	—	n.a.	—	n.a.	—	n.a.
Dolls, rubber	2.4	n.a.	2.8	n.a.	2.9	n.a.	4.0	n.a.	2.8	n.a.	2.8	n.a.	5.4	n.a.
Toys, rubber, not containing electric motor														
Toys containing internal combustion motor, radio controlled	#	n.a.	—	n.a.	#	n.a.	0.6	n.a.	—	n.a.	—	n.a.	#	n.a.
Toys containing internal combustion motor, not radio controlled	80.5	n.a.	99.0	n.a.	76.5	n.a.	74.7	n.a.	178.5	n.a.	95.0	n.a.	90.2	n.a.
	28.5	n.a.	60.6	n.a.	93.6	n.a.	117.1	n.a.	278.4	n.a.	295.3	n.a.	300.5	n.a.
Dolls' clothing														
Dolls n.e.s. and parts														

Item/Market	1980		1981		1982		1983		1984		1985		1986	
	Value HK\$ Million	Qty. '000	Value HK\$ Million	Qty. '000	Value HK\$ Million	Qty. '000	Value HK\$ Million	Qty. '000	Value HK\$ Million	Qty. '000	Value HK\$ Million	Qty. '000	Value HK\$ Million	Qty. '000
Wheeled toys designed to be ridden; dolls prams & dolls push chairs	1.8	25	1.1	9	0.3	5	0.3	3			0.9	11		
Parts of all materials for toys														
Toys, n.e.s.	137.0	n.a.	479.6	n.a.	1,130.5	n.a.	702.5	n.a.	549.4	n.a.	536.4	n.a.	1,058.6	n.a.
Electronic components for TV games & electronic games									87.4	n.a.	187.2	n.a.	125.6	n.a.
TV games, cartridges	146.3	1 683	996.0	3 130	1,622.5	4 556	415.9	12 406	124.8	3 574	28.2	413	34.0	318
Electronic games, hand-held									112.3	400	35.2	163	30.6	154
Electronic games, not hand-held	802.8	65 188	283.5	3 550	497.3	4 858	350.4	5 983	179.9	3 552	201.2	2 861	403.5	7 056
Total	5,529.0	n.a.	6,761.6	n.a.	6,556.0	n.a.	6,183.2	n.a.	10,803.2	n.a.	9,320.9	n.a.	11,156.9	n.a.

Note:  
# less than HK\$0.05 Million  
\* less than 0.5 unit of quantity  
n.a. = not available  
n.e.s. = not elsewhere specified

Source:  
Hong Kong Trade Statistics, Census and Statistics Department

**Table III-18. Export Performance of Various Sectors of the Industry in 1986**

Sector	Value (HK\$ Mn)	Major Markets (In Value Term)	Remarks
(a) Plastic toys	7,968 (71.4%)	USA UK Canada	This is the dominant sector of the industry. Owing to the versatility of plastic raw materials and advancement in moulding technique, a wide variety of toy designs ranging from simple toy figures to highly refined model trains are produced.
(b) Metal toys	370 (3.3%)	USA FRG Canada	Diecast toy cars form the bulk of Hong Kong's production of metal toys.
(c) Stuffed toys	448 (4.0%)	USA UK	Domestic exports of stuffed toy registered a sharp rise in 1984 because of a fad in the USA for Cabbage Patch Kids dolls and similar items. The strong demand continued in 1985 but weakened in 1986.
(d) Other toys	2,371 (21.2%)	China USA Macau	These include mainly toy parts and electronic games.
Industry Total	11,157 (100.0%)		

Source: Hong Kong's Toy Industry, Hong Kong Government Industry Department November 1987

**Table III-19. Proportion of Sales for Export**

Proportion of Sales for Export	No. of Factories
100%	43 (70%)
50%-99%	17 (27%)
1%-49%	2 (3%)
0%	0 (0%)
Total	62 (100%)

Source: Hong Kong's Toy Industry, Hong Kong Government Industry Department November 1987

contract production. The industry itself estimates that 75% to 80% of the industry's total sales are made up of contract production.

A look at the results of the Hong Kong government survey shows that the number of enterprises engaged in contract production is large, but the fact that the majority produces their own brand products alongside their contract products deserves notice.

## (1) Products

### 1) Plastic Toys

Polystyrene (both high impact and general grades) and polyethylene (of both high and low density) are the two most commonly used plastic resins. But there is also a broad variety of other raw materials in use, including ABS, PVC, PP, PMMA, EVA, nylon, and polyester. It has been estimated that 50% to 65% of the polyethylene used is supplied by the Dow Chemical factory which opened production in Hong Kong in 1976. But in actual fact, there is a great dependence upon imports from Japan, the United States, Taiwan, and South Korea as well. In this connection, the volume of artificial resins and plastic raw materials for 1986 was HK\$4,687 million. Most of the injection molding machines are local products.

### 2) Metal Toys

The mainstream of the metal toys made in Hong Kong is made up of such vehicles as mechanical cars and trucks with free-wheel, pull-back, and friction-driven functions. Robot and electricity-driven cars are being produced, but in small numbers.

Zinc alloy and aluminum for making metal toys are imported mainly from Australia, while car bodies, axles, and screws are produced locally.

### 3) Stuffed Toys

The main raw materials are plush and tricot, but velvet, towel, and cotton are also used. Plush and tricot are imported mainly from Taiwan and South Korea, but there is a recent trend toward increasing the volume supplied by Hong Kong factories in China or Hong Kong-China joint venture factories. Polyester fibers are used in the majority of cases for stuffing. Doll hair made of rayon, nylon, and fire-resistant thread are imported, but plastic parts such as eyes and noses are produced locally.

### 4) Electronic Toys

Hong Kong's electronic toys got their start with remote controlled cars, but at present, a large variety of electronic toys and games are being produced. The newest item

is talking dolls. In the realm of parts, particularly in the remote control type, transmitters are designed and produced locally. In the case of talking dolls, the chips that control the sound system are procured from the U.S., Japan, Taiwan, South Korea, and Hong Kong. On the other hand, the mechanical set for the inside of these dolls is either made locally or imported from Japan. Electronic chips for electronic educational toys and games are mainly imported from Japan.

#### (2) Labor Costs

According to the 1984 survey of industrial production carried out by the Census & Statistics Department, the ratio of labor cost in the toy industry accounted for a higher-than-average share of the total costs of production when compared with other manufacturing industries. This tendency is particularly strong in metal and plastic toys.

#### (3) Employees

A survey taken on the 62 companies mentioned earlier shows that 60% hire university and polytechnic graduates for their administration and technical staffs, while 37% (most small factories) do not employ graduates of either university, polytechnics, or technical institutes. The remaining 3% employ technical institute graduates for their technical staff.

Rising wages and labor shortages are problems in Hong Kong, with complaints from 31% of all enterprises concerning a shortage of unskilled workers, 27% on a shortage of craftsmen, and 23% on a shortage of technicians. But only a mere 2% complain of an administrative staff shortage.

#### (4) Quality Control

When exporting their products, toy makers must satisfy the safety standards of their importing countries, and in some cases they are required to comply with special standards set up by the individual foreign importer. There are even some foreign importers who insist upon having their own independent investigation and testing laboratory within the Hong Kong maker's factory. The quality control generally carried out in Hong Kong includes [1] small parts, [2] sharp points, [3] paint, [4] mechanical strength, [5] material for dolls and stuffed toys, and [6] potential danger from toy guns.

Among the 62 enterprises surveyed, 56% maintain a full time quality control staff, while 53% carry out raw material control (materials and parts supplied by outside sources or by other departments in the same factory). 100% of the 62 enterprises carry out production control.

**Table III-20. Cost of Production**

Industry	Labor Costs (%) (A)	Purchases of Materials, Supplies and Industrial Services (%) (B)	Other Expenses (%) (C)	Total Costs of Production (%) (A)+(B)+(C)
All manufacturing	18.8	71.4	9.8	100
Toys	20.3	70.9	8.8	100
of which:				
Plastic toys	21.3	69.8	8.9	100
Metal toys	23.4	66.1	10.5	100
Electronic toys	18.5	72.6	8.9	100
Other toys	10.8	82.6	6.6	100

Source: Hong Kong's Toy Industry, Hong Kong Government Industry Department November 1987



#### (5) Supporting Industries

One of the strong points of Hong Kong's toy industry is the existence of a broad range of supporting industries. In other words, the toy industry is supported by mold and die making, electroplating, parts, and printing enterprises. Among these, the role played by mold and die-making is a very important one.

Most of the major toy makers have in-house mold-making facilities, but a majority of the small- and medium-sized enterprises subcontract the manufacturing of plastic (injection molds, blow molds, etc.) and metal (die-cast molds) tools to outside local subcontractors. In Hong Kong, there are around 70 large mold and die makers, while there are several hundred in-plant mold-making workshops, and several hundred more small mold shops, making the field of supporting industries a broad one.

Electroplating is used in the toy decoration process, and in Hong Kong there are around 700 electroplating and vacuum plating enterprises. Also, in the printing field, there are around 2,600 enterprises, and their technical strength is considered second only to Japan. Their technical strength is reflected in the packaging and enterprise pamphlet printing they produce.

#### (6) Distribution Routes

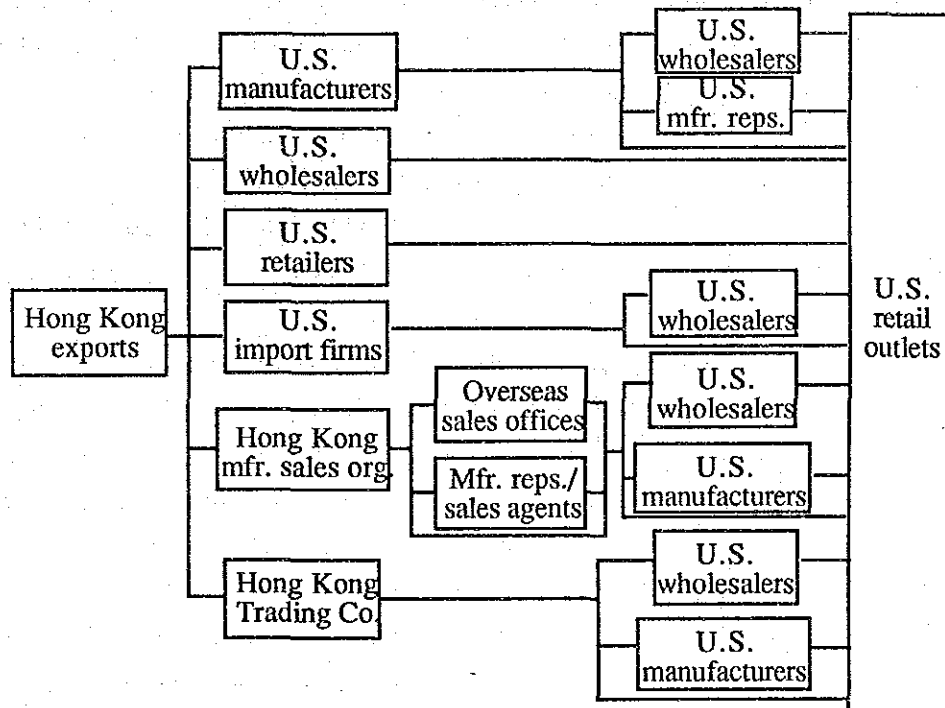
When viewed from the standpoint of its connections with the United States which is Hong Kong's largest export destination country, Hong Kong's toy export routes have a number of extraordinarily unique features.

The first is the fact that 48% of all products exported to the United States from Hong Kong are exported through U.S. buying offices and agents stationed in Hong Kong. This distribution route means that U.S. toy makers play the role of importer. Examples of U.S. toy makers that import Hong Kong toys are Fisher-Price, Coleco, Hasbro, Tonka, Mattel, and Tyco. The import ratio held by such U.S. wholesalers as Greenman Brothers and Parker Brothers is around 25%, and that of retailers is 27%. One of the sales routes used by Hong Kong's small enterprises is that of Hong Kong based trading companies, but this constitutes only about 9% of the whole. A chart of Hong Kong toy distribution in the United States is seen in Chart III-7.

On the market in the United States, toys are sold mainly in department stores, toy shops, discount stores, variety stores, and catalog show rooms. Thus sales through the retail route are the most numerous. Figures for 1985 show that sales through the retail route account for 79% of the whole, with the remaining 21% being sold by mail order and in military base stores.

The sales routes in Europe have the same unique features as those of the U.S., but compared to the U.S. market, the scale of the European market is small. Due to the

**Chart III-7. Hong Kong Toy Industry Distribution Flow into the USA**



Source: SRI Contact with Industry.  
 Hong Kong Government, Industry Department survey, December 1986.

prevailing tradition of a low ratio of toys being imported from abroad into European countries, there is a very small number of European toy enterprises that have buyer offices and agents in Hong Kong.

The main difference between the sales structure of the U.S. and the European market is that in contrast to the fact that 90% of the toy retail sales in the U.S. is in the form of mass merchandising (by such enterprises as Toys-R-Us, K-Mart, and Sears), sales by retail shops make up approximately one-third of the total in Europe.

The following two changes have come about in the sales strategies of Hong Kong over the past ten years. [1] Major Hong Kong manufacturers have begun to establish sales bases in the U.S. and Europe, and [2] know-how about wholesaling is becoming diversified, resulting in increases in procurement of packaged goods through agents in Hong Kong.

While Hong Kong toy enterprises have desirable aspects such as short-term production, reliable supply and delivery, low price, dependability and flexibility, problems such as rising wages, shortage of labor, drop in profits due to intensification of both domestic and foreign competition, and a decrease in marketing research and product development also stand as distinct disadvantages. Wages have risen even higher than those of South Korea, and the industry is attempting to solve the problems of high wages and labor shortage by shifting their production centers to China. And at the same time, they are exerting efforts toward raising product quality, design and development.

#### **2-2-5. Government's Role in Promoting the Industry**

The free trade laissez-faire policy of the Hong Kong government has introduced the principle of competition into the private sector. And while there is no clear promotion policy for the toy industry, it must be noted that it is supported from a number of different sources.

One of these is the toy paint tests that the government has been carrying out since 1967. Its aim is to introduce the concepts of raising product quality and consumer protection among domestic makers. Also, a sample testing scheme was established in 1985 for toy exports to England, and in 1986, the same plan was expanded to include the U.S.

Active efforts were made to introduce foreign product standards and inspection methods to domestic makers. The Industry Department's Product Standards Information Bureau is responsible for this work, and it sells standards information from foreign organs such as ISO, UL, BSI, DIN, and CSA. The Hong Kong Laboratory Accreditation Scheme (HOKLAS), a plan for product quality approval, was also

introduced in 1985 by the Industry Department. And on top of this, manufacturers receive standards and measurement services at the Department's Standards and Calibration Laboratory.

In the area of design, the Hong Kong Design Innovation Co., Ltd. was established in 1986 with the support of the government. It provides design development and new product development assistance to manufacturers. In the area of technology, there is the Hong Kong Productivity Council (a non-profit organization which is funded by the government.)

Thus we see that in Hong Kong, all types of support organs have been established with the support of the government, with particular emphasis placed upon product inspection and safety standards. And these organs contribute to the promotion of exports. Also, in the private sector, there are constant efforts to expand business negotiations through activities such as active displaying of products at the toy shows that are held every year in Nuremberg and New York. The Hong Kong Toy Council was established in 1986 to promote the interests of the local toy industry. The council organizes seminars and other functions of interest to local toy manufacturers and represents the industry internationally.

## 2-3. Taiwan

### 2-3-1. Development Pattern

Taiwan's toy industry started as an export industry during the 1960s. In the early phase, only a few small scale factories produced toys made of bamboo, wood, and paper for the domestic market. At that time, there were about 40 companies, among which, 16 were doll factories, and they concentrated on domestic sales and sales to foreign tourists as souvenirs.

Foreign investment from 3 U.S. toy makers, Martel, Karison, and Louis Marks, in 1964, proved to be an important turning point for Taiwan's toy industry. In the background of this advance of the 3 U.S. companies into Taiwan were [1] the wage rise in Hong Kong where production had been subcontracted to that time, and [2] a shortage of supply ability in Hong Kong. Faced with these problems, Taiwan became a new producing country.

The toy products of the 1960s were mainly inflatable vinyl plastic toys and such plastic products as PE/PS molded toys. During the 1960s there was a large increase in demand for plastic toys throughout the world, and it was for this reason that production was concentrated on plastic toys that could be mass produced at low cost and with easy access to technology.

During the late 1960s and through the 1970s and 1980s, Taiwan's toy industry achieved remarkably high growth. Toy production figure movements since 1976 are shown in Table III-21. The market peaked in 1984 with NT\$30.02 million, and since that time it has fluctuated up and down. Compared to the 1976 figure of NT\$6.32 million, the 1987 figure of NT\$26.35 million represents an increase growth of 4.2 times. By way of illustration, this remarkable growth can best be grasped by comparing the toy export figures for 1965, 1970, 1980, and 1985. The figure for 1965 was NT\$88.16 million, and this increased by eleven times to NT\$983.58 million in 1970. As for exports during this period, 80% to 90% of the total was produced by U.S. toy makers in Taiwan and 90% of that figure was exported to the U.S.

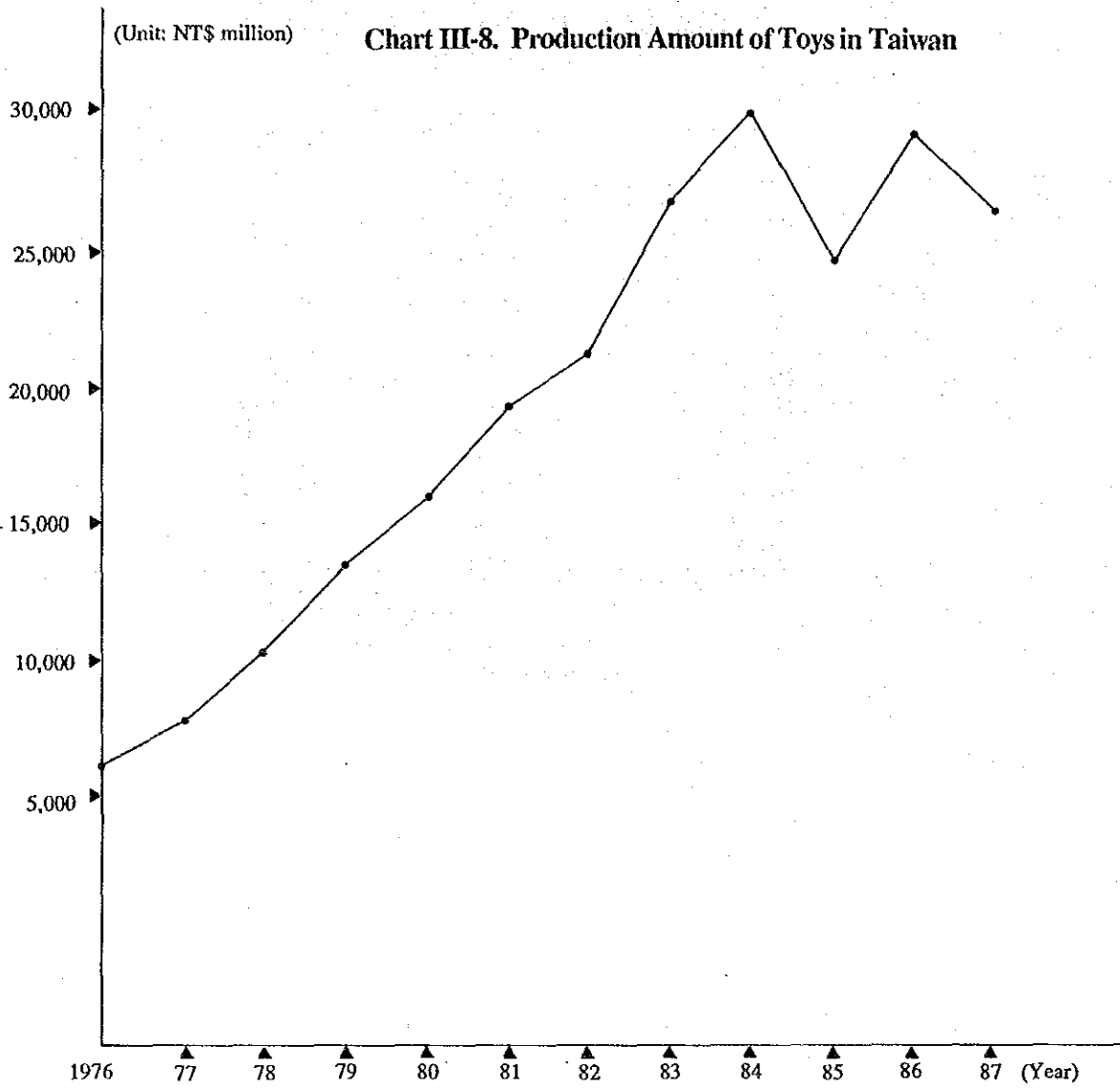
Regarding exports during the 1970s, Taiwan became the world's second largest exporting area after Hong Kong. This is symbolic of the high growth Taiwan achieved during this period. During the past ten years, the export figure has increased by 18 times to NT\$18,155 million.

During the late 1970s and the early 1980s, there was a sudden increase in the demand for electronic games in the U.S. This was followed by computer registered dolls, and further, in 1984, plushy animals and dolls with IC functions appeared and

**Table III-21. Growth Rate of Taiwan's  
Toy Industry**

Year	Production (NT\$1,000)	Shipments Price (NT\$1,000)
1976	6,324	5,997
1977	7,822	7,579
1978	10,553	10,303
1979	13,781	13,424
1980	15,948	15,089
1981	19,322	19,193
1982	21,320	19,545
1983	26,970	25,912
1984	30,022	30,254
1985	24,752	25,096
1986	29,395	29,512
1987	26,347	26,877

Source: Industrial Production Statistics  
 Montly 1984 Dec, 1988 April.  
 Department of Statistics Ministry of  
 Economic Affairs



Source: Industrial Production Statistics Monthly 1984 Dec., 1988 April  
 Department of Statistics Ministry of Economic Affairs

became hit products beginning in 1985. This was because Taiwan's exports saw steady growth during the 1980s.

It is estimated that Taiwan's toy makers number around 1,570 at present, and 32% or 503 of them are members of the Taiwan Toy Manufacturer's Association (TTMA, an organization similar to the Japan Toy Association).

TTMA was established in 1967 for the purpose of promoting Taiwan's toy industry which had just begun to obtain a place in Taiwan's manufacturing industry during the 1960s, and of promoting exports. It began with a membership of 40 companies, and today this figure has increased to 503. Also, around 65% of all export products is produced by these 503 TTMA members, while the remaining 35% is produced by the 1,067 which are not members of TTMA.

Taiwan's toy makers are generally small scale enterprises, and their operation character is of a strongly unstable nature in the context of which importance is placed upon short-term profits rather than such long-term strategies as establishment of each product and development, or of their own brand name. This situation has remained the same at present. They have the same skill as the Asian NIEs toy makers in production and export of copy products, but few Taiwanese enterprises show a comparatively strong character of their own.

Taiwan's toy industry represents about 1% of the total production of the whole Taiwanese manufacturing industry, and around 2% of the total export figure, which demonstrates the high export reliability level when compared with other types of industries.

Taiwan's toy industry has developed steadily up to the present, but it is now faced with rising wages and a labor shortage, making it necessary for it to find new ways to cope with the situation. The production establishment which previously relied on copy products is now entering a period in which it is necessary to plan and develop original products and make them value added. Supported by Taiwan's economic development, there is the aspect of expansion of the domestic market, but with export diversification and the shift of production centers to foreign countries, the environment now surrounding Taiwan's toy kingdom is quite severe.

### **2-3-2. Exports**

The 1987 toy export figure of NT\$36,549.15 million was a 15% increase over the previous year. This is the largest export figure ever achieved in the entire history of Taiwan's toy industry. After 1984 a slight slump had prevailed, but now there is a steady trend toward recovery.



Viewed from the standpoint of separate items, general toys (including those with special functions) make up 65.6% of the whole, followed by indoor electronic games with 16.4%, children's vehicles with 10.9%, and dolls with 7.1%. A look at the trends of the past 4 years shows that general toys have stayed in the 60% range, rising from 62% in 1984 to 66% in 1987. In contrast, the share held by dolls decreased from 21% in 1985 to 7% in 1987. At the same time, children's vehicles showed a remarkable expansion from a 3% share in 1984 to 11% in 1987.

Next, let us look at the export destination nations. The U.S. is top with 57.5%, and is followed by Japan with 7.5%, England with 4%, and Italy and West Germany with 3.5% each. (See Table III-23.) One special aspect of recent trends is the decrease of the share of exports to the U.S. from 66% in 1985 to 57.5% in 1987. The decrease in the U.S.'s share is pretty well compensated for by the increase of exports to Japan. Also there are steady increases in exports to such EC nations as West Germany. Thus we see that the Taiwanese toy product market is gradually diversifying. For Taiwan, the Japanese market is gradually gaining greater importance, rising to 3rd place in 1985, and on to 2nd place in 1987 due to a sudden increase in exports to Japan. In the area of Japan's imports, Taiwan and South Korea are competing with each other for first place, with Hong Kong lagging slightly behind in 3rd place.

It goes without saying that the appreciated yen stands in the background of the sudden increase of exports to Japan. The fact that Taiwan and South Korea are in a superior position to Hong Kong is due more to the deeper relationship they have had with the Japanese market than the matter of prices.

Export destination by item is indicated in figures. Aside from the common special feature of the overwhelmingly large share held by the U.S., [1] Saudi Arabia is in 2nd place as an export destination for infant vehicles, and [2] the ratio of exports of indoor electronic games is a high 19% for Japan, and Japan also holds a 6.2% in all other toys.

Exports of indoor electronic games are contributing greatly to the general increase in the total value of toy exports. Exports of TV games peaked in 1984 at NT\$4.7 billion, since which time they have increased, but they still maintain a high standard even today.

### **2-3-3. Support Strategies of the Government**

The role played by TTMA for the industry was described earlier, but it should also be mentioned that this organization is working hard toward the internationalization of Taiwan's toy industry. The ICTI (International Committee of Toy Industry) took Japan in as a sponsor country. This is part of the move toward internationalization. ICTI gathers the toy producing nations and areas of the world together once a year. This

**Table III-22. Taiwan's Exports of Toys by Item**

	(Unit: NT\$ 1,000)			
	1984	1985	1986	1987
CCCN9701	1,112,899	890,231	2,345,908	3,996,389
Wheeled toys for children	(3.2)	(3.3)	(7.4)	(10.9)
9702	6,011,035	5,616,230	4,300,820	2,585,194
Dolls	(17.2)	(20.6)	(13.6)	(7.1)
9703	21,725,070	17,622,976	21,488,643	23,988,477
Other Toys	(62.0)	(64.6)	(67.8)	(65.6)
9704	6,174,886	3,140,212	3,538,596	5,979,091
Indoor and Electronic Games	(17.6)	(11.5)	(11.2)	(16.4)
<b>TOTAL</b>	<b>35,023,890</b>	<b>27,269,649</b>	<b>31,673,967</b>	<b>36,549,151</b>

Source: Trade Statistics Statistical Department

**Table III-23. Export Destinations of Taiwan's Toys**

	(Unit: NT\$ 1 million)		
	1985	1986	1987
U.S.	17,999	19,694	21,017
	(66.0)	(62.2)	(57.5)
Japan	811	1,140	2,731
	(3.0)	(3.6)	(7.5)
U.K.	1,223	1,224	1,450
	(4.5)	(3.9)	(4.0)
Italy	764	563	1,291
	(2.8)	(1.8)	(3.5)
FRG	748	1,095	1,261
	(2.7)	(3.5)	(3.5)
<b>TOTAL</b>	<b>27,270</b>	<b>31,674</b>	<b>36,549</b>

Source: Trade Statistics Statistical Department

organization was founded to promote the standardization of toys throughout the world, and it also founded the ACTI (Asian Committee of Toy Industry) as a regional branch organization. TTMA participates in ACTI as Taiwan's representative. ACTI deals with such matters as [1] solving the copy problem, [2] standardizing toy safety guidelines for the Asian area, and [3] standardizing the ST (Safety Toy) marking system.

At present TTMA is focusing on the two targets of [1] elimination of fake and copy toys, and [2] promotion of toys with high safety standards and high quality. Due to the occurrence of discovery of Taiwan-made copy products that violate U.S. copyright laws by U.S. customs officials and their refusal to allow them into the U.S., TTMA is taking the following measures. TTMA has permission from the Board of Foreign Trade (BOFT) to endorse export documents for all Taiwan-made toy exports. This means that when a problem arises, both domestic and foreign enterprises can now file their complaints with TTMA.

TTMA is taking an active stance toward safety matters as well. In March 1984, the Ministry of Economic Affairs authorized TTMA to found a 'Toy Safety Evaluation Committee'.

This committee is responsible for inspecting all toys for safety and quality, for which purpose safety and quality inspection machines were purchased and the Taiwan Toy Safety and Inspection Center was established. This center carries out tests on inflammability, noise level, small parts, sharp points, and impact force. When all these tests are passed, an ST mark is applied which indicates the safety level of the product to the consumer. At present, 743 items out of a total of 1143 tested have been awarded the ST mark. Outside of this work, TTMA introduces information concerning foreign safety standards as well.

## **2-4. South Korea**

### **2-4-1. Development Pattern**

South Korea's toy industry grasped the opportunity of the initiation of stuffed toy production in the 1970s to execute speedy development in terms of raising of quality and expansion of production scale. Today South Korea is the largest supply country in the world in the field of stuffed toys.

Thanks largely to increased exports and internal demand, toy production in South Korea showed a 21.3% annual increase rate between 1976 to 1986, and the value of it recorded \$800 million or more in 1986, 8 times the \$100 million of 1976. Exports contributed a great deal to production increases after 1980.

A look at individual items of toy products shows that stuffed toys became the major product, and in 1986 the value of production reached \$570 million (\$113 million in 1976) and it accounted for 70.3% of all toy products. Stuffed toy production showed 28.2%, the highest annual increase rate between 1976-1986, in particular due to large shares of exports, accounting for more than 95%.

Plastic toys in 1986 accounted for 9.5% of all toy products and the production value of plastic toy products rose to \$77 million from \$15 million in 1976. The annual production increase rate was 17.7% (76-86). Metal toys in 1986 accounted for 4.9% of all toy products and the production value of metal toy products soared to \$39 million from \$7 million in 1976. The average annual production increase rate shot up to 18.7% (76-86), which resulted from a steady increase of internal demand and exports. In 1986 dolls accounted for 3.1% of all toy products, when the production value of doll products reached \$25 million. In 1976 the figure was \$20 million, accounting for 18.4% of exports, which was the second highest rate next to stuffed toys. The increase in doll production showed only 2.2% (76-86), an incredible lower increase level compared to other items.

Children's wheeled vehicles accounted for a 2.4% increase, and the production value was \$19 million in 1986.

### **2-4-2. Exports**

A look at the toy export trends by item since 1980 reveals broad range growth there. The 1987 export figure went over the \$1 billion mark. Compared to the 1980 export figure of \$200 million, this represents a 5-fold growth in seven years.

The 2 unique aspects of the market during the 1980s are [1] sewn toys are the major export product with more than 60%, and that share expanded from 67% in 1980 to 73% in 1987, and [2] there is a remarkable growth in the export of plastic toys which achieved an 8% share in 1987 (See Table III-24, Chart III-9).

A look at the 1987 export trends by item reveals that sewn toys increased 41% over the previous year to \$794.85 million, an overwhelming 73% of the total toy export value, and in terms of increase ratio, plastic toys doubled by 2.4 times. Concerning the Christmas exports for 1987, there were no hit products like the Cabbage Patch Dolls and Santaviers of 1985 or the Heat Bears of 1986, but the Musical Bear (fitted with an IC chip with a memory capacity of 18 melodies) enjoyed comparatively positive popularity on the U.S. market. Slash molding plastic items centered around dolls, however, went into a slump. In the past, these were good selling items, and the main reason for their decline was the fact that South Korea was unable to keep up with the varied and ever changing products on the world market due to such developmental expenses as design.

In recent years, the demand has shifted away from sewn toys to other types of toys on the international toy market. On top of this trend in the industry, South Korea is faced with competition from such developing countries as China. In the field of sewn toys, Sanmo stopped production of simple sewn toys in February 1988, and began specializing in mechanical toys. The entire export increase figure of Toshin Enterprises was in mechanical toys, showing a shift away from sewn toys.

In contrast, plastic and metal toys have shown remarkable growth over the past few years. Especially for Taiwan which has great competitive strength in these fields, the broad rise in value of the Taiwan dollar in 1987 caused a slump in exports from Taiwan, so that one of the reasons for the export increases in this area for South Korea is that orders were shifted from Taiwan to South Korea at that time. In terms of actual products, there were particularly good sales of such mechanical toys as radio controlled cars and moving cartoon movie characters.

In terms of export trends by country, the U.S. constitutes the largest market. Its share ratio was 55.5% for 1981, it peaked at 75.9% in 1984, and it still maintained 67.6% in 1987. Recent trends show a sudden increase in exports to Japan, with a particularly remarkable growth rate beginning in 1986. In 1987, exports to Japan recorded \$82.2 million, a 265% increase over the previous year, and 7.6% of the total exports for that year. In 1987, exports to both West Germany and Holland showed a growth of around double that of the previous year (See Table III-25, Chart III-10).

**Table III-24. Exports of Toys of South Korea by Type**

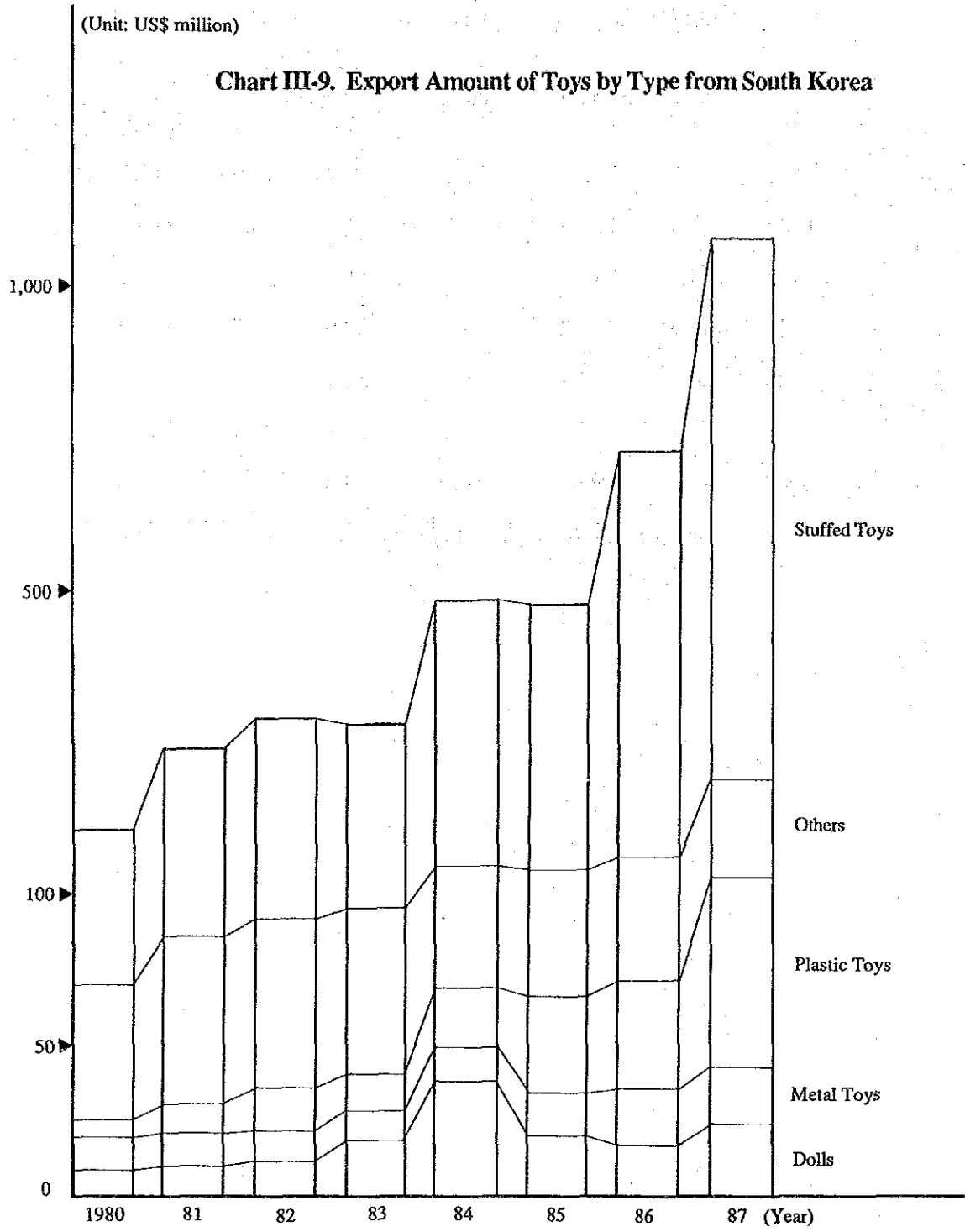
(Unit: US\$ million)

	Dolls	Stuffed toys	Metal toys	Plastic toys	Other toys	Total
1980	9.6	138.9	11.3	4.8	43.9	208.6
1981	10.9	162.1	10.9	10.7	52.9	247.5
1982	12.1	197.6	10.1	14.2	56.3	290.2
1983	19.3	188.4	9.6	11.8	54.5	283.5
1984	37.8	338.8	12.3	20.0	77.3	486.2
1985	20.6	342.2	14.1	31.7	72.8	481.4
1986	16.9	565.6	18.1	36.9	45.7	727.8
1987	23.7	794.8	18.9	88.3	153.1	1,078.8

Source: South Korea Toy Industry Cooperative Association

(Unit: US\$ million)

Chart III-9. Export Amount of Toys by Type from South Korea



Source: South Korea Toy Industry Cooperative Association

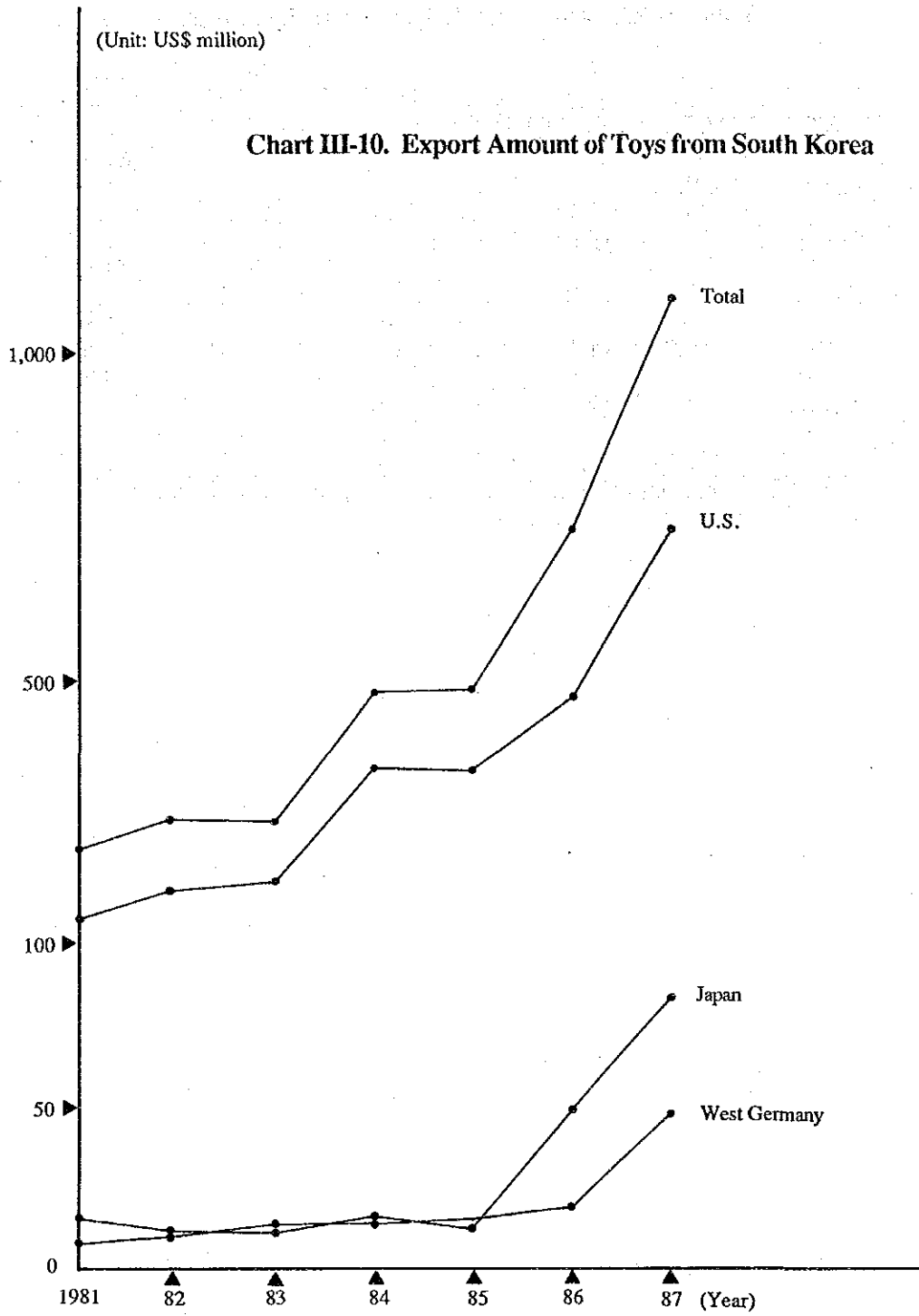
**Table III-25. South Korea's Toy Exports by Market**

(Unit: US\$ million)

	1981	1982	1983	1984	1985	1986	1987
U.S.	137.4	185.4	193.7	368.8	361.5	472.2	729.3
	(55.5)	(63.9)	(68.3)	(75.9)	(75.1)	(64.9)	(67.6)
Japan	9.7	10.6	11.9	16.0	13.7	49.8	82.2
	(3.9)	(3.7)	(4.2)	(3.3)	(2.8)	(6.8)	(7.6)
FRG	15.3	10.9	12.1	14.2	13.9	18.9	47.3
							(4.4)
Canada	10.8	15.2	13.8	21.3	25.7	31.8	44.5
							(4.1)
U.K.	14.3	11.5	9.7	13.1	14.4	18.9	39.5
							(3.7)
Australia	14.3	12.6	9.3	12.0	9.6	11.6	18.2
Others							
Total	247.5	290.2	283.5	486.2	481.4	727.8	1,078.8

Source: South Korea Toy Industry Cooperative Association





Source: South Korea Toy Industry Cooperative Association

### (1) Export Channels

The structure of export channels is characterized by a high dependence on foreign buyers because a large portion of the toys are produced based on orders from foreign specialized importers of toys. In other words, simple subcontracting contracts are dominant in the manufacture of toys for export.

- Export via special importers accounts for more than 45% of total exports (as of 1986). Direct exports by toy manufacturers are as low as 19% of the country's exports.

- In the case of dolls and sewn toys, exports through special importers hold a 57% share of the total. Direct exports are only 15%.

- The high dependence on special importers is derived from manufacturers' lack of ability in the areas of original product planning and new design development. Accordingly, it is very difficult for Korean manufacturers to flexibly deal with changes in overseas demand.

### (2) Export Prices

- A look at the average export price per unit shows that the average price of sewn toys per dozen rose from \$5.40 in 1976 to \$17.20 in 1986. At the same time, the export price of metal toys increased from \$4.20 to \$21.60 during the term. On the contrary, the average price of dolls did not show any substantial change (\$13.90 in 1986 vs. \$11.10 in 1976).

- A continued rise in export prices can be observed as a result of the higher quality of newly developed products and Korean manufacturers' pursuit of higher class products.

### (3) Development of Overseas Markets and Marketing

In exports, the Korean toy industry is heavily dependent on industrialized countries as shown by the fact that 90% of its exports go to industrialized countries. Its export market structure is not well-balanced on a regional basis.

- Its exports to the United States still accounted for as much as 75.1% of total exports in 1986. Exports to EC countries stood at only 7.7% in 1986, showing a continued declining trend since 1982.

- Because exports to developing countries and other regions remained at less than 10%, diversification of export markets is recommended in order to gain more opportunities to increase exports.

- Korean toy manufacturers rely on traditional buyers in the marketing of export products. Direct marketing activities by Korean manufacturers to overseas consumers are virtually negligible.

#### (4) Competition in Overseas Markets

The Korean toy industry is locked in a severe competition with its counterparts in Hong Kong and Taiwan. Hong Kong and Taiwan are also dependent on the U.S. market for 59.5% and 70.7% of their exports, respectively ( as of 1985). Competition with products from the two countries has been becoming more fierce.

- The entry into the U.S. market by China and late-comers from other developing countries has been showing a gradual increase in the sewn toy sector, posing a great threat to the Korean toy exporters.

#### 2-4-3. Outlook for the Future

Due to wage rises and the raising of the value of the won, the South Korean toy industry environment is quite severe. In the midst of these conditions, the industry is making serious efforts toward effecting such changes as rationalization of operations and utilization of higher quality materials for sewn toys. For example, the export price for a dozen stuffed toys was \$10, but recently it has risen to \$20. This stems from the fact that boa material was used in the past, and that now there is an aim toward raising the quality of the products by using such high class materials as vonnel and high pile. According to a survey of the South Korean Toy industry Cooperative, the 30 top export companies' use of such high class fabrics has reached 70%. South Korea's sewing technology has stabilized such that there is a practice of a total lack of defective goods and precise meeting of schedules no matter how complicated the sewing process may be. As a result, requests for subcontract work for high priced products are constantly emerging. The U.S. AMC department stores and the Kens Brothers Company buy almost all their in-house high price products from South Korea. The Saint Bear which is a popular product of the AMC Company is a bear which wears knit garments, and the Kens Brothers' Wink Dog is an item that appears as a bulldog fit with jeans. Both of these products have complicated production processes, and their export price is a high \$53 per dozen. Development of value added stuffed toys that are installed with electronic or mechanical devices is also in progress, and recent export trends are favorable.

There are 18 types of stuffed animals in production at present, and they come in 6, 13, and 20 centimeter sizes.

In South Korea, domestic toys are tested for quality and safety. Export inspections are carried out by KITI, but items that have passed the buyers' tests are exempt from export inspections. Some foreign buyers have set up their own laboratory in the country, but most of them leave investigations up to KOTITI. Investigations differ with different products. In other words, stuffed toys undergo ex post facto inspections,

which means that the inspections are carried out on products after they leave the warehouse, while moving toys must undergo prior inspections in accordance with a very strict set of safety regulations.

## 2-5 China

Along with the recent growth in investment from Hong Kong, China's toy industry is exhibiting a rapid rate of expansion. Total toy production in China jumped from 230 million yuan in 1980 to 500 million yuan in 1985. Furthermore, the number of toy manufacturers increased from 131 to 220 during that time period, and there was a total of 40,000 workers employed by the industry. Almost all production is intended for export, while the share of total toy production for the domestic market is a mere 1.6%.

Under the 5-year program planned for 1986 to 1990 for the development of the toy industry, China is encouraging foreign investors, especially from Hong Kong, to move into the country, as well as making efforts to develop and foster its domestic industry. With toy sales amounting to 370 million yuan in 1985, China's domestic market has a large expansion potential for the years to come. Moreover, the fact that the population of children in China under 12 years of age is estimated at 300 - 340 million further suggests that the domestic market will become a major consideration in the future.

Among the problems currently facing the Chinese toy industry are quality of domestically produced raw materials such as plastics and paints, molds and dies, electronic technology, and quality control.

High labor costs and insufficient factory space in Hong Kong are causing manufacturers there to subcontract production to firms in China, and according to an industry estimate, at least half of Hong Kong's toy production takes place in China. Kader Industrial, a leading toy manufacturer in Hong Kong, began subcontracting production in Canton in 1980, and it is presently employing 2,000 workers at its Shenzhen factory. If indirect employment is included, Kader has created over 7,000 new jobs.

China's toy exports rose 39% from the previous year to \$113.14 million in 1986. By country, Hong Kong is the largest importer of Chinese toys, with its imports totalling \$60.78 million, or 54% of total exports from China. Exports to the United States follow with 6.7%, then West Germany with 5.6%, and finally, United Kingdom with 4.4%.

A study on the status of distribution of Chinese-made toys in Hong Kong, which was conducted in May 1988 through interviews with managers at 3 Japanese-affiliated department stores, 1 Chinese-affiliated department store, 5 toy retailers, and approximately 70 consumers, showed the following characteristics.

73% of the consumers regard Chinese-made plastic toys as low in quality, design, and price. These products sell well among the lower-income bracket.

Chinese metal toys are considered superior to their plastic counterparts in terms of quality, design, and price. More than half of the consumers view the metal toys as average in terms of quality, below average in design, and low- to middle-class in terms of price. There is a great possibility for future development in metal toys, and if quality and

design are improved, Chinese metal toys may make inroads into the market for higher-income consumers.

Stuffed toys are regarded as middle-class. In terms of quality, design, and price, 80%, 53%, and 71%, respectively, of the respondents said that Chinese stuffed toys belong to the middle-class category. These products are strong in the market for middle-income consumers.

Table III-26. Chinese Toy Export

(Unit: US\$)

Country	1985	1986	Percentage increase
Hong Kong	41,223,296 (50.6%)	60,781,304 (53.7%)	(47.4%)
U.S.	7,114,405 (8.7%)	7,607,098 (6.7%)	(6.9%)
FRG	3,974,632 (4.7%)	6,330,806 (5.6%)	(59.2%)
U.K.	3,470,061 (4.3%)	5,026,160 (4.4%)	(44.8%)
Neitherland	2,691,632 (3.3%)	4,697,636 (4.2%)	(74.5%)
Others	22,918,033 (28.2%)	28,697,409 (25.4%)	(25.2%)
TOTAL	81,402,059 (100.0%)	113,140,413 (100.0%)	(38.9%)

Source: 1987 Almanac of China's Foreign Economic Relations and Trade

Table III-27. Evaluation of Chinese Products in Hong Kong

	Quality			Design			Evaluation		
	Low-class	Middle	High	Low	Middle	High	Low	Middle	High
Plastic Toys									
No. of respondents	33	13		33	13		35	10	
(%)	72	28		72	28		78	22	
Metal Toys									
No. of respondents	9	10		12	7		10	9	
(%)	47	53		63	37		53	47	
Stuffed Toys									
No. of respondents	8	30		18	20		11	27	
(%)	21	79		47	53		29	71	

Note: This survey is based on the interview with managers at a total of 9 department stores and retailers as well as the interview with about 70 consumers.

### 3. Major Market

#### 3-1. General

In a look at long term world toy import trends beginning in 1974, we find that there has been a 3.7-fold growth during the eleven years from 1974, with a total of \$1.76 billion, to 1985 with \$6.59 billion. A figure over the \$2 billion mark was recorded in 1976, and it continued to rise to \$3.56 billion in 1978, to \$4.62 billion in 1979, and to \$6.24 billion in 1982.

The world's major toy importing countries are divided into two groups, the U.S. and the EEC. Long term trends prevail in the expansion of the U.S. share and the decrease in the EEC share. In 1974, the EEC share was 42% and that of the U.S., 22%. In 1985, this dropped to 27% for the EEC and expanded to 45% for the U.S. (see Table III-28). The U.S.'s share surpassed the 30% mark in 1982, and further grew to 40% in 1984. The EEC had maintained a share in the 40% range since 1974, but in 1981, it dropped down into the 30% range, and in 1985, it dropped to 27%. The movement trends for the import figures of the U.S. and the EEC will be seen in Chart III-11. The U.S.'s import figure surpassed that of the EEC for the first time in 1982, then it dropped below that of the EEC temporarily in 1983, but it rose above the EEC once more in 1984, and since that time the difference between the U.S. and the EEC figure has continued to grow.

The U.S. is now the largest toy importing nation. But since 1986 there has been a trend toward loss of vigor due to a decline in the hit products that had led the market up to that time and due to the fact that no new product has appeared to take their place.

The 1986 import figure was \$3.05 billion (according to US Department of Commerce statistics). Viewed from the standpoint of country or region of origin, the growth of imports from China between 1983 and 1986 was the greatest, 24 times the value of 1983. In 1986, the shares of the exporting nations and areas were 21.9% for Taiwan, 21.2% for Hong Kong, 16.6% for South Korea, 11.7% for China, and 10.6% for Japan. Compared to the rise in the import growth ratio from South Korea and Taiwan, imports from Japan had remained comparatively steady up to 1985, but under the influence of the appreciated yen, there was a drop in 1986. Also, concerning imports from Hong Kong, Hong Kong is losing competitive strength due to the hot pursuit of China and South Korea.

The EEC holds second place in the world among toy importing nations. Viewed from the standpoint of the ranking of individual countries, England's share in the world

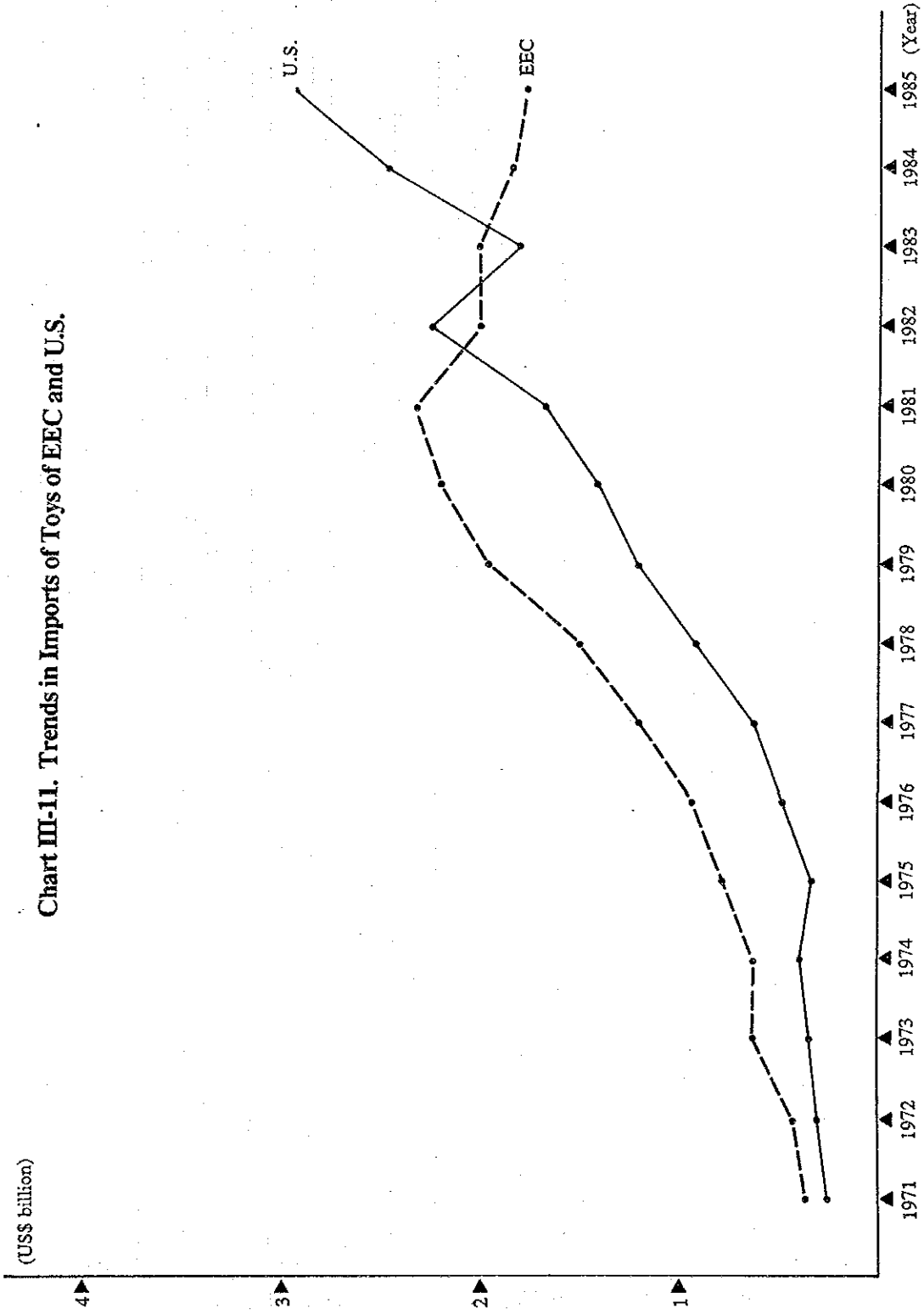


Table III-28. Share of World Toy Imports by Country

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Africa	2.0	2.1	2.1	1.5	1.7	2.2	2.2	2.0	1.7	0.9
North Africa	0.6	0.7	0.6	0.4	0.3	0.6	0.8	0.7	0.6	0.4
America	31.9	31.4	33.9	34.4	34.3	38.2	44.8	40.4	48.0	51.4
LAIA	2.2	2.4	2.6	3.2	4.6	4.6	2.7	1.4	1.3	1.4
CACM	0.4	0.5	0.5	0.4	0.4	0.3	0.1	0.2	0.2	0.1
Asia	8.0	8.8	9.5	9.2	9.6	9.6	10.8	10.9	10.9	11.9
Middle East	1.8	2.6	2.9	2.9	3.2	2.8	3.6	3.3	2.4	2.4
Europe	54.0	54.3	51.3	51.9	52.3	47.1	39.3	43.7	36.6	33.1
EEC(Ten)	43.0	43.4	42.0	42.9	42.9	39.3	32.4	36.2	30.5	27.2
EFTA	10.2	9.9	80.5	8.1	8.0	6.6	5.9	6.7	5.3	5.2
Oceania	4.0	3.5	3.1	2.9	2.7	3.0	2.9	3.0	2.8	2.6
U.S.	22.4	22.6	25.7	26.1	25.0	28.4	36.3	32.2	40.7	45.0
U.K.	6.7	6.8	7.0	8.3	9.7	9.8	7.5	8.6	7.5	6.5
France	9.8	10.1	9.0	9.7	8.6	8.1	7.8	8.8	6.3	5.5
FRG	11.2	11.4	10.9	10.2	10.5	9.3	6.4	7.2	6.7	6.3
Canada	6.0	5.1	4.2	3.9	3.6	4.3	4.8	5.2	5.0	4.2
Hong Kong	1.5	1.6	1.8	1.9	2.2	2.8	3.3	3.4	4.4	5.7
Italy	2.7	2.5	2.7	3.2	3.6	3.1	3.0	3.3	3.3	2.6
Netherlands	5.1	5.2	5.1	4.6	4.0	3.3	2.9	3.2	2.4	2.2
Australia	3.6	3.2	2.8	2.5	2.4	2.6	2.6	2.6	2.5	2.3
Belgium-Luxembourg	4.3	4.3	4.2	3.8	3.3	2.8	2.3	2.4	2.1	2.0

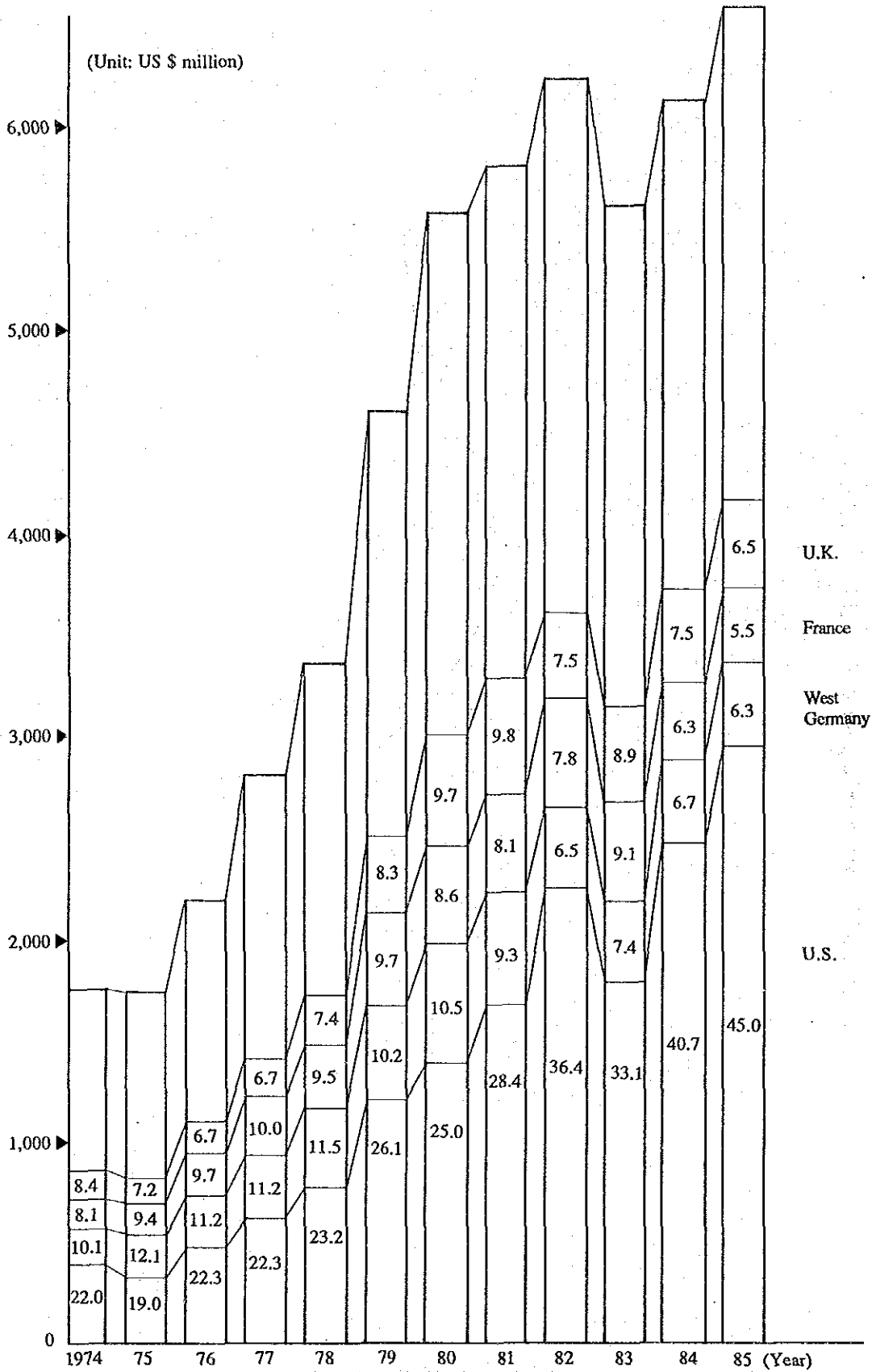
Source: UN International Trade Statistics Yearbook 1985

Chart III-11. Trends in Imports of Toys of EEC and U.S.



Source: UN International Trade Statistics Yearbook 1985

Chart III-12. Import Amount and Share of Toy Production in the World



Source: UN International Trade Statistics Yearbook 1985

toy import market in 1985 was 6.5%, West Germany's was 6.3%, and France's was 5.5%.

To take England as an example, toy imports by nation and area of origin for 1985 were 20% for Hong Kong, 11.6% for Taiwan, 8% for Japan, 6.3% for France, and 6.2% for Italy. On the other hand in the case of France's toy imports for 1986, Italy held top rank with 17.4%, followed by West Germany with 13.9%, England with 6.8%, and Macao with 6.4%. Thus we see that even among the nations of Europe, there are considerable differences in the importing countries.

Future trends in the world toy market will be controlled by the major consumer nation groups of the U.S. and the EEC.

The U.S. Industrial Outlook 1988 estimates that there will be an annual growth rate of 1.3% between 1988 and 1992 for the U.S.'s toy industry. At the same time, it predicts that both foreign production by the U.S.'s toy makers and toy imports will continue to expand. According to U.S. Department of Commerce statistics, the shipment figure exceeds imports, but according to U.S. toy industry estimates, 80% of the U.S.'s toy market is dominated by imported items.

## 3-2. U.S. Market

### 3-2-1. Outlook

The U.S. is the world's largest toy market. For this reason, U.S. toy makers eye areas, for the most part, that are trained upon the U.S. domestic market, and product research and development proceeds with the domestic consumer in mind.

The U.S. toy industry had an unexciting year in 1987, its slight growth overshadowed by lack of a "super hit". The value of industry shipments of dolls, toys and games reached \$3.4 billion, a 3.7% growth over the previous year. While shipments of toys, games, and children's vehicles rose 6% in real terms, those of dolls and stuffed toys were down 12%.

According to Toy Makers of the America (TMA), the domestic toy retail sales total is estimated at \$12.5 billion. TMA data shows a total industry level of \$8.3 billion in 1986, falling 1.5% to \$8.2 billion in 1987. The TMA shipment figures cover both shipments of U.S.-produced goods and imported toys that are re-shipped by domestic manufacturers, but do not include direct imports by wholesalers or retailers. According to the U.S. Industry Outlook 1988, the "makers" shipments of dolls and stuffed toys decreased from the 1986 figure of \$403 million to \$352 million.

The stagnation of the toy industry in 1987 was partly due to the fact that no new products were developed to take the place of the hit products that had come out annually up until the previous year.

The major feature of the industry was a recovery to stable sales of everything from the high-priced, high-tech toys advertised as having musical instruments installed in them, to basic toys.

Behind the much more recent trend toward a recovery for basic toys is the strong trend toward selling package projects as part of these toys, a plan that has been stressed during the past few years. One of the manifestations of this trend is the toy production and sales method in which licenses are obtained for such attractive features as registered names, designs, and logos. According to U.S. Toy Industry Association estimates, around 50% of the toy production sales volume is dominated by this type of licensed product.

The main products produced in the U.S. are general toys (SIC39444), valued at \$1.3 billion in 1985, followed by non-electronic games (SIC39446), valued at \$490 million (See Table III-29). Dolls and stuffed animals (SIC3942) constituted a significant U.S. product category overall in the earlier years of this decade (\$5-600 million), but had slipped dramatically by 1985 and later years to only the \$300 million level.

Electronic games/toys (SIC39447) were reported at almost \$1.35 billion in shipments in 1982, but only \$100 million in 1985.

The five years of data presented in Table III-30 indicate that imports have increased their share of the market, but most markedly in the categories of dolls and stuffed animals. In that area, imports still accounted for less than 50% of consumption in 1983, but increased to almost 60% in 1984, and continued to rise to above 84% for 1987. During the same period, apparent consumption increased from \$981 million in 1983 to \$1,940 million in 1987.

In 1983, the import share of apparent consumption of toys/games/vehicles was up to 29% and had grown to 51% by 1987.

Apparent consumption of dolls increased to 50% from 1983 to 1984 (\$1.5 billion) and continued to rise \$1,940 million in 1987.

On the other hand, apparent consumption of toys, games and children's vehicles increased over \$4 billion in 1984 and continued to rise \$4,660 million in 1987.

### **3-2-2. Market and Distribution Trends**

#### **(1) Toy Consumption Trends**

Individual consumption of toys and sports equipment in 1986 showed only a 3% actual growth over the previous year. This figure is far below the 7% of 1983 and the 11% of 1984. The growth stagnation of individual consumption reflects the decrease in individual disposable income. In 1986, standard wages dropped, giving manufacturers the advantage of a cost cut, but this was a disadvantage in terms of buying power. It is estimated that income will increase in the future thanks to tax reforms, but the consumption desire of consumers has dropped to the lowest level in three years, according to the Economic Industry Reports Co.

According to an analysis by the Economic Industry Reports Co., the main toy consumers are married couples aged 25 to 34 whose oldest child is less than 6 years old. The group which stands next in importance is the 35 to 44 year old group. Also, as incomes increase, the number of purchases and the amount spent on toys increase. In terms of region, in 1985, the disposable income per person for those in the northeastern and Pacific seacoast regions went above the average, with sudden growth seen in New England and central northwest.

The decreasing trend in the number of children below the age of 14 peaked in 1980 and then reversed. The Bureau of Labor Statistics (BLS) predicts that there will be an average annual increase of 0.4% in the number of children in this age bracket up to 1990. Including pre-school children, 35% of all children are concentrated in the south, but the

**Table III-29. Dolls/Games/Toys  
U.S. Domestic Product Shipments**

	(\$ millions)					
	1987E	1986E	1985	1984	1983	1982
<u>SIC 3942</u>						
Dolls and Stuffed Toy Animals	316	298	309.0	612.5	554.2	523.6
<u>SIC 3944</u>						
Games, Toys and Children's Vehicle	2,496	2,400	2,752.7	3,167.5	3,199.9	3,976.9
<u>SIC 39443</u>						
Baby Carriages, Children's Vehicles (Except Bicycles)	NA	NA	310.2	311.3	356.8	315.2
<u>SIC 39444</u>						
Toys, Excluding Games, Hobbies, Electronic Toys	NA	NA	1,310.7	1,430.6	1,361.4	1,329.5
<u>SIC 39445</u>						
Hobbies and Models	NA	NA	363.9	389.6	429.2	377.0
<u>SIC 39446</u>						
Nonelectronic Games	NA	NA	489.5	763.6	447.9	399.1
<u>SIC 39447</u>						
Electronic Games/Toys	NA	NA	103.8	125.2	390.4	1,347.8
<u>SIC 39440</u>						
Games/Toys/Vehicles NSK (Not Specified by Kind)	NA	NA	174.7	147.1	214.1	208.5

E - Estimated

Sources: 1982: Census of Manufactures

1983 - 1985: Annual Survey of Manufactures

1986E-1987E: U.S. Industrial Outlook

Table III-30. Import Penetration, US Dolls/Toys/Games

	(Values in \$million)				
	1983	1984	1985	1986	1987E
<u>SIC 3942</u>					
Dolls:					
Value of Product Shipments	554	613	309	298E	316
Value of Imports	442	898	1,146	1,278	1,628
Value of Exports	15	13	11	11	9
Apparent Consumption	981	1,498	1,444	1,565E	1,935
Import Share of Apparent Consumption (%)	45.1	59.9	79.4	81.7E	84.1
<u>SIC 3944</u>					
Toys, Games and Children's Vehicles:					
Value of Product Shipments	3,200	3,168	2,753	2,400E	2,496
Value of Imports	1,144	1,259	1,594	1,774	2,380
Value of Exports	375	232	191	173	221
Apparent Consumption	3,969	4,195	4,156	4,001E	4,655
Import Share of Apparent Consumption (%)	28.8	30.0	38.4	44.3E	51.1

E - Estimated

Sources: Computed by AFMR, based on data from the U.S. Department of Commerce



the greatest density of children in the overall population is found in the west. In the western region, the population of children showed an annual average growth rate of 20% between 1980 and 1985, according to the Economic Industry Reports Co.

According to "Business Week" magazine (April 22, 1985), one of the reasons that the toy industry is maintaining rapid increases in the retail sector is the increase in the amount of money parents spend on their children and the ratio of first child preference. This is due to the purchase of high priced toys for the first child among the majority of parents with the idea in mind that the same toys can be used by their younger children later on. Also, parents today married later than the generation of their parents did, postponing the age at which they had children, thus giving them the latitude to purchase luxurious toys that their parents' generation was unable to buy. The increase in the number of homes where both parents work is also a contributing factor in the promotion of increased toy consumption.

## (2) Retail and Wholesale Price Trends

According to a toy industry price structure survey, the difference between the manufacturer's shipment price and the retail price is generally considerably lower than the average profit margin for other consumer goods, entertainment goods, and services.

The growth in the producer's price for toys, games, children's vehicles, and dolls lags behind the average producer's price rises for all consumer products. However, the recent deflation situation has reversed this trend. According to an analysis by the Economic Industry Reports Co., in contrast to the fact that there has been no actual changes in producers' prices for consumer goods in general since 1983, producers' prices for toys, games, and children's vehicles increased by 2.4% in 1985 and by 2.5% in 1986. On the other hand, the producers' prices for dolls dropped two years in a row and became somewhat stable in 1986, but at an even lower standard.

High price standards were seen in plastic models, pre-schooler kit toys, and home board games. The only items that dropped in price during 1986 were transport toys in the unmovable and un-rideable categories.

The average prices for imported toys dropped 9% in 1985, while they rose 5% in 1986. Concerning dolls, the price of those above 13 inches in height saw a sudden increase from the \$2.6 over the previous year to \$5.59, but the import price of small dolls dropped from \$0.87 to \$0.24. The average price of dolls exported by the U.S. in 1986 was \$8.61, and that for imported dolls was \$1.60.

### (3) Easing of Seasonal Sales Trends

One of the biggest recent changes in the toy industry is the beginning of a trend toward an averaging out of the old seasonal sales tendencies of normal years. Up to the middle of 1970, 70% of annual sales were concentrated in the 6 weeks before Christmas, but now Christmas season sales constitute only about 58% of the total annual toy sales of \$12 billion.

According to an analysis by TMA, the major reason behind these changes is the inflation and fuel shortage that prevailed from the end of the 1970s, which brought about a revival in home entertainment and an increase in the use of toys by teenagers and adults.

### (4) Toy Industry Trends

When talking about the toy industry, we are inclined to imagine large enterprises such as Mattel, Hasbro, and Coleco, but the number of enterprises belonging to Toy Makers in the U.S. which have annual sales of more than \$150 million is no more than 3%, while 30% of them are less than \$1 million enterprises ("Nation's Business," December 1985). As traditional and basic toys sold well, 1986 was the year of revival for small- and medium-sized enterprises.

According to the "Industrial Surveys", while a new record of sales was set by major enterprises, the small- and medium-sized enterprises which had staple products were put in a very painful straits in 1985. However, according to the Economic Industry Reports Co., while 1986 was a year of dissatisfaction for major enterprises, it was also the top year for small- and medium-sized, and new enterprises in the toy industry.

### (5) Distribution

U.S. toy makers sell their products either to regional wholesalers or directly to retailers.

According to the 1987 Census of Wholesale Trade, there were more than 250 establishments classified as "agents/brokers/commission merchants" handling sales of more than \$ 1 billion dollars whose primary business classification was toys, hobby goods, and supplies. Among big companies such as Hasbro and Tyco, they are more likely to move toward direct sales. Based on the census mentioned above, more than 1,650 wholesalers classified their primary business as distribution of toys, hobby goods and supplies, accounting for more than \$3 billion in sales.

According to the TMA, there are around 150,000 retail shops in the U.S. that sell toy and games, and they range from small scale independent shops to gigantic international chain stores. Also, according to the June 1986 issue of "Discount Merchandising", toy sales are dominated by specialty chain stores and traditional discount

shops. They were the first volume sales stores that offered all products at discount prices. In this context, Toys 'R' Us, which was the first chain to take over in the toy sales department, sells high quality brand name products at 20% to 50% off the normal price. Another remarkable trend is in the toy sales route which was centered around department stores in the past but is now in the process of shifting to shops that specialize in hobby supplies, toys, and games. And drug stores are also becoming an important retail route. A five year analysis (1982-1986) of retail sales of toys by type of retail outlet shows clearly the increasing importance of discount stores (29% in 1982, to 33% in 1986) and toy stores (17% in 1982, to 27% in 1986) at the expense of traditional department stores (21% in 1982, to only 12% in 1986).

The center of toy production is in the northeast. 39% of all toy producing factories are concentrated in this area, with over half of the big factories located in the state of New York. The number of doll factories has decreased by 33%, but as before, one third of them are still in New York state.

### **3-2-3. Import Trends**

#### **(1) Outline**

No separation is made between the import data on imports from foreign countries and imports from the foreign production bases of U.S. enterprises. If the import total and the domestic shipment total are added, the total toy supply for a given year can be found. And if the export figure is subtracted from that figure, the scale of the U.S. toy market at the level of the manufacturer becomes clear. However, since it is possible that market up resales may be being carried out, which do not effect changes in production volume, figures obtained by means of this method will produce a figure which is lower than that of the actual market scale (according to the Economic Industry Reports Co.). But in spite of this calculation problem, the importance of imports to the U.S. toy industry is made clear. According to the Economic Industry Reports Co., toy imports have doubled every five years since 1967, and in 1986, they outstripped the domestic shipment figure with a total of \$3 billion. This import increase trend is not changing even with the recent depreciated dollar and the currencies of all the major nations and areas involved, excluding Japan and West Germany, linked to U.S. dollars.

Hong Kong, Taiwan and South Korea have for the past two decades dominated U.S. foreign purchases of dolls and toys. In the dolls and stuffed toys segment, until the mid-1980s these three sources routinely accounted for close to 80% of U.S. imports and for more than 50% of imports of other toys and games. By 1987, these three countries

and areas still supplied more than 50% of total imports, but had been joined by China and Japan as major sources.

In the past, the biggest import item was dolls, and in 1972, they constituted 29% of the total import volume. However, in 1983, dolls decreased to 15%, and in 1983 stuffed toys, which had been a mere 8%, rose to 22%. Stuffed toys are an extremely highly labor intensive product.

Foreign-made imported toys maintain a high popularity in spite of their high prices. Stocking imported products is one method for independent specialty shops to establish a difference between themselves and discount shops since they provide a larger variety of products to choose from and they give a sense of high class. Another attractive point about imported toys for the shop is the larger profit margin than domestic toys. Among imported toys, European toys have an established reputation for good durability, good design, and good craftsmanship (according to "Playthings", November 1986). Among Japanese toys, video games are very popular. Video games and their parts make up an actual 68% of toy imports from Japan. The following Table shows the import figure and ratio by producing country for each of the major items.

According to U.S. Department of Commerce statistics, the shipment figure is higher than that of imports, but according to the U.S. toy industry itself, 80% of the U.S. toy market is dominated by imported goods.

In any case, it is a fact that while the U.S. product shipment figure is entering into stagnation, the weight of imported products is gradually rising.

## (2) Import Trends in 1987

Toy imports grew from \$1,585 million in 1983 to \$2,157 million in 1984, a 36% increase. They made a further 27% increase to \$2,740 million in 1985 and an 11% increase to \$3,051 million in 1986. In 1987, imports grew to \$4,029.9 million, a 32% increase.

In 1987, Taiwanese products dominated 23% of U.S. toy imports and maintained the top importer position in 1986 and 1987. South Korea is in 2nd place (share, 17.4%); China, 3rd place (16.6%); Hong Kong, 4th place (14.5%); Japan, 5th place (13.2%), and so on. The notable changes have been the moves of South Korea and China (See Table III-31).

Viewed in terms of country or region, imports from China show the highest growth ratio, with \$14.9 million in 1983, and \$671 million in 1986, representing a 45-fold increase. The import ratios from South Korea and Taiwan also boast high growth ratios. In the case of South Korea, the figure quadrupled from \$169.9 million in 1983 to

\$701.9 million in 1987. Taiwan's figure increased 1.9 times from \$475.4 million in 1983 to \$923.8 million in 1987.

In contrast, imports from Japan progressed comparatively steadily until 1985, but under the influence of the appreciated yen, there was a drop in 1986 from the previous year's figure. Then in 1987, imports from Japan grew to \$530 million, a 65% increase. Imports from Hong Kong as well are in the process of losing their competitive strength due to high labor costs compared with China and South Korea.

Among the 2nd-tier supplier countries, there have been some shifts in rank such as the powered movement of Thailand from 17th to 12th place; \$18.1 million in 1985 to \$35 million in 1987. Import statistics are shown in Table III-32.

Table III-31. U.S. Imports of Dolls, Toys, Games, Children's Vehicles  
Summary by Leading Countries of Origin, 1985 - 1987

Country	1987					1986					1985				
	Rank by Val.	\$ Mil.	% chg. vs. 1986	Share		Rank by Val.	\$ Mil.	% chg. vs. 1985	Share		Rank by al.	\$ Mil.	Share		
				Total	%				Total	%			Total	%	
TOTAL		4,042.9	+32.5		3,051.7	+11.4						2,740.1			
Taiwan	1	923.8	+38.2	22.8	1	668.6	+13.1	21.9	+0.3	2	591.2	21.6			
So. Korea	2	701.9	+38.3	17.4	3	507.6	+32.6	16.6	+2.6	3	382.9	14.0			
China	3	671.2	+87.3	16.6	4	358.3	+45.5	11.7	+2.7	5	246.3	9.0			
Hong Kong	4	587.0	-9.2	14.5	2	646.8	+1.1	21.2	-2.1	1	639.8	23.3			
Japan	5	533.9	+65.2	13.2	5	323.2	-14.9	10.6	-3.3	4	379.9	13.9			
Macao	6	88.6	-4.5	2.2	6	92.8	+14.1	3.0	0	7	81.3	3.0			
Mexico	7	87.1	-4.0	2.2	7	90.7	+2.5	3.0	-0.2	6	88.5	3.1			
Singapore	8	79.7	+126.4	2.0	9	35.2	+47.9	1.2	+0.3	13	23.8	0.9			
W. Germany	9	57.3	+16.0	1.4	8	49.4	+32.8	1.6	+0.2	8	37.2	1.4			
Malaysia	10	40.1	+47.4	1.0	13	27.2	-14.5	0.9	-0.8	10	31.8	1.7			
Italy	11	38.5	+19.2	1.0	11	32.3	+23.8	1.1	+0.1	12	26.1	1.0			
Thailand	12	35.2	+93.4	0.9	16	18.2	+0.6	0.6	-0.1	*17	18.1	0.7			
Canada	13	29.5	-5.2	0.7	12	31.1	-16.2	1.0	-0.4	9	37.1	1.4			
U. Kingdom	14	28.0	+22.8	0.7	14	22.8	+14.6	0.7	0	15	19.9	0.7			
Denmark	15	23.7	-27.5	0.6	10	32.7	+16.8	1.1	+0.1	11	28.0	1.0			
Philippines	16	20.7	+10.7	0.5	15	18.7	-13.0	0.6	-0.2	14	21.5	0.8			

\* In 1985, Spain ranked ahead of Thailand at #16, with an import value of \$18.3 million.

Source: AFMR, based on data from U.S. Department of Commerce, International Trade Administration

Table III-32. US Importers of Toys (Detail) 1987

Country of Origin	Quantity (000)	Value (\$000)
<b>7370500 Invention Models</b>		
Japan	-	342
United Kingdom	-	190
Korean Rep.	-	140
All Others	-	<u>306</u>
Total		978
<b>7370700 Scale Model Railroad etc., Stock Equipment and Parts of</b>		
Hong Kong	-	11,468
Korean Rep.	-	6,866
FR Germany	-	5,942
Japan	-	3,767
China M.	-	4,879
All Others	-	<u>15,253</u>
Total		48,125
<b>7370900 Construction Sets or Kits with Units Made to Scale</b>		
Japan	-	22,147
Italy	-	2,539
FR Germany	-	1,614
All Others	-	<u>6,028</u>
Total		32,328
<b>7371400 Rail, Highway, etc. Equipment Made to a Scale of Over 1 to 85</b>		
Japan	-	10,047
FR Germany	-	6,946
Singapore	-	5,908
All Others	-	<u>18,220</u>
Total		41,121
<b>7371520 Rail, Highway, etc. Equipment Made to a Scale of Over 1 to 85</b>		
Singapore	-	5,061
Japan	-	4,958
Macao	-	3,669
FR Germany	-	2,061
France	-	1,932
All Others	-	<u>4,720</u>
Total		22,401
<b>7371560 Models and Construction Kits or Sets, NSPF</b>		
Japan	-	9,169
Singapore	-	6,109
Hong Kong	-	5,062
FR Germany	-	3,634
Malaysia	-	3,327
Korean Rep.	-	3,088
All Others	-	<u>11,422</u>
Total		41,811
<b>7371600 Models and Construction Kits or Sets NSPF</b>		

Country of Origin	Quantity (000)	Value (\$000)
7371600 Models and Construction Kits or Sets NSPF		
Singapore	-	22,277
Japan	-	15,813
China T.	-	10,219
Korean Rep.	-	8,394
Hong Kong	-	6,875
All Others	-	<u>23,784</u>
Total		87,362
7372100 Doll Clothing, Imported Separately		
China M.	-	21,468
Hong Kong	-	4,800
Philippine Rep	-	2,813
China T.	-	1,788
Korean Rep.	-	1,194
All Others	-	<u>1,245</u>
Total		33,308
73732300 Stuffed Dolls, with or without Apparel		
China T.	10,770	50,361
China M.	13,312	39,393
Korean Rep.	6,576	1,281
Hong Kong	3,536	9,800
Malaysia	119	4,061
FR Germany	219	3,381
Spain	236	3,178
Thailand	745	3,015
All Others	<u>1,066</u>	<u>5,133</u>
Total	36,579	129,603
7372415 Dolls, (excluding stuffed), over 13' with Apparel or Not		
China M.	6,688	28,086
Hong Kong	2,857	23,944
China T.	2,206	14,464
Spain	197	1,394
FR Germany	55	1,297
Japan	30	1,269
All Others	<u>720</u>	<u>3,618</u>
Total	12,753	74,072
7372425 Dolls, (excluding stuffed), up to 13' with Apparel or Not		
China M.	92,111	84,662
China T.	17,236	37,904
Hong Kong	46,665	30,695
Malaysia	11,389	16,315
Philippine Rep.	7,360	11,855
All Others	<u>12,841</u>	<u>12,157</u>
Total	187,602	193,582



Country of Origin	Quantity (000)	Value (\$000)
7372600 Parts of Dolls: Doll Skins for Stuffed Dolls		
China T.	-	432
China M.	-	427
Korean Rep.	-	<u>246</u>
All Others	-	80
Total		1,185
7372700 Parts of Dolls, NSPF		
China T.	-	1,842
China M.	-	1,834
Hong Kong	-	1,308
All Others	-	<u>1,682</u>
Total		6,666
7372800 Stuffed Toy Animals, Valued not Over \$.10 per Inch of Height		
China M.	36,264	14,206
Korean Rep.	24,741	12,530
China T.	8,422	3,948
All Others	<u>4,421</u>	<u>2,023</u>
Total	73,848	32,707
7373000 Stuffed Toy Animals, Valued Over \$.10 per Inch of Height		
Korean Rep.	172,522	442,859
China T.	69,899	178,050
Hong Kong	15,362	23,544
All Others	<u>2,589</u>	<u>5,454</u>
Total	371,093	769,874
7373500 Metal Toy Animals, etc., not Having A Spring Mechanism		
7374000 Toy Animals, etc.,NSPF, not Having A Spring Mechanism		
China T.	89,247	66,745
China M.	182,226	60,251
Hong Kong	173,775	30,388
Korean Rep.	25,088	24,630
All Others	<u>29,282</u>	<u>17,221</u>
Total	499,618	199,235
7374200 Metal Toy Figures of Animate Object with a Spring Mechanism.		
China T.	1,872	2,041
Korean Rep.	845	1,950
Hong Kong	2,049	1,093
All Others	<u>1,669</u>	<u>1,547</u>
Total	6,435	6,631
7374300 Other Toy Figures of Animate Object with a Spring Mechanism.		
China T.	1,938	2,770
Korean Rep.	3,185	2,176
China M.	1,099	2,022
Hong Kong	4,141	2,146
All Others	<u>1,447</u>	<u>1,995</u>
Total	11,810	11,109

Country of Origin	Quantity (000)	Value (\$000)
<b>7374700 Toy Figures of Inanimate Objects, other, without Spring Mechanisms</b>		
China M.	-	13,079
Hong Kong	-	4,305
China T.	-	1,970
Mexico.	-	1,957
All Others	-	<u>3,226</u>
Total		24,537
<b>7375100 Skins for Toy Figures of Animate or Inanimate Objects</b>		
Korean Rep.	31,896	38,882
China T.	1,896	3,968
All Others	1,985	<u>2,176</u>
Total	35,777	45,026
<b>7375200 Toy Books</b>		
Canada	-	6,763
China T.	-	3,131
Hong Kong	-	1,652
Singapore	-	1,585
Italy	-	1,418
All Others	-	<u>3,480</u>
Total		18,029
<b>7375500 Toy Alphabet Blocks and Building Bricks</b>		
Denmark	-	21,222
China T.	-	16,811
Hong Kong	-	3,940
All Others	-	<u>19,436</u>
Total		61,409
<b>7376000 Toy Musical Instruments</b>		
China T.	-	11,995
Hong Kong	-	5,212
Italy	-	4,413
China M.	-	3,936
Mexico	-	1,336
All Others	-	<u>3,177</u>
Total		31,169
<b>7376500 Magic Tricks and Practical Joke Articles</b>		
China T.	-	5,190
Hong Kong	-	3,686
All Others	-	<u>4,112</u>
Total		12,988
<b>7377000 Confetti, Paper Decorations, Party Favors and Noisemakers</b>		
China T.	-	4,291
Hong Kong	-	1,616
China M.	-	1,413
All Others	-	<u>5,882</u>
Total		13,202

Country of Origin	Quantity (000)	Value (\$000)
7377300 Toy Tea Sets of Ceramic Ware Scale of 1 to 10 or Larger		
China T.	-	436
FR Germany	-	165
All Others	-	<u>177</u>
Total		778
7378000 Toys, NSPF, Having a Spring Mechanism		
Hong Kong	17,928	11,797
Macao	6,668	9,537
Mexico	4,638	8,246
China M.	7,356	5,711
China T.	6,362	5,132
All Others	<u>6,610</u>	<u>9,351</u>
Total	49,562	40,774
7378500 Kites		
China T.	-	1874
Korean Rep.	-	775
Hong Kong	-	591
China M.	-	200
All Others	-	<u>255</u>
Total		3,695
7379300 Toys Having an Electric Motor		
Hong Kong	14,114	59,033
China M.	8,267	25,481
Singapore	1,134	19,605
Japan	1,212	17,887
China T.	5,096	15,469
All Others	<u>5,203</u>	<u>22,965</u>
Total	35,025	159,900
7379515 Toys Having a Friction or Weight Operated Motor		
Hong Kong	4,972	3,563
China M.	1,700	1,344
Macao	1,054	1,087
China T.	351	402
All Others	<u>943</u>	<u>1,154</u>
Total	9,020	7,550
7379525 Toys Having an Electric Motor		
Hong Kong	7,793	21,493
China T.	5,881	8,052
China M.	3,110	7,896
Korean Rep.	706	4,200
Macao	1,061	2,667
Mexico	1,624	2,338
Japan	89	1,604
Singapore	125	1,072
All Others	<u>289</u>	<u>1,045</u>
Total	20,678	50,367

Country of Origin	Quantity (000)	Value (\$000)
<b>7379536 Rubber or Plastic Inflatable Toy Balloons and Punchballs</b>		
Mexico	-	2,982
Korean Rep.	-	1,000
China T.	-	827
Belgium	-	775
Thailand	-	638
All Others	-	<u>1,715</u>
Total		7,937
<b>7379552 Toys of Rubber or Plastics, NSPF, Inflatable</b>		
China T.	-	9,851
Mexico	-	659
Hong Kong	-	606
United Kingdom	-	413
All Others	-	<u>684</u>
Total		12,213
<b>7379555 Toys of Rubber or Plastics, NSPF</b>		
Hong Kong	-	52,019
China T.	-	26,667
Macao	-	20,737
China M.	-	18,817
Japan	-	13,262
All Others	-	<u>28,930</u>
Total		160,432
<b>7379555 Toys of Other than Rubber or Plastics, NSPF</b>		
Hong Kong	-	20,239
China T.	-	16,801
Korean Rep.	-	12,043
China M.	-	11,186
All Others	-	<u>29,565</u>
Total		89,834
<b>7379570 Toy Parts, NSPF</b>		
Hong Kong	-	3,890
Japan	-	2,356
China M.	-	2,111
Korean Rep.	-	1,365
China T.	-	1,054
All Others	-	<u>1,895</u>
Total		12,671

### 3-3. West Germany's Toy Market

#### 3-3-1. Current State

##### (1) Trend of Domestic Production

The toy industry in West Germany is overwhelmingly dominated by small- and middle-sized firms. At present, about 1,000 firms are operating in the industry with a total of about 24,000 shops. Large firms with employees of 200 or more number only 20 with the remaining firms belonging to small- and medium-sized companies.

The main producing area is located in the southern part of West Germany. The Baberish State in which is located Nuremberg, a town of toys, has an advantage in that an abundant low-cost labor force is available. Toy manufacturers are dependent on household production for some portion of their production. People in rural areas of the state are relatively so poor that they welcome household labor. At the same time, people in the state are familiar with wood processing because many forests are there.

Main production items include plastic toys (31.8%), tinware and metal toys (21.8%), paper-and craft paper toys (11.3%), fabric toys (6.5%) and wooden toys (5.6%).

Statistics by the Federal Statics Bureau showed a 175 increase in toy production in the five years from 1983 to 1987 (Table III-33).

The most significant production item is plastic toys. After hitting a record production of DM582.7 million in 1986, production plummeted by 7% over the previous year to DM538.3 million in 1987, the lowest level in the past five years. Production of metal toys followed a similar pattern; it declined 4% from a record level in 1986 to DM398.7 million in 1987. Production of paper and craft paper toys doubled in the past five years. It increased 42.1% to DM211 million 1987. Production of fabric toys marked a continuous increase in the past five years. In 1987, production rose 7.9% over the previous year to DM165 million.

##### (2) Trend of Export and Import

West Germany's toy imports amounted to DM1.24 billion in 1987, a 14.9% increase over the previous year's level. Table III-34 shows the trend of imports in the past five years.

By product category, plastic toys accounted for 43.3% of total imports in 1987, followed by fabric toys, metal toys and dolls.

A look at imports of main items by importing country shows that in plastic dolls Malta accounted for more than 20% of total imports during the past five years, although

**Table III-33. Toy Production Trend (1983-1987)**

(Unit: DM million)

Product Category	1983	1984	1985	1986	1987
Plastic Toys	555.9	559.9	552.3	582.7	538.3
Metal Toys	310.2	315.3	367.8	405.6	389.7
Puzzles	45.5	42.0	39.3	41.4	51.3
Paper and Craft Paper Toys	111.4	118.4	113.9	141.5	201.1
Vehicle Toys	108.1	111.4	118.4	99.9	111.4
Wooden Toys	75.5	70.2	75.7	85.7	95.7
Fabric Toys	71.6	81.8	96.5	98.7	106.5
Dolls and Accessories	75.9	77.7	85.8	96.5	91.4
Others	108.4	113.6	117.0	125.6	124.9
<b>TOTAL</b>	<b>1,462.5</b>	<b>1,490.3</b>	<b>1,566.7</b>	<b>1,677.6</b>	<b>1,710.3</b>

Source: Federal Statistics Bureau

the item registers a gradually declining trend. Hong Kong's share fell to about 10% in 1986 and 1987 from about 25% in the 1982-1985 period. In exchange, the share held by China increased to 26.8% in 1987. In plastic kit assembly toys, Switzerland holds a less than 30% share, In the other category of plastic toys, major exporters are China (16.3%), Hong Kong (15.4%) and Italy (11.8%)

West Germany exported DM936 million worth of toys in 1987, a decline of 6.1%. A look at the export trend during the past five years indicates that after a 7-9% increase until 1986, exports marked their first decline in 1987 (Table III-4).

By sector, as shown in Table III-35, plastic toy accounted for 38.7% of toy exports in 1987. Plastic toys have maintained the position of the largest export item since 1983. Fabric toys registered a 20.1% increase in exports, resulting in a higher share of the total export. In exchange, the percentage of cards and room games showed a corresponding decline. Main importing countries of plastic toys except for dolls and assembly kit toys are France and Netherlands. The United States was the largest importer of battery-powered railway models in the past five years.

### (3) Position of Imported Products in Domestic Market

The rapid growth of imported products into the German market is an astonishing phenomena for the toy industry. In recent years, among items whose dependence on imports are particularly high are dolls and accessories (87.1% in 1987), fabric toys (79.0%) and plastic toys (73.9%).

Under import pressure, the German toy industry has been succeeding in expanding exports to some degree, but has failed to compensate the loss in the domestic market.

Domestic consumption was DM1,090.2 million in 1983, DM1,220.6 million in 1984, DM1,294.6 million in 1985, DM1,367.4 million in 1986, and DM1,471.3 million in 1987. Consumption rose a combined 35.0% increase in the past five years. Table III-36 indicates the trend of domestic production of main three items (Table III-36).

In 1987, domestic consumption of plastic toys showed a 3.5% increase; metal toys a slight rise; and fabric toys, a 42.2% rise. Domestic market volume was estimated at DM3.5 billion in 1987, of which DM1.5 billion or 43% was sold through special retailers.

The fall in the dollar's value hit the German toy industry. Italy and Hong Kong are being threatened by Taiwan and China. Five countries and areas in Asia account for more than 53% of imports into West Germany. Producers in these countries and areas are not only able to produce toys at lower cost, but also benefitted from the decline in the exchange rate of the dollar. Another problem is an inflow of copy products of German

**Table III-34. Trend of Toy Export and Import Value  
(1983-1987)**

	(Units; DM million, %)			
	Imports	Growth	Exports	Growth
1983	879.5	-	736.5	-
1984	967.7	+10.0	789.6	+7.2
1985	1019.7	+5.4	881.0	+11.6
1986	1075.9	+5.5	961.0	+9.1
1987	1236.6	+14.9	903.6	-6.1

Source: Federal Statistics Bureau

**Table III-35. Export and Import Value and Share in 1987**

Product Category	(Unit: DM million, %)			
	Import	Share	Export	Share
Plastic toys	535.0	43.3	349.4	38.7
Metal toys	128.0	10.4	158.2	17.5
Cards and room games	101.0	8.2	58.1	6.4
Vehicle toys	16.1	1.3	31.8	3.5
Wooden toys	33.9	2.7	41.4	4.6
Fabric toys	179.9	14.5	58.8	6.5
Dolls and accessories	139.7	11.3	70.8	7.8
Music toys	14.7	1.2	4.8	0.6
Weapon toys	9.4	1.0	3.0	0.4
Rubber toys	11.2	1.1	10.3	1.1
Other	60.5	5.0	117.0	12.9
<b>TOTAL</b>	<b>1236.6</b>	<b>100</b>	<b>903.6</b>	<b>100</b>

Source: Federal Statistics Bureau



toys from Hong Kong and Taiwan. East Germany is also mounting a dumping assault in the West German market.

#### (4) Consumption Trend

Toy demand in West Germany has been growing at an annual rate of about 2% in recent years. Factors for the increase are:

- 1) Today, demand for toys comes not only from children but also from adults.
- 2) Toys are becoming more sophisticated and accordingly more expensive.
- 3) Development of new products has created new demand.

Despite the increase in unemployment since 1982, toy demand has grown. According to an analysis survey of consumption trends in 1987, 27.2% of 1,719 consumers surveyed responded that they bought one or more toys in the year, of which, 21.7% purchased room games. Those who responded that they did not buy any toys were 67% of all respondents.

##### a. Consumption by age

In the by age category, people who purchase toys most frequently are aged between 30 and 39. People of this age category have low age children.

##### b. By personal income

People with earnings between DM2,000 -4,500 are the most frequent purchasers of toys. This age segment of people is considered to be families with children.

##### c. By household type

81-87% of families with children of age 6 or below purchased toys last year. On the contrary, only 23% of households without children purchased toys in the year. In particular, households with children between 4 and 6 bought toys most frequently. Households with children aged 2 or under are the greatest customers of stuffed toys.

##### d. By occupation

Large-sized independent business and free-lance professionals buy toys most frequently, followed by the manager segment.

##### e. By region

Regional characteristics cannot be observed except for the fact that in West Berlin, people who buy toys is lowest. Upper middle class people purchase higher quality toys. German consumers are more oriented toward brand products, reflecting the prevailing consumer assumption that brand guarantees quality.

Table III-36. Trend of Domestic Production

(Unit: DM million)

Plastic toys					
Year	Production	Imports	Exports	Domestic Production	Import Ratio(%)
1983	555.9	311.8	278.8	588.9	52.9
1984	559.9	386.0	308.7	637.2	60.6
1985	552.3	437.2	345.5	644.0	67.9
1986	582.7	494.1	377.1	699.7	70.6
1987	538.3	535.0	349.4	723.9	73.9
Metal toys, including electrically-powered model trains					
Year	Production	Imports	Exports	Domestic Production	Import Ratio(%)
1983	310.2	106.3	115.9	300.6	35.4
1984	315.3	113.8	117.1	312.0	36.5
1985	367.8	126.8	157.7	336.9	37.6
1986	405.6	124.9	172.2	358.3	34.9
1987	389.7	128.0	158.2	359.5	35.6
Fabric toys					
Year	Production	Imports	Exports	Domestic Production	Import Ratio(%)
1983	71.6	61.4	17.4	115.6	53.1
1984	81.8	66.0	22.8	125.0	52.8
1985	96.5	81.6	30.1	148.0	55.1
1986	98.7	110.1	48.7	160.1	68.8
1987	106.5	179.9	58.8	227.6	79.0

Note: Import ratio - Percentage of import value to total domestic consumption value

Source: Federal Statistics Bureau and data based on its statistics

### 3-3-2. Sales and Distribution of Toys

#### (1) Distribution Routes and Price Trends

Toy have been supplied by the following retailers:

- Special toy retailers
- Special toy shops
- Department stores
- Self-service stores
- Consumer markets

In addition, other distribution routes are also used to supply toys. They include furniture stores, stationery shops, living good shops, and hardware stores. When routes for supply of raw materials are not taken into account, the distribution routes of toys can be described as follows:

- manufacturers -- retailers -- end users
- manufacturers -- joint purchasing cooperatives -- member retailers --end users
- manufacturers -- wholesalers -- retailers --end users
- manufacturers -- retailer cooperative (cooperatives of department stores, chain stores and self-service stores) --end users
- manufacturers -- delivery stores -- end users
- manufacturers -- toy retailers -- end users
- manufacturers -- special toy retailers -- end users

The distribution routes of imported toys are as follows;

- importers -- toy manufacturers -- retailers -- end users
- importers -- wholesalers -- retailers -- end users
- importers -- retailers' cooperatives (department stores, chain stores, self service stores) -- end user
- importers -- purchasing cooperatives -- member retailers -- end users
- importers -- purchasing cooperatives -- member retailers -- end users
- importers -- delivery stores -- end users
- importers -- purchasing cooperatives -- member retailers -- end users
- importers -- delivery stores end users
- importers -- toy retailers -- end users
- importers -- special toy retailers -- end users

According to specialists, distribution margins are as follows:

- wholesalers, about 15-30%
- retailers, about 70-150% or more (margins hinge on sale items and kind and condition of each retailer).

Surveys on the margins of manufacturers and importers are impossible.

According to Deutsche Handelskammer Spielzeug (DHS0, about 43% of total sales of toys or DM1.5 billion are made through special retailers. In the industry, 2,400 firms exist, of which, only 3% report sales over DM2 million. Other sales figures are retailers with sales of less than DM2.0 million (7%), retailers with sales of less than DM1.0 million (24%), retailers with sales of less than DM500,000 (27%), and retailers with sales of less than DM250,000 (35%). These figures show the extremely heavy dominance of small-sized firms in the toy retailing industry.

About 20% of total toy sales or DM700 million are handled by department stores. Sales by department stores have been showing an increasing trend. The form of distribution categorized as "Green Pastures" (i.e., special markets) has been showing continuous growth in recent years, accounting for 16% of total sales in the industry. Delivery stores for special markets hold about a 6% share of the market. Other distribution channels account for 5% of total sales. According to DHS, other distribution channels include gasoline stands, kiosks and drug stores.

## (2) Special Product Market -- A New Distribution Channel for Toys

The emergence of a new form of distribution has triggered discussions in the industry. Toys-R-Us, the world's largest toy retailer chain in the United States, moved into West Germany in 1987. The U.S. firm already established four special stores with 3,000-4,200 square meter floorage in 1987. The number of sales outlets will be increased to 50 units in the final stage.

Spiel+Hobby, a Limburg-based affiliate of the CO-OP group has taken an expansion course. The firm will establish the "children's country" chain with 2,500-4,500 square meter floorages in April 1988. A pilot store will open in Nuremberg.

"Vede", the largest toy purchasing cooperative in the U.S. and Europe, opened its first Bonny Land market with a 1,200 square meter floorage in November 1985. The "Idee+Spiel" group planned to set up "Spielissima", an association of special retailers in the fall of 1987 with an aim of forming the largest cooperative with 630 cooperatives to rival Vede.

### 3-3-3. Current Problems and Future Prospects

The fundamental problem for the industry is that it is impossible to exactly forecast production trends. The fact leads to frequent failures of market strategy for manufacturers. On the other hand, hit products appear by chance. At toy fairs, firms in the industry look for the sudden emergence on the market of a hit product. However, such great hit products have not appeared for a long time. The last one was the so-called "Magic Disk", which became an unexpected hit in 1981. A successor to it has not yet appeared. This indicates a difficulty in identifying the tastes of children. The industry says many hit products do not last long in the market.

External problems are also factors which one cannot overlook. Under growing import pressure, exports showed their first decline in 1987. Industry sources say that the industry cannot watch calmly the widening trade deficit. Severe import pressure was observed in the 1980-1981 period. The main reasons are declining exports to the United States as a result of the dollar's depreciation and growing import pressures from Asia. Manufacturers in Taiwan, China, Hong Kong and South Korea are targeting the European market as a new market which will replace the U.S. where imports from these countries will show signs of a decline in the future.

Mid-term toy demand prospects depend on economic growth and structural factors. Among structural factors are changes in population structure and fundamental changes in consumer behavior such as the selective purchasing pattern of consumers in a saturated market.

The change in population structure will have an effect on sales prospected to show a growing tendency until 1990, children in the age categories between 10-15 and 15-20 are expected to decline. The population indices of children aged between 10-15 and 15-20 are expected to drop to 83 and 66 respectively (1985=100). According to an analysis by BAT Leisure Research Center, the number of families with children aged under 15 will decline 24% from 6 million in 1985 to 4.5 million. Households with children under 14 account for 53% of the total number of households which purchase toys.

The toy industry is now trying to compensate losses in sales of toys for children and young people by increasing sales of toys to adults because of the expected change in population of the targeted age group.

In toys for adults, social games related to current politics, economics and society have been playing a dominant role. In the category of toys for children, prospective items are metal toys, sports vehicle for children, vehicles for toys, fabric toys, and dolls, if the revival of wooden toys is not taken into consideration.