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A STUDY OF
THE DISTRIBUTION SYSTEM
IN JAPAN

by
Masayoshi Maruyama

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A STUDY OF THE DISTRIBUTION SYSTEM IN JAPAN

This paper forms part of an OECD project which addressed the issue of the structure and change in the distribution systems of seven OECD countries.

The paper gives an overview of the structure of the Japanese distribution system and discusses its economic performance, both on the grounds of efficiency and market access. Next, a detailed analysis of the Japanese distribution sector is carried out, on the basis of which policy recommendations are drawn.

<div align="center">*   *   *</div>

Ce document fait partie d'un projet de l'OCDE qui avait pour objet l'analyse de la structure et des changements dans les systèmes de distribution dans sept pays de l'OCDE.

Cette étude donne une vue d'ensemble de la structure du système japonais de distribution et discute sa performance économique en termes d'efficacité et accès au marché. Une analyse détaillée du système de distribution Japonais est effectuée et sur cette base sont tirées des recommandations de politique économique.

Contents

A Country Study on the Distribution System in Japan

by

Masayoshi Maruyama

I. Introduction

This study consists of four parts. In Part A the salient feature of the distribution system in Japan is described using basic statistics of commerce. The structure of the retail sector is treated in section I and that of the wholesale sector in Section II. In each section the size, structure, the density of outlets, the concentration ratio, and the productivity of the distribution industry are examined. The horizontal linkage in retailing by the chain store operation and the vertical linkage in wholesaling are also considered.

Part B considers the performance of the distribution system in Japan from the viewpoints of efficiency and the market access. In Section I the distribution system is accessed from efficiency. Section II examines the business practices such as a long-term continual relationship and selective distribution policy in light of the problem of market access.

Part C provides a theoretical explanation for the spatial structure in retailing, the vertical distribution channel structure, the mode of transaction, and the distribution channel choice and interbrand competition.

Finally, the last Part D proposes some policy recommendations for the structural improvement of the Japanese distribution system and business practices in light of deregulation in Japanese retailing, market access, and the price differential between Japan and abroad.

Part A: Overview of the Structure

Inspection of national data reveals that the Japanese distribution industry accounted for about 13.2 per cent of GDP (gross domestic product) and 17.6 per cent of the total number of workers in 1986. Distribution is second in size only to manufacturing among non-service sectors. Looking at time-series data, the weight of the distribution sector in total industry is almost stable over the past 10 years (see table A-1 and A-2).

I. Retailing Sector

1.1 Average Size of Retail Outlets

According to the 1988 Census of Commerce (published by the Ministry of

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International Trade and Industry), there were about 1.62 million retail establishments in Japan with total annual sales of 115 trillion yen, and around 7 million persons engaged (see table A-3, A-4 and A-5). The outlets of food and beverage retailers accounted for about 41 per cent of the total number of outlets, 37 per cent of the total number of workers, and 31 per cent of the total retail sales, which ranked the largest position (see table A-6, A-7 and A-8). But the share of retail sales for food and beverages is steadily decreasing along with the textiles, apparel and accessories. On the other hand, general merchandise stores, whose proportion of the number of outlets is very small (only 0.2%), accounted for about 14 per cent of the total sales. This indicates the recent trend of growth in the number of large-scale general merchandise stores such as department stores and super stores and the decline of conventional small speciality stores.

Retail outlets engaging only one to two persons accounted for the majority (54.0%) of the total number of retail outlets, followed by those with three to four persons (26.1%), and five to six persons (13.2%). Hence, those outlets with less than ten persons accounted for 93.3 per cent of all retail establishments. On the other hand, the number of large-scale retail outlets with more than 50 persons was about 7,400, accounting for only 0.5 per cent of all retail outlets (see table A-3). There is a large number of small stores (i.e. a high proportion of small and medium-sized stores) in Japan.

We will examine the scale of retail outlets by three measures: the average number of persons engaged (employer and employees) per outlet, annual sales per outlet, and sales floor space per outlet.

Firstly, the scale of retail outlets is examined in terms of the number of persons engaged per outlet. The long-term change of the retailing sector in Japan can be seen from Table A-3. This table shows that the small (family-operated) retail outlets with one to two persons have been decreasing, whereas outlets with more than three persons have been increasing. Those small retail outlets with one to two persons accounted for 62.5 per cent in 1974, and have continued to decrease thereafter. According to the most recent data, the proportion of small outlets was a little over 50%. The number of retail outlets increased after World War II, but started to decrease in 1985. It decreased by 5.4 per cent in the three years from 1982 to 1985. During the same period, small retail outlets with one to two persons decreased by 9.3 per cent. This trend can be seen also in the 1988 Census of Commerce. While the total number of retail outlets have decreased only by 0.6 per cent during 1985 and 1988, the number of those small retail outlets has decreased by 7 per cent.

Table A-9 shows the number of persons engaged per retail outlet in Japan. Compared to Japan (3.9) in 1985, there were less persons per outlet in Italy (2.0) in 1981, and roughly the same number of persons per outlet in France

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(4.3) in 1985. However, there were more persons engaged per outlet in other major countries (the US, Germany, and the U.K.). The number of persons engaged per outlet in the US (12.8) in 1987 was the largest among those countries studied (see Maruyama et al.[1991]).

Secondly, the scale of retail stores is examined in terms of annual sales per outlet. There is a large difference in size of sales between general merchandise stores and other retail outlets (see table A-10). From table A-6 it is confirmed that small retail outlets engaging one to two persons accounted for the majority of the total number of retail outlets, but that the share of sales among these small outlets accounted for only 11 per cent. On the other hand, large retail outlets with 50 and more persons accounted for less than one per cent of the total number of retail outlets, but the share of sales was above 20 per cent. Large-scale retail stores in Japan now have dominant positions in retailing, but an international comparison of the average annual sales per establishment indicates that Japan has shown a relatively small average annual sales per outlet in advanced countries, the figure being about one-third that of the US (see Maruyama et al.[1991]).

Thirdly, the small floor space per retail outlet characterizes the Japanese retail industry. The average floor space in Japan is increasing, but was only 58m^2 in 1985. There is a large gap between the smallest (food and beverages) and the largest (general merchandise) stores (see table A-11). The small floor space per retail outlet in Japan can also be confirmed by an international comparison.

We have seen that the number of small retail outlets has decreased, and average floor space has expanded in Japan. However, an international comparison reveals that the scale of retail outlets in Japan is notably small among the major advanced countries judging from the three criteria mentioned above. These are the major characteristics of the Japanese distribution system.

1.2 Density of Retail Outlets

If we measure the density of retail outlets by the number of retail outlets per 1,000 residents, Table A-12 shows that the total average density in 1985 is 13.5 and that the food and beverage stores is 5.5, the highest classification overall. The density of retail outlets in Japan is more than 1.5 times of that of France (8.6) in 1985, and more than twice of that of the US (6.1) in 1987 and the U.K.(6.1) in 1984. The difference in densities between Japan and the other countries has been increasing (see Maruyama et al.[1991]). The fact that there are many retail outlets is even now one of the fundamental characteristics of the Japanese distribution system.

1.3 Concentration in the Retail Trade

The share of sales by different types of operation is shown in Table A-13. The large-scale retail stores such as department stores and general merchandise stores accounted for between 8 to 10 per cent of total retail sales. The recent rapid growth of convenience stores such as Seven Eleven and Lawson dealing with daily necessities is remarkable. The average annual percentage increase in convenience stores is 16 per cent. Also the growth of mass market electric appliance outlets in a chain store operation, and the expansion of variety in non-store retailing businesses, such as door-to-door sales and mail-order businesses, must be noted.

As a result, the concentration rate of retailing is increasing. Table A-14 shows that the cumulative share of sales for the top twenty five retail firms (CR25) is increasing from 7.6 per cent in 1968 to 11.2 per cent in 1988. The share of the top two hundred firms is (CR200) 21.5 per cent of total retail sales. Entering into details, the concentration has increased during 1968 and 1974, decreased thereafter, and is increasing in recent years. In 1974 the Large-scale Retail Store Law has been enacted, and its impact on the retail structure can be seen from this figure.

1.4 Scope and Degree of Horizontal Organization

It has been shown that Japan still has a large number of family-operated retail stores such as greengrocers, fish shops, butchers, bakers. Those small stores handling only specific commodities earn a certain level of sales by selling to customers in their neighborhood. On the other hand, the last two decades witnessed a growth in the importance of chain stores in the retail sector; *pari passu* the role of independents has been diminishing. The horizontal organization of retailing is now proceeding in Japan. Table A-15 shows that the proportion of chain stores is increasing from 7 per cent in 1968 to 22 percent in 1988. Especially, this proportion is highest in general merchandise stores at 65 per cent. This proportion is beyond the average level in such businesses as texture, apparel and accessories, drug and toiletries, and motor vehicles, bicycles and carts. This proportion is below an average level in the business of food and beverages (see table A-16).

Table A-17 shows the share of retail sales by chain stores. Average share of sales by chain stores is 60.7 per cent, but the share is 87.3 per cent in the general merchandise. As for food and beverage stores, the proportion of independents is large, but the share of sales by chain stores is about 50 per cent. Tables A-16 and 17 illustrate this point. This means that chain stores have larger average sales than independents.

Now the leading large retail companies, such as Daiei, Seibu Saison, Ito

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Yokado, Jusco, Uny, and Tokyu, operate various types of retail business in each corporate group. General merchandise companies have developed a wide variety of stores, such as food stores, convenience stores, department stores, specialty stores and discount stores in addition to their principal business. When the domestic market is limited in size, a retail company cannot expand only in one type of business so most choose to diversify store formats as a strategy for growth. European small countries like Belgium and the Netherlands also have retail companies which operate different types of stores, earning a large share in the retail market. In a large Japanese market with a population of 120 million, the leading retail companies have diversified their business to a considerable extent. This is partly due to the fact that large retail companies have been restricted in opening large scale GMSs under current law.

1.5 Productivity

Following the conventional views, we measure the productivity in the retail sector by annual sales per person engaged. The productivity of retail outlets with different sizes are shown in Table A-18. This table shows that economies of scale exist in Japanese retailing. That is, the productivity of small retail outlets engaging one to two persons is very low compared to larger outlets.

Comparing productivity internationally, the amount of sales in each country has been denominated by the US dollars. The need to employ a conversion rate, which is inevitable in doing an international comparison, is based on the purchasing power parities instead of the actual exchange rate. Although Japan ($81,000) in 1988 has had lower productivity than France ($88,000) in 1988, it was higher than that of West Germany ($80,300) in 1985, the US($77,400) in 1987, and the U.K.($58,800) in 1984. Italy is excluded from the comparison, since data are not available. Among the five major countries, Japan and France, where relatively small retailers are predominant, have shown a higher productivity in terms of annual sales per person engaged than those of the US, West Germany and the U.K.. It has been conjectured that small scale retail operations imply a "lower productivity", but it is not true for the retail industry as whole.

However it can be seen that economies of scale holds in the Japanese retailing, why does "small scale" not necessarily mean "low productivity" in an international comparison? The annual sales per person engaged (productivity), is obtained as the ratio of the annual sales per retail outlet divided by the number of persons engaged per retail outlet. Therefore, even if the scale of retail outlet is small, so that the annual sales per outlet is small, productivity is not necessarily low if the number of persons engaged per outlet is also small.

· To see in more detail the relationship between the scale and the productivity

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in retail sector as a whole in 1982, we will decompose retail outlets into five groups with different sizes; the outlets with less than 10 person engaged and the outlets with 10 to 19 persons, and so on. The productivity in each group, and the proportion of each group to the total number of retail outlets and to the total retail sales are examined. The proportion of the number of retail outlets with less than 10 persons engaged is higher in Japan (95.1%) than in the US(80.5%). The proportion of annual retail sales with less than 10 persons is considerably higher in Japan (54.8%) than in the US (29.2%), while there are few differences in those proportions between Japan and France. The productivity of retail outlets with less than 10 persons in Japan is the lowest among the three countries.

On the other hand, the productivity of retail outlets with 100 or more persons in Japan is the highest among those countries. It does not simply mean that the Japanese large retail outlets have a considerably higher productivity, because of the Japanese unique system of "haken shain" (salespersons lent from wholesalers and/or manufacturers to large retail stores). Many of Japanese department stores are largely dependent on such salespersons.[1] If adjustments for such salespersons are made, the productivity of Japanese large scale retail stores with more than 100 persons engaged would become almost the same as, or a little higher than, that of France.

Now we will examine the relationship between the scale of outlets and the productivity in retail sector as a whole. The productivity in the retail sector as a whole can be expressed as follows:

$$O/L = (O_1 + O_2)/(L_1 + L_2)$$
$$= \{(L_1/(L_1 + L_2)\}(O_1/L_1) + \{L_2/(L_1 + L_2)\}(O_2/L_2)$$

Where O: annual retail sales
       L: the number of persons engaged in retail establishments.

Retail establishments are divided into two groups; one with less than 10 persons (indicated by suffix 1), the other with 10 and more persons (indicated by suffix 2). Thus, the productivity in the retail industry as a whole can be reduced to be a weighted average of the productivity of these two groups. All countries compared show a higher productivity for retail outlets with 10 and more persons (O_2/L_2) than those with less than ten persons (O_1/L_1). In the United States, however, there is a very little difference in productivity between the two groups. The US has the highest proportion of retail establishments with 10 and more persons ($L_2/(L_1 + L_2)$), while Japan has the lowest.

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[1]   According to the "Survey of the Japanese Retail Industry" (Nihon Keizai Shinbunsha), such salespersons accounted for an average of 80% of own salespersons at ordinary department stores. At some department stores this proportion is as high as 2.4 times.

The reason why there is little difference in the productivity of retail industry as a whole between Japan and the US can be explained as follows. Though the proportion of the latter group (L2/(L1 + L2) in the United States is more than twice that of Japan, productivity (O2/L2) is lower than that of West Germany, France, and Japan. Hence, even if the economies of scale in the retail sector can be seen from a domestic comparison of each country, it does not hold in an international comparison.

Summary of Section I

The structure of the retail sector in Japan is characterized as follows:

(1) Although self-service operation and chain store management have diffused rapidly after the 1960s, Japanese retail stores in general are still small in size
(2) The productivity in the retail sector measured by sales per person engaged is not low in Japan compared to those of the US and the European countries. However, there is a large number of small retail stores with one to two persons, and the productivity in those small stores is relatively low compared to other countries
(3) The density of retail stores is higher in Japan than in other major advanced countries
(4) Chain stores or the multi-store operations have been promoted but the proportion of the number of outlets is low
(5) Leading retail companies have been promoting diversification of their organization by operating various types of retail businesses within their corporate groups.

II. Wholesaling Sector

2.1 Average size of wholesale establishments

According to the 1988 Census of Commerce, the number, of wholesale establishments in Japan is about 436,000 with total annual sales of 446 trillion yen, and around 4 million persons engaged (see table A-19, A-20 and A-21). Wholesale establishments dealing in food and beverages accounted for 22.7 per cent of the total number of establishments, 21.9 per cent of the total number of workers, and 20.7 per cent of the total sales (see table A-22, A-23 and A-24). The proportion of the number of establishments in the food and beverage sector has been decreasing as with retail outlets. On the other hand, general merchandise wholesalers, whose proportion of the number of establishments is only 0.2 per cent, accounted for 19.6 per cent of the total sales. This reflects the existence of Sogo Shosha (general trading companies).

The same criteria as for the structure of the retail industry (the number of

persons engaged per establishment and annual sales per establishment) are used to compare the scale of wholesale establishment. First, the number of persons engaged per wholesale establishment is examined. Table 19 indicates the long-term change of the wholesaling sector. This table shows that the distribution of shop size in wholesaling is almost stable and there is no radical structural change. Wholesale establishments engaging five to nine persons accounted for 27.9 per cent of the total number of wholesale establishments, followed by those with three to four persons (25.2%), and one to two persons (21.8%). Relatively small establishments with less than 10 persons accounted for 74.9 per cent of the total number of wholesale establishments. Table A-25 shows the number of persons engaged per wholesale establishment in Japan. In terms of the number of persons engaged per wholesale establishment, Japan (9.6 in 1988) was larger than Italy (5.1 in 1981) and about the same as West Germany, though it was smaller than the other advanced countries (the US, the U.K., and France). But there is little difference when compared with the situation in the retail industry. It should be noted here that the values for the U.K. and France tend to be somewhat over estimated, as they are the number of persons engaged per corporation, not per establishment as in Japan and the US (see Maruyama et al.[1991]).

Secondly, the scale of retail outlets is examined in terms of annual sales per outlet. There is a large difference in size of sales between general merchandise stores and other establishments (see table A-26). Large wholesale establishments with 100 and more accounted for only 0.7 per cent, of the total number of wholesale establishments, but their share of sales was around 40 per cent (see table A-19 and A-21).

Annual sales per wholesale establishment (converted by purchasing power parity) in Japan ($4,406,400 in 19888) was the largest among the five advanced countries including the US($3,780,700 in 1987), West Germany ($2,870,800 in 1985), the U.K. ($2,645,600), and France ($$2,716,100). Though retail establishments in Japan are small scale, average size of wholesale establishment is relatively large. This is due to a higher proportion (37.9% in 1988) of sales by large wholesalers with more than 100 person engaged, including general trading companies (see Maruyama et al.[1991]).

2.2 Density of Wholesale Establishments

The density of wholesale establishments is measured by the number of wholesale establishments per 1,000 residents. Table A-27 shows that the total average was 3.4 in 1985 and food and beverages (0.8) was very high. Japan (3.2 in 1988) and Italy (2.3 in 1981) show a high density of wholesale establishments just as they show a high density of retail establishments. The density of wholesale establishments in Japan is a little less than twice of Germany (1.9 in 1985) and more than twice of the US (1.6 in 1987) (see

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Maruyama et al.[1991]).

2.3 Concentration in Wholesale Trade

As we have seen above, the large wholesale establishments engaging 100 or more persons, which account for less than one per cent of outlets, accounted for a large share of the total wholesale sales. General merchandise wholesalers including general trading companies account for only 0.2 per cent of the total number of wholesale establishments, but their share of sales is around 20 per cent (see table A-19 and A-21) The dominant share of sales by large wholesalers is one of the characteristics of the Japanese wholesale sector.

2.4 Scope and Degree of Organization

We will consider two dimensions of organization at the wholesale level: horizontal organization, which means the expansion of multi-outlet operations, and vertical organization, which means the vertical integration of wholesalers. The latter will be treated in the next section. Let us compare the proportion of the number of independent outlets versus chain outlets to see the development of horizontal organizations.

Table A-28 reveals that chain outlets in Japan account for 80.3 per cent of total sales in 1988, which is higher than the share of those in the retail industry. This indicates a higher level of horizontal organization through multi-outlet operations in the wholesale industry. General merchandise shows the highest percentage of 99.7 per cent, followed by the wholesalers of machinery and equipment (86.5%), mineral and metal materials (86.1%), and chemicals (85.7%). On the other hand, wholesalers such as recovered materials (47.6%), furniture/fixtures/utensils (62.9%) and farm livestock and aquatics (63.9%) show a relatively low level of horizontal organization.

Table A-29 shows the proportion of wholesale establishments by chain stores. The proportion of wholesale establishments by chain stores is 36.5 per cent on average, general merchandise (55.5 %) is the highest, followed by the wholesalers of machinery and equipment (52.9%), mineral and metal materials (50.6%), and chemicals (50.2%).

2.5 Vertical Structure and Linkage of Distribution Channel

The ratio of wholesale sales and retail sales (W/R ratio) is highest in Japan (3.53 in 1982, 3.44 in 1985 and 3.10 in 1988). Compared to the US where the W/R ratio (0.99) is lowest, the ratio in Japan is more than three times (see table A-30 and Maruyama et al.[1991]). A conventional view is that the higher W/R ratio is an evidence of multi-layered nature of distribution

channel. The reason is that the larger the frequency of transfer of ownership at the wholesaling level, the larger the total amount of wholesale sales and the higher the W/R ratio since the amount of wholesale sales is calculated in repetition at the wholesaling level.

Two points should be noted in using the W/R ratio. The first point is that total wholesale sales includes goods for export and industrial goods (capital and production goods) which are not shipped for domestic consumption. It is necessary to exclude such goods although this is difficult to do on an international basis. We have chosen the wholesale sales of consumer products to make an international comparison. The W/R ration of consumer products in Japan (2.08) is higher than the other countries. There is a large difference between Japan and the US which is the lowest (0.61).

The second point is that the W/R ratio does not necessarily mean the multi-layered nature of the distribution channel. There is another implication from the W/R ratio. The W/R ratio can be rearranged as follows :

$$\text{W/R ratio} = \frac{\text{Wholesales Sales per Establishment}}{\text{Retail Sales per Establishment}} \times \frac{\text{Density of Wholesale Establishments}}{\text{Density of Retail Establishments}}$$

As we can see, the ratio of the density of wholesale establishments to the density of retail establishments does not greatly differ between Japan and the US. Therefore, from the above equation, the difference in the W/R ratio can be explained by the fact that the ratio of wholesale sales per establishment to the retail sales per establishment is considerably larger in Japan than in the US. The existence of large scale wholesalers such as general trading companies may be one of the reasons for abnormally high W/R ratio in Japan.

Though the comparison of distribution channels is not easy, one can take the ratio of sales from wholesalers to other wholesalers for instance. The ratio in Japan (41.9% in 1982 and 38.2 % in 1988) may not be abnormally higher than that of the US(24.8% in 1982) , but it is evident that Japan certainly has a multi-layered nature wholesale structure (see table A-31).

The structure of distribution channels is closely related to the form of organization and the types of transaction at the wholesale level. The degree of vertical organization in Japan may be examined by looking at the shares of *other wholesale sales* in "Statistics by Distribution Channel" from the Census of Commerce. *Other wholesale sales* onsists of the wholesale sales between headquarters and branches and the wholesale sales of own manufactured goods with the former having a higher weight. Therefore, the amount of *other*

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wholesale sales means the sales of in-house transactions, and its share thus shows the degree of vertical integration in wholesaling. The high shares of *other wholesale sales* in drug and toiletries (54.9%), machinery and equipment (56.9%) indicate a higher degree of vertical ownership integration in such fields (see table A-32). The weight of second stage wholesale sales in such fields is relatively lower and the proportion of ownership transfer is smaller, hence the distribution channel is shortened.

Unlike vertical ownership integration, there are more relaxed organizational relationships called *keiretsu* (affiliation). The Basic Survey of Commercial Structure and Activity defines keiretsu as "the relationship between manufacturers and wholesalers/retailers established by an exclusive agency contract or receiving of management and/or financial assistance in exchange for selling the manufacturers' products in a preferable/exclusive way." The questionnaire in the survey reveals that the distribution channels of drugs and toiletries (40.7%) and machinery and equipment (37.6%) are organized under keiretsu operation. Among the wholesale companies who respond to be affiliated to keiretsu, 70.6 per cent are affiliated to manufacturers' keiretsu and 35.5 per cent affiliated to wholesalers' keiretsu. The total is not equal to 100 per cent because companies responded to be affiliated to both the manufacturer's' keiretsu and wholesalers' keiretsu (see table A-33).

2.6 Role of General Merchandise Wholesalers in Japan

The wholesale sales of general merchandise outlets in Japan amounted to 19.6 per cent of the total wholesales sales in 1985, while in the US, West Germany, the U.K., France and Italy, the wholesale sales of general merchandise outlets is not seen in the classification of the wholesale industry. General merchandise wholesalers supplement the function of numerous small and specialized wholesalers who supply goods to also numerous small and specialized retailers. Japanese wholesalers have a specialized and multi-layered nature, and supported retail stores by supplying a variety of merchandise. A clear role is being played by general merchandise wholesalers including general trading companies. Purchases from producers and selling to industrial users occupy as high as 41.2 per cent of the total sales of general merchandise wholesalers whereas 16.4 per cent is the average. The shares of purchases from overseas and sales to wholesalers is 11.3 per cent whereas 2.8 per cent is the average. In addition, the share of intermediate wholesalers (purchase from wholesalers and selling to other wholesalers) is also high.

General trading companies play a relatively important role as leading general merchandise wholesalers. They employ such functions as arrangement of big projects, intermediation of transactions, risk hedging (insurance and trouble handling), and financing. They play a role as intermediaries by getting involved in transactions between manufacturers or distributors, rather than

performing the entire function of distribution themselves. The function of these wholesalers may be limited considering the fact that their margin ratio is about 3 percent, which is much lower than the average ratio of the wholesale industry as a whole (11.2%), and is almost the same as the margin ratio of intermediaries in West Germany (3.81% in 1985).

On the other hand, the role of leading general merchandise wholesalers in Japan is different from that of intermediaries in the US and Europe in the sense that Japanese general merchandise wholesalers perform a function of risk hedging in addition to simple intermediation. Intermediaries, having been commissioned by customers, promote transactions by negotiation and finalize conditions of contracts. Hence, they avoid risk arising holding inventory of unsold goods. The proportion of intermediaries to total wholesalers differs from country to country. In Japan they account for only 0.2 to 0.4 per cent of the total establishments, the proportion being considerably lower than that of West Germany (36.0% establishments), France (17% companies) and the US (10.5% establishments), but higher than that of the U.K (1.3%). The proportion of the annual sales (or commission) in Japan is as low as 0.1 per cent, which is lower than that of West Germany (1.8%) and France (5.6%). In Japan, *Toimaru* who engaged in transportation, storage and transactions has evolved to differentiate the function in the modern times: one becoming *Nakagai* (merchant wholesaler) and the other *Suahi* (intermediaries). As discussed above, the current role of Japanese intermediaries is negligible in Japan.

2.7 Productivity

Productivity in wholesale sector is measured by annual sales per person engaged. The productivity of wholesale establishments with different sizes are shown in table A-34. There is a large gap in productivity between large wholesale establishments with 100 and more persons and other smaller establishments.

Productivity in Japan ($459,600 in 1988) is by far the highest among the five advanced countries (excluding Italy as data is not available). To see the relationship between scale and productivity in wholesale sector, wholesale establishments are divided into five groups. The proportion of wholesale establishments with less than 10 persons engaged to the total is higher in Japan (76.3% in 1982) than in the U.S (67.6% in 1982). However, the proportion of their sales to the total is lower in Japan (16.0% in 1982) than in the US (19.8% in 1982). There is little difference between Japan and the US in the productivity of wholesale establishments with less than 10 persons. However, the productivity of Japanese wholesale establishments with more than 10 persons is higher than that of the US. For large wholesale establishments with more than 500 persons, Japan ($2,857,800 in 1982) has a higher productivity

than the US($408,900 in 1982) (see Maruyama et al.[1991]).

In order to examine the difference in productivity in more detail, wholesale establishments are divided into two groups, those with less than 10 persons indexed by 1 and those with 10 and more persons indexed by 2. Following the case of the retail industry, the number of persons is represented by L, and the wholesale sales is represented by O. The productivity of wholesale establishments with 10 and more persons (O_2/L_2) is higher than those with less than 10 persons (O_1/L_1). Japan shows the largest difference in productivity between wholesale establishments of different size. It can be also noted that whereas France showed the largest difference in productivity between retail establishments of different size, it shows the smallest difference between wholesalers of different size.

The proportion of wholesale establishments with 10 or more persons ($L_2/(L_1 + L_2)$) is highest in France (77.9% in 1982) and is lowest in Japan (67.6% in 1982). The difference is a little over 10 percent, which is far less than the case for retail establishments. Whereas Japan (32.4%) has a higher proportion ($L_1/(L_1 + L_2)$) of relatively small establishments than the US (25.7%) and Germany (22.4% in 1984/1985), the productivity of such establishments (O_1/L_1) in Japan ($203,100) is similar to the US ($212,400), France ($179,100) and West Germany ($264,300). Productivity in wholesale establishments with 10 or more persons (O_2/L_2) in Japan is considerably higher than other countries. Such characteristics of the Japanese wholesale industry reflect the existence of large wholesalers, namely general trading companies.

Summary of Section II

The structure of the wholesale sector in Japan is characterized as follows:

(1) The proportion of the number of relatively small outlets with less than 10 persons is high. However, unlike the retail industry, the proportion of annual sales of large wholesalers with 100 or more persons is extremely high.

(2) Compared to other countries, productivity in the wholesale industry as a whole is high in terms of annual sales per persons engaged.

(3) The density of wholesale establishments is high, as in the retailing sector.

(4) Japan has a multi-layered wholesale structure as compared to other countries.

(5) The weight of intermediaries in Japan is very small, but general merchandise wholesalers such as general trading companies play an important role.

Part B: Performance of the Distribution System

I. Efficiency

1.1 International Comparison

(a) Relative Productivity

Productivity in the distribution sector as a whole is compared in te:ms of value added per person engaged. The OECD national accounts are u:.ed for comparison in order to avoid biases resulting from matching statistic; from different countries. In order to avoid conversion of currency, relative productivity is compared. Table B-1 shows relative productivity in six countries including Japan. Relative productivity in the distribution sector compared to the total industry in 1985, Japan (0.76) shows a higher value than the US (0.70), West Germany (0.68) and the U.K (0.58), but a lower value than France (0.82) and Italy (0.90). As for relative productivity in the distribution sector as compared to the manufacturing sector, Japan (0.64) is roughly at the same level as the US (0.63) and the U.K (0.61).

In comparing productivity, it may be better to measure productivity in terms of value added per man-hour, instead of measuring it in terms of value added per person engaged. However, it is difficult to make an international comparison of productivity in the latter form due to limitations in the availability of statistics on working hours. Alternatively, it is possible to separate full-time workers and part-time workers and to measure the productivity in terms of the value added per full-time worker.[1] But the estimation of the ratio of part-time workers is also a difficult problem. As a tentative attempt of measurement, The Establishment Census of Japan could be used. Table B-2 shows the ratio of part-time workers in Japan. On average, the ratio of part-time workers in the retail trade (14.9% in 1986) is higher than the wholesale trade (5.3% in 1986).

(b) Unit Labor Costs

The unit labor cost is the labor cost per output produced by a worker per hour of work. This is one of the indexes to judge the efficiency in distribution. Unit labor cost is calculated as a wage rate per man-hour for real value added per man-hour. The lower this value, the higher the efficiency. As

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[1] 1988 Japan Census of Commerce defines the numbers of persons who are engaged at the establishment, including business proprietor, unpaid family employees, paid directors and regular employees (including day laborers and temporary employees who worked 18 days or more in both April and May of 1988.

shown in table B-3, compared with Japan, the US had a lower unit labor cost in the 1970s, but this relationship was reversed in the 1980s. While Japan had a stable unit labor cost, the unit labor cost continued to rise in the US, and in 1987 Japan (0.6) had a considerably lower value than the US (0.76), indicating a higher efficiency in terms of labor cost (see table B-3).

(c) Distribution Margins

International comparison of the "gross margin ratio" in the distribution sector was made. The ratio of gross margin is the difference between the amount of sales and the amount of purchases. It is a sum of profit and costs in the distribution sector. The proportion of the gross margin to the amount of sales is the gross margin ratio. It may be said that the less efficient the distribution sector, the higher the costs, and the less competitive the distribution sector, the higher the ratio of gross margin. Thus, the ratio of gross margin can be one of the indexes to measure efficiency of distribution.

Compared to the US, West Germany, the U.K. and France, Japan (27.1%) has the lower ratio of gross margin in the retail industry, being notably differentiated from West Germany (34.2%) which shows the highest margin ratio. The gross margin ratio of the wholesale industry in Japan (11.2%) also has the lowest margin rate. In interpreting such results, it must be noted that the gross margin ratio in the wholesale industry is an average value of the total wholesale sales, and the multi-level nature in the wholesale sector is not taken into consideration. Therefore, comparison of individual margin rates of retail and wholesale sales is not sufficient to correctly understand the distribution margin. Taking into consideration the multi-level nature of the wholesale sector, it is desirable to use the distribution margin ratio which is defined by the ratio of the sum of retail and wholesale gross margins to the amount of retail sales (see table B-4). Japan has a higher ratio of distribution margin than the retail and wholesale margin ratios. Japan (57.6%) also has a higher value than the US (49.7%), but is roughly at the same level as West Germany and France, indicating that Japan cannot be said to have a higher distribution margin although it has multi-level distribution channels.*

(d) Operating Cost and Operation Surplus

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* Alternatively, US-Japan comparison of the commercial margin ratio, using the input-output table, has been attempted by a Ministry of International Trade and Industry White Paper (Tsusho Hakusho1988]), the Economic White Paper (Keizai Hakusho[1989]), by the Economic Planning Agency and by Nishimura and Tsubouchi[1989]. It has been shown that the distribution margin in Japan is a bit larger than the US.

As distribution margin includes both costs and profit of the distribution sector, it would be interesting to divide distribution margin ratio into the ratio of operating costs (the ratio of operating costs to sales) and the ratio of operating surplus (the ratio of operating surplus to sales). Table B-5 and B-6 show the ratios of operating cost and operating surplus in Japan. US-Japan comparison of the wholesale and retail sectors shows that the Japanese distribution sector earns a higher ratio of operating surplus with a lower ratio of operating costs than the US (see Ito and Maruyama [1991]).

(e) Inventory Rates

The inventory rate is shown by the ratio of inventory to the amount of sales. The inventory turnover rate is an inverse number of the inventory rate. Compared to other countries, Japan has lower inventory rates and higher inventory turnover rates in both the retail and the wholesale sector (see table B-7).

The Basic Survey of Commercial Structure and Activity reveals the turnover rate of inventory in retailing and wholesaling in Japan (see table B-8 and B-9). Small-lot and frequent ordering is one of the characteristics of Japanese retailing. It is necessary to explore how lower inventory rate (higher inventory turnover rate) in Japan should be understood. This problem will be considered in Part C (Section I), but the reason can be briefly stated. In general, the higher the inventory cost of retailers and the lower the retailers' ordering costs, the lower the inventory rate of retailers. This may be interpreted in Japan as follows. In Japan, retailers have limited space and their inventory cost is higher due to higher land costs. On the other hand, prompt and precise delivery seems to indicate a lower ordering cost. On the basis of frequent and small lot delivery, it is seen that inventory turnover rate is higher in retailing. This may also apply to transactions at the wholesale level.

The distribution inventory rate is defined as the ratio of the sum of retail and wholesale inventory to the retail sales. Comparison in Table B-7 indicates that distribution inventory rates in Japan are not necessarily higher than other countries, even though Japan has a multi-layered distribution system.

1.2 Diffusion of Information Technology

The diffusion of information technology has been rapid in the distribution industry. The number of stores with Japan article number code reader POS systems have increased from 4,740 in 1983 to 183,497 in 1990. This is an increase of 40 times in seven years. The number of stores with POS systems in Japan is highest in the industrialized countries. The introduction of new information technology has greatly improved the efficiency of sales management and inventory management in distribution sectors. Recent rapid

growth of convenience stores is supported by the innovation of information technology. The computerization of distribution activities now proceeds from an introductory phase, exploiting the "hard merit" of economizing a work force, to a second phase of utilizing the "soft merit". Managerial decisions are supported by POS (point of sale) systems, EOS (electric ordering systems) and VAN (value added networks) for gathering, processing, and transmitting relevant information. The information shared by on line networks among manufacturers, wholesalers, and retailers is advancing. Innovation in information technology is utilized to exploit economies of chain linking, and motivates the growth of horizontal organizations such as franchise chain and voluntary chain.

1.3 Rate of Entry and Exit in the Distribution Sector

Table B-11 shows that the ratio of entry and exit in the wholesale and retail trades is higher relative to other industries. But it must be noted that the ratio includes eating and drinking places which seem to have a exceptionally high ratio of entry and exit. The average number of outgoing retail outlets per year was around 70,000 and new entrants accounted for around 50,000 in 1985. Hence the rate of change in the number of retail outlets was negative in 1985. The changing retail environment will be considered further in the next section.

1.4 Differences in Productivity

Japan has the characteristics of small scale operations at the retail level, and a multi-layered structure at the wholesale level. In these respects, Japan is considerably different from the US. In spite of such superficial differences, however, an international comparison of such indexes as productivity in the distribution sector, gross margin ratio and inventory rate indicates that there are few differences between Japan and other countries. In Japan, retail outlets are small in scale, but there are few differences in productivity in the distribution sector as a whole between Japan and the other countries, both in terms of sales per person engaged or in terms of the relative productivity. Although Japanese distributors emphasize distribution services, and wholesaling is multi-layered in nature, the distribution margin ratio, and distribution inventory rates in Japan are comparable to other countries.

However, even if it is concluded that the Japanese distribution system is not less efficient compared to other countries, it is still a relative evaluation based on an international comparison, and as such does not prove that distribution structure and business practices in Japan are problem free. It is expected that the Japanese distribution system will become more efficient and effective through structural improvement. In the following sections, problems in the Japanese distribution system is examined from the view point of efficiency.

(a) Variation Coefficient of Productivity: An International Comparison

The Japanese retail structure is unique in that while there are numerous retail outlets of small and medium size, there are some large retail outlets which have a large share of the market. A problem arises from differences in productivity between businesses of difference sizes.

Paying attention to whether sales data is on an "establishment basis" or on a "company basis" and whether data is on a "worker basis" or on an "employee basis", a comparison is made of three international groups. Japan and France, both of which are on an "establishment" and a "worker" basis, are compared for productivity. Both Japan and France have low productivity in small retail outlets with one to two workers. In Japan, small retail outlets with one to two workers show very low productivity, indicating a clear difference from that of large retail outlets.

Even if there are differences in productivity between retail outlets of different sizes and small retail outlets have the lowest productivity, this is not a problem if the proportion of such small retail outlets is low. In other words, it is meaningless to discuss differences in productivity between outlets of different sizes without taking into account the size distribution of retail outlets.

This aspect is considered using the overall coefficient of variation (standard deviation/mean) of productivity between different sizes. Coefficients of variation are calculated for comparable groups as shown in Tables B-12. From the table, it can be seen that Japan has a higher coefficient of variation than the US, West Germany, the U.K. and France, suggesting an extremely large difference in productivity between outlets of different sizes. The US has an extremely small coefficient of variation, and in the US, the difference in productivity between outlets of different sizes is small. Following the usual economic arguments, the existence of such differences in productivity may be understood to indicate stagnant competition at the retail level.

(b) The Changing Retail Environment

The comparison above is for 1982 due to the limitations in the data. It is necessary to examine changes after 1982. We have seen a decreasing trend in the number of small retail outlets, and domestic small outlets, which are generally pointed out as being less efficient, are showing a rapid rate of decline.

While retail outlets decreased by 53,915 during the nine years from 1979 to 1988, those retail outlets which were opened prior to 1974 decreased by 282,041. It should be noted that those outlets opened between 1945 and 1955

and those outlets opened between 1965 and 1974 show an especially high rate of decrease. In the case of the former, it may be suggested that a large number of family-run retail outlets which started business after World War II were closed because there was no one to succeed business into the next generation. In the latter case, those which started operation to take advantage of vigorous demand during high economic growth seem to have declined due to low productivity, and an inability to cope with changes in consumption demand.

Of those retail outlets which newly entered the market, a large number are highly efficient, even though they are small in size. As seen above, big changes have been progressing in the distribution structure of Japan: as small and inefficient retail outlets close, the industry as a whole is moving toward higher efficiency. Yet, it is still a characteristic in Japan that differences in productivity exist between outlets of different sizes.

(c) Difference in productivity between Independent and Chain Stores

There is also a problem of horizontal organization of business activities through chain operations. Chain stores accounted for 57.6 per cent of the total retail sales in 1988. What should be noted here is a problem of differences in productivity between independent and chain outlets. A comparison of independent and chain outlets, with productivity measured in terms of "annual sales per worker" in 1988, shows that the productivity of independent retail outlets (11.3 million yen in 1988) is far below that of retail chain outlets (24.8 million yen) (see table B-13). Similarly, the productivity of independent wholesale outlets (49.0 million yen) is far below that of chain wholesale outlets (137.1 million yen). In addition the existence of such differences in productivity between independent and chain outlets can be confirmed in the operation of businesses in different retail and wholesale product sectors (see table B-14, column 6).

Chain outlets expand their operation through chain-linking of stores, employing the economies of scale realized through centralized purchasing, joint delivery, and gaining benefits of resulting cost reduction. Chain operations also provide economies of chain-linking as management resources such as sales know-how and information on demand trends can be effectively utilized jointly with great effect. Higher efficiency through chain operation leads to differences in productivity between independent and chain outlets.

Although there are various types of chain store operation, those stores which are members of any chain account for only a few percent of total outlets, but account for more than 30% of overall retail sales (see table B-15). That there is a so much difference in sales volume between those independent and multiple businesses is also one of the characteristics of the Japanese retail

industry.

As seen in table B-16, there is considerable difference between modern, organized retail outlets such as department stores, GMSs, supermarkets, and convenience stores, and family-run independent retail stores. Sales per worker was 16 million yen on average for the retail industry (1985), whereas department stores enjoy 2.5 times this figure and GMSs enjoy about double. In the food retailing sector, the average sales per store amounted to a little over 13.5 million yen, whereas supermarkets were about 26 million yen or double, and convenience stores maintained 1.2 times of that amount, with 16 million. In the US, there is a higher level of modernization and organization, supermarkets have a sales volume of 1.5 times of the average for the food industry; but department stores and general supermarkets have less sales volume than retail industry average. There is less difference in selling efficiency between different types of business operation in the US as compared with Japan, so that the efficiency of the American distribution industry as a whole has become uniform.

Table B-14 examines the frequency of chain store operations in the different types of retail business sector. In the Japanese retail industry, chain store operations are employed in such sectors as general merchandise retailing (including department stores), motor vehicles, groceries, women's and children's clothing, men's clothing and the footwear businesses. In these sectors, chain stores businesses account for more than 60% of the total sales.

On the other hand, chain store operations are not commonly employed in such sectors as beverages and seasonings, vegetables and fruits, fresh fish, rice, barley and other cereals, and confectionery and bakery. In these sectors, chain store businesses account for about 20 to 30% of the total retail sales. One reason for the low level of chain store operation in some sectors is the official system of licensing in such fields as liquor and rice. As for vegetables and fruits, fresh fish, and confectionery and bakery, independent family-run businesses are in the majority. Except for beverages and seasonings, and rice, barley and other cereals, businesses not employing chain stores are small in size in terms of the sales per outlet and also have low productivity in terms of the sales per worker (see table B-14, column 4).

II. Market Access

In this section, the problems of Japanese business practices are reviewed from the standpoint of access to the Japanese market. We will take up the problem of long-term continual relationships and the selective distribution system.

2.1 Long-term Continual Relationships

The salient feature of Japanese business practices lies in a long-term continual relationship. Usual explanation for this feature stresses its cultural and social background, but Japan's business practices has an economic role. Although it will be considered more in detail, we will summarize the merit of long-term relationships as follows.

(A) Long-term continual relationships serve as a base of vertical cooperation in the pre-contract and ex post enforcement of contract:

(1) The mutual understanding and a relation-specific knowledge accumulated through enduring trade relationships economize communication costs between trading partners.
(2) The accumulation of relationship-specific assets raises a cost of breaching contracts, hence providing an ex-post self-enforcing effect on the contract.

(B) Long-term continual relationships serve as a private response to demand uncertainty. There are two attitudes toward this uncertainty. One is an active aspect to reduce uncertainty. The other is a passive aspect to share a risk. In these aspects:

(3) Long-term continual relationships serve to secure reliability of information exchange in order to reduce noise in communication.
(4) Relation-specific intangible assets accumulated through continual trade relationships, such as a mutual understanding and a common knowledge, serve as the base for cooperation and they provide an opportunity for a risk-sharing.

It is true, however, that there are problems. In the first place, stabilization of transactions on the basis of continual transactions may lead to inflexibility over the possibility of changing transaction partners. It may lead to delay in dynamic response to better transaction opportunities or closure of opportunities for those who want to start transactions. From the standpoint of access to the Japanese market, continual transaction relations may have a side effect of interfering with new entries to the market even if there is no strategic motivation to prevent such entries.

In the second place, even if there are replaceable trading partners and there exist competitive relations between those trading partners at the time of starting transactions, once transaction relations are established with a specific partner, that party, being the first mover, will be in an advantageous position against the second mover who wishes to have transaction relations after the former accumulates assets peculiar to such relations in the process of continual transactions. Such *first mover advantage* would infer a shift of transaction relations from relations with numerous parties to relations with only a few

parties. Under such circumstances, there is motivation to take advantage of the *first mover advantage,* leading to an abuse of advantageous position reflecting the power relationship in transactions.

As for the mode of contract, *ambiguous contracts,* not necessarily relying upon written contract, is a Japanese characteristic. Continual trade relationships which form a background of Japanese business practices have a positive aspect in that they lead to a reduction in communication costs by allowing "ambiguous contracts" based on mutual understanding and common transaction relation-related knowledge. On the other hand, as contents of contracts are not accessible to the third parties, i.e., as transaction conditions are not verifiable, it is difficult to get arbitration for a third party. For those who want to newly establish transaction relations, this is a matter of concern. In addition, if they are foreign entities, it may be interpreted as an element of difficulty of business in Japan, as there is an additional difficulty of communication. Also, "ambiguous contracts" have a negative aspect in that as transaction conditions are not clear, competition conditions will not be clear between rival parties and thus it will not lead to positive competition.

In addition, the nature of Japanese commercial transactions which emphasize *reliance relationships* to support "ambiguous contracts" has a negative aspect in relation to market access in that it takes time to newly enter the market upon establishing reliance relationships. The "continual trade relationships" and "ambiguous contracts" which are the basic characteristics of Japanese commercial transactions have a nature of a *double-edged* nature It is not good just to criticize the basic characteristics of Japanese commercial transactions or just to defend them. They should be evaluated from the standpoint of both positive and negative aspects, while taking into consideration their *double-edged* nature. As for individual commercial practices which the basic characteristics of Japanese commercial practices support, it is reasonable to let them perform their economic functions and to regulate their demerits. From such a standpoint, problems of individual commercial practices are examined in the following, with an emphasis on market access

Directly related in relation to access to the Japanese market are *long-term continual trade relationships,* the *keiretsu systems* as commonly found in automobile and home appliances, and the *selective distribution channels* found in cosmetics. There are two problems with these relationships.

The first is a problem related to long-term continual trade relationships. Assets specific to such relationships will be accumulated in the process of continual transactions between manufacturers and distributors which will be *switching costs,* and thus this will be an impediment to new entry. The second problem is that introduction of excluding dealings by existing companies will

lead to market foreclosure, resulting in higher entry costs for those companies newly entering the market.

Asume that a distributor is transacting with a specific manufacturer and there is an entrant with a product which is identical to that being supplied by the existing one. Let us assume that the entrant is more efficient than the existing one, with the entrant's average production cost being C_1 and the existing manufacturer's average production costs being C_0. Let us also assume that the entrant engages in shipping price competition of the *Bertrand* type with the existing one. If the existing manufacturer and entrant offer products of the same quality, the distributor will attempt to choose the one which is more advantageous to the distributor. Now let us assume that in order to terminate transactions with the existing manufacturer and switch to the newly entered manufacturer, the distributor will have to pay switching costs of ($\delta >0$). Then, the distributor will choose the one with less costs, by comparing ($W_1 + \delta$) and W_0, W_1 being shipping price of the entrant and W_0 being the shipping price the existing one. As a result of price competition, the shipping price after entry will be set at maximum of $\{C_1 + \delta, C_0\}$. In this case, even if a manufacturer attempting to enter the market is more efficient than an existing company and ($C_1 < C_0$), the former will not be able to enter the marker as long as $C_1 + \delta > C_0$. Only those efficient companies which satisfy ($C_1 + \delta$) < C_0 will succeed in entering the market. In other words, the existence of switching costs will be a barrier to entry, and thus have some social demerits.

Specific switching costs are as follows. Assets specific to a relationship accumulated through continual transaction relationships become costs to terminate transaction relationships and to switch to another party. In this respect, continual transaction relationships may be said to be an impediment to new entry. Such switching costs spontaneously occur as a result of continuation of transactions, which should be a hurdle to be overcome through the process of competition over transacting parties.

What is more problematic are switching costs established to maintain transaction relations with the existing company. As pointed out in Aghion & Bolton [1987], a transaction contract between the existing manufacturer and the distributor which provides a penalty for cancellation of the contract has a possibility of functioning as an impediment to new entry. Business practices which may be used in such a way, including share rebates and cumulative rebates should be strictly checked under anti-monopoly legislation from the standpoint of controlling unfair transaction methods.

2.2 Selective Distribution

The second problem is that of market foreclosure, and this is a current topic

in the area of theory of industrial organization. A theoretically definitive conclusion has not yet been obtained, however. Studies are being made on the problem of *upstream foreclosure* which is related to the relationship between a supplier who supplies raw materials and parts, and an assembly manufacturer, and on the problem of *downstream foreclosure* which is related to the relationship between a manufacturer of finished products and a distributor. These can be considered in relation to accessing the Japanese market. In the following sections, however, the latter problem is discussed in order to place emphasis on the distribution area, especially distribution of consumer goods.

A problem with exclusive dealings is an elimination of competing traders. Under exclusive dealings, it is difficult for rival manufacturers to secure customers, and free competition between manufacturers may be impeded. Therefore, the way in which Japan and the US are dealing with the system of exclusive dealings under anti-monopoly legislation is examined. Under the Anti-monopoly Act of Japan, exclusive dealing is not illegal in itself. Exclusive dealing is restricted if it comes under the Article 11 of the General Designation - To transact with a party under the unreasonable conditions that party shall not transact with the competitors, and when there is a possibility of reducing the opportunities of the competitors making transactions. In other words, it is restricted if it is a "transaction with unreasonable exclusion conditions." Therefore, exclusive dealing is restricted when it is a transaction with exclusion conditions and when such conditions are unreasonable.

For a transaction to have exclusion conditions, it is necessary for the manufacturer concerned to prohibit or restrict the seller from handling products of other manufacturers.' Therefore, if a seller handles products from only a specific manufacturer as a result of voluntary selection, and thus he is dealing exclusively, then such transactions are not restricted as they do not include exclusion conditions. "Unreasonable" means a possibility of impeding fair competition, and whether unreasonable or not is determined by how closed the distribution channel is to competing manufacturers. Therefore, if a powerful manufacturer signs a exclusive dealing contract with a considerable number of sellers, such a contract is, as a rule, considered unreasonable.

Under the so-called Anti-trust Law of the US, exclusive dealing can be restricted directly by Article 3 of the Clayton Act (provision to prohibit tie-in or exclusive transactions) or in some cases by the Federal Trade Commission (FTC) Act (prohibition of unfair competition methods and fraudulent behaviors or practices). After social merits of exclusive dealing were upheld in the Sylvania case in 1977, the US Department of Justice started to take an attitude of relaxing the management of the Anti-Trust Law in relation to vertical non-price restraint in the 1980's.

In 1985, the US Department of Justice announced Vertical Restraint

Guidelines. In the Guidelines, the Department, taking into consideration the competition promoting aspect of vertical restraint, limited application of the principle of as *illegal per se*, and expressed its policy of judging illegality on the basis of the *rule of reason* under which market structure and so on is examined case by case. As a result, the number of prosecution cases on vertical non-price restraint decreased rapidly.

Gellhorn & Fenton [1988] consider the management of the Anti-trust Law in relation to vertical restraint during the Reagan Administration. Such movements have been influenced by the Chicago School and the economic analyses of vertical restraint being done by the economists who are critical of the Chicago School (Audretsch, 1988). Ornstine [1988] considers exclusive dealing.

In relation to the system of exclusive dealing, both Japan and US apply, the *rule of reason* under the Anti-trust Law, The Japanese anti-monopoly act is well provided as a law, and it is not less restrictive than that of the US as far as exclusive dealing is concerned. The problem is how to execute and manage the anti-trust law under the rule of reason. As the US is moving toward the relaxation of the management of the anti-trust law in relation to vertical restraint, it may be useful to achieve a balance between the two countries if Japan would intensify its management of the anti-trust law. In so doing, it should be noted, however, that thoughtless intensification of the anti-trust law, ignoring the actual conditions (rationality) of the Japanese business practices may rather impede free economic activities and may thus impede efficiency.

Case 1   Home Electric Appliances

Home appliances and automobile sales are often cited as examples of Distribution Keiretsu (affiliation in the distribution sector). Let us examine how the system of affiliated outlets makes it difficult for new comers to secure sellers, and how it impedes access of foreign manufacturers to the Japanese market and how it creates a closed Japanese market.

First, home appliances. Since 1965 or so, general home appliance manufacturers have established marketing companies to distribute products to mass merchandisers in order to incorporate distribution channels other than outlets affiliated into their own distribution channels. This is a channel policy of using both affiliated outlets and distribution channels other than keiretsu outlets. Recent years have seen a further diversification of distribution channels for home appliances due to the rise of speciality chains of home appliances (home appliances mass merchandisers) which provide as many products and distribution services as keiretsu outlets, and also due to the growth of discount stores. The keiretsu outlet channel accounted for 75% of the total sales in 1970, but its share decreased to 57.8% in 1983, and 45.5% in

1988. With in only five years from 1983 to 1988, it has lost its position of being the principal distribution channel.

Case 2 Automobiles

Affiliation of the automobile distribution network has originated in the introduction of a franchise system with an outlet in each prefecture by GM Japan and Ford Japan in the pre-war years. In early Showa (1935 to 1945) after the two companies left from the Japanese market, Toyota modified and utilized the distribution network of GM Japan, and Nissan modified and utilized the distribution network of Ford Japan. The late coming manufacturers in the post-war era also followed the examples of the early entrants to affiliate distribution outlets under the system of one outlet in each region. Even today, domestic cars are distributed under a system of franchises. After 1975 or so, however, the exclusive clause was removed in the contract between leading manufacturers and dealers. Therefore, at least in contract, no exclusive selling clause exists today.

As for selling of imported cars, Japanese leading automobile manufacturers have started to handle imported cars of foreign automobile manufacturers, in addition to the traditional import agents. The boom in foreign cars as a result of price effects resulting from a higher yen and abolition of excise tax, and relaxation of water's edge restrictions including simplification of procedures for model approval, Japanese automobile manufacturers are attempting to improve their image and expand their share by increasing items of dealers through the handling of foreign cars. Mazda is marketing Ford cars through Autorama, European cars including Citroen through Eunos and Italian cars such as Rancher and Outbianki through Autozam. Isuzu is marketing Opal, Suzuki GM and Peugeot, Mitsubishi Chrysler, Nissan Wagen Passert, etc.

In addition, companies of other industries including supermarkets, and department stores have also entered the automobile market. Mazda has established a national distribution channel called Autorama with the supermarket Nichii and restaurant chain Skylark. They are taking a business style of showing cars in front of stores. The company has gone through an experimental stage, and as of 1989, had a network of 11 shops, and selling points at more than 250 shops. Encouraged by this, leading distributors such as Seibu and Daiei, general trading companies such as Sumitomo and even agricultural cooperatives are showing their intention to handle foreign cars. As there is a problem of commercial rights, such movement has not become a full scale movement yet. However, some attempts such as mini dealers, dealer complexes and common showrooms are progressing. Such movement, together with an increase in parallel import, have brought about diversification of distribution channels for foreign cars.

In view of recent changes in the distribution channels for home appliances and diversification of automobile distribution channels, it may be said that affiliated outlets (keiretsu chains) are not an impediment to access to the Japanese market, though there is the possibility.

Part C: Analysis

I. Spatial Structure of Retailing

A variety of factors give shape to the retailing structure. Among them are population density, the layout of cities, and the development of the transportation system, including the diffusion of motor vehicles. Undeniably the Large-scale Retail Store Law has helped to preserve small retail outlets of the mom and pop type. Common explanations enumerate several factors, but there is little analysis about the retail structure in Japan.

1.1 Consumers' Shopping Behavior

Each consumer decides the frequency of purchase in order to economize shopping costs. Suppose that a consumer's shopping cost is composed of a "shopping trip cost" and an "inventory cost" at home. It can be easily shown that the higher the inventory cost is, the more frequently the consumer purchases in smaller lot-sizes. It seems that the inventory cost of fresh food, especially raw fish, is very high. The inventory cost of other daily necessities may be higher, if the living space is limited. A strong consumer preference for fresh foods and a shortage of kitchen space have helped to perpetuate a type of shopping behavior marked by frequent shopping trips to neighborhood shops for small quantities of groceries. From this we can see the reason behind facts reported in the White paper on Small-Medium-Size Enterprise (Small-Medium-Size Enterprise Agency, 1989) why Japanese consumers attach a great importance to the distance from outlets in selecting a shopping place.

1.2 Retailers' Behavior

As far as retailers are concerned, it makes more sense to let wholesalers, who are reliable and prompt in their deliveries, handle the job of storage. Each retailer decides the frequency of order and the level of retail inventory in order to economize selling costs. Suppose that the selling cost is composed of the "cost of ordering" and the "cost of inventory holding". It is shown that the higher the inventory cost is and the lower the ordering cost is, the more each retailer frequently places orders in a small-lot size. From the discussion of Part A the floor space per retail outlet is relatively small in Japan, which implies a high cost of retail inventory in Japan. Each retailer attaches a great

importance to the distribution service provided by wholesalers, and expects sure and prompt deliveries from wholesalers. A quick delivery implies a low opportunity cost of waiting time, and a sure delivery implies a low risk premium of delay, which indicates a low ordering cost in Japan. This explains the feature of small-lots and frequent transactions in Japan.

1.3 Spatial Competition in Retailing

The retail structure in Japan is prescribed by the above shopping behavior of consumers and the selling behavior of retailers. The retail structure is examined by using a spatial competition model. Suppose that consumers are distributed in a unit circle with an equal density. Consumers are homogeneous except for the difference of their location. The number of retailers is denoted by n, and it is assumed that retail outlets are distributed in unit circles with an equal length of distance $(1/n)$ from each other. Each consumer purchase just one unit of the commodity. Each consumer decides to purchase from the shop which minimizes the sum of the shopping costs (i.e., shopping trip costs plus inventory costs at home) and the price. When the prices of other retailers are given, the demand function for each retailer is specified. The retailer sets his sales price so as to maximize his profit, taking others prices as given. We use a symmetric Nash equilibrium in price strategies as the equilibrium concept. When the number of retail outlets n is given, by using the condition for profit maximization the equilibrium retail price can be derived (see the appendix).

1.4 On the Number of Retail Outlets

We consider the situation of free entry into the retail market and for sake of simplicity we suppose that the entry cost is zero, making retail profit is zero in the long-run equilibrium. In the symmetric zero profit Nash equilibrium, the equilibrium number of retail outlets is given by

$$n = \sqrt{2ct\delta / (c_1c_2)},$$

and the equilibrium density of retail outlets is given by

$$n/\delta = \sqrt{2ct/ (c_1c_2\delta)},$$

where c : consumer's inventory costs per a unit of quantity at home
t : consumer's trip cost of a unit distance
δ : density of consumers
c_1 : retailer's cost per a number of ordering
c_2 : retailer's unit cost of inventory.

From this equation we have the following propositions.

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(1) The higher the inventory cost at home (c) and shopping trip costs of consumers (t), the higher will be the density of retailing.

(2) The lower the ordering cost of retailers, the higher the density of retailing.

These propositions address the question as to why the density of retail outlets in Japan is high. The reasons are that the consumer's inventory holding cost is higher because of the strong preference of fresh food and the limitation of living space, the consumer's shopping trip cost is higher because of Japan's congested roads, and the retailer's ordering cost is reduced by relying on the distribution service provided by wholesalers.

II. Vertical Structure of Wholesaling

2.1 Density of Wholesale Establishments

The wholesale industry is also characterized by a high density of businesses compared with other countries, and often a product will pass through several wholesaling tiers before it reaches the retailers. Wholesale structure is greatly influenced by the retail structure. We can see that the density of wholesale establishments reflects the density of retail outlets. The reason is that if there are many retail outlets, the number of arcs in the transaction network can be economized by using an indirect transaction mediated by wholesalers, which implies a reduction of transaction costs. This is the economic role of wholesalers. Furthermore, the multiplicity of retail outlets dispersed spatially and the limit of managerial capacity of wholesalers, explain the density of wholesale establishments. In fact, there is a little difference between Japan and the US in the ratio of the density of wholesale establishments and the density of retail outlets. Hence, if the multiplicity of retail outlets is given, it is incorrect to say that the number of wholesale establishments is too large.

2.2 Transaction Network and Vertical Structure

It has been shown in Part A that the Japanese distribution system is multi-layered, but this does not necessarily imply inefficiency. Suppose that there are four makers and four retailers. Then the total number of the arcs of transaction network is 16 for a direct transaction (see Figure C-1). If one wholesaler lies between retailers and makers, and aggregates retail orders, then the total number of the arcs of transaction network reduces to eight and the transaction costs is economized (see Figure C-2).

In the case where the managerial capacity of wholesalers is limited, however, such a situation becomes unworkable. If the managerial capacity of wholesalers is limited to four arcs in the transaction network, employing a two layered wholesale system, with four wholesalers, the total number of

transaction arcs increases to 12 (see Figure C-3). But there is a "redundancy" in this network.
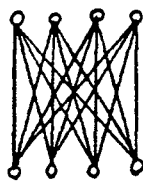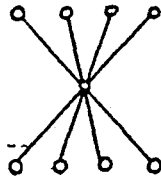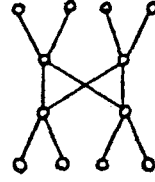
Figure C-1   Figure C-2   Figure C-3   Figure C-4
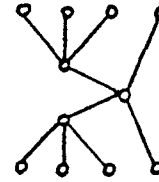
Employing a three layered system with three wholesalers, however, can reduce the number of arcs to only 10 (see figure C-4). This table shows the case of the minimum number of arcs subject to the limit of managerial capacity of wholesalers. In this case, there are three levels of wholesaling, and there exists an "intermediate wholesaler". Intermediate wholesalers purchase from other wholesales and resell to the other wholesalers, and their existence is often said to be socially redundant, but, the total number of arcs is reduced to 10 which is lower than those of the cases of direct transaction and indirect transaction illustrated by figure C-1 and figure C-3. Hence it can be seen that the multi-layered distribution reduces the total number of transaction arcs and saves the transaction costs.

In order to economize transaction costs, there is another approach to aggregating retail demands, such as an organized system or a voluntary chain of joint ordering. This kind of organization of retailing does not operate successfully in Japan. It reflects wholesalers' historical role in distribution and providing various distribution services to retailers. The habit of relying on wholesalers normally extends to the chain of large retail stores, which take advantage of the services the wholesalers provide. The recent proliferation of convenience stores has also been assisted by well developed networks of distribution intermediaries.

III. Mode of Transaction

3.1 Factors of Vertical Coordination

A feature of the distribution sector is the prominence of retail outlets affiliated with specific manufacturers, especially in product lines like pharmaceuticals and cosmetics, electrical appliances, and automobiles. But while many of these establishments fall in the category of *Keiretsu outlets* in business groupings, they are not all specialized stores under a single manufacturer. Drugstores, for instance, generally belong to several

shopkeepers' associations, each of which handles the products of a single manufacturer.

The large consumer electronic makers have enormous retail chains: There are some 24,000 nationwide shops affiliated with Matsushita's chain, 11,000 in Toshiba's chain, and 10,000 under Hitachi, but many of these electrical appliance outlets also sell at least some products of rival manufacturers. Moreover, the affiliates of manufacturers have been losing ground to independent stores and now account for only half of all sales. Increasingly their customers are deserting them for discount shops and other high-volume retailers.

The question of the keiretsu within distribution deserves closer scrutiny. Without much knowledge of why these corporate groups came into being and what economic functions they serve, foreign observers have been attacking them on the assumption that they do little more than exclude newcomers and impair free trade. The first point to note is that in the distribution industry at least, businesses in keiretsu chains usually do not hold each other's stock, nor do they exchange personnel. Though the keiretsu in some other sectors are known for their cross-share holdings, interlocking directorates, and loans of personnel, in distribution each group is glued together mainly by long-term transaction ties among its members.

Keiretsu function primarily as networks that coordinate vertical cooperation between manufacturers and distributors. They came into being as a private-sector response to a set of market failures under conditions of oligopoly, external economies, and imperfect information. It must be noted that there are common features in those industries of pharmaceuticals and cosmetics, electrical appliances, and automobiles. Namely, (1) product differentiation is prevalent in these industries, (2) each product belongs to a shopping goods, (3) market segmentation is important in these industries. These features produces factors for vertical cooperation as follows.

(1) When product differentiation is prevalent, both of the maker's market power based on product differentiation and the regional monopoly power of retailer produce a problem of successive monopoly, and the retail price is not set a socially favorable level (i.e, the problem of double marginalization).

(2) As for a shopping goods, it is important for consumers to use product information provided by retailers, but there is an externality in providing such an information service. Hence the level of sales promotion of providing product information does not attain a socially favorable level (i.e.the problem of externality).

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(3) In the marketing segmentation policy, makers need to collect information about market demand from distributors, but there is a problem to reduce noise in communication (i.e. the problem of reliability of information exchanged).

It can be seen that the distribution keiretsu in those industries serve as networks that coordinate vertical cooperation for such factors as the above (see Maruyama[1988]).

3.2 Long-term Continual Relationship

In terms of organizational structure, a *Keiretsu* lies halfway between the vertically integrated corporation, which carries out various business activities in-house, and the classic version of the free market, where independent companies at each level engage in external transaction with other independent companies above and below them. Within the distribution keiretsu, the leader's role is played by the manufacturer, typically a large corporation in an oligopolistic position. Distributors are often eager to tie up with such firms because of their desire for long-term relationships. They feel this way not just because it accords with a venerable Japanese business customs, long-term ties, they have found, also bring solid economic benefits.

For one thing, two businesses that work closely together for many years accumulate considerable knowledge about each other and can thus minimize the communication costs that arise when new partners meet. This mutual knowledge becomes a valuable intangible asset of the two firms, and since neither want to destroy it by breaking their implicit contractual ties, the asset reinforce their relationship. Whether at the precontract stage of a new deal or in the implementation stage after the contract comes into force, the long-term ties strengthen the vertical cooperation.

These ties also alleviate the problems of imperfect information. To cope with constantly changing demand, manufacturers need reliable information on what they should produce, and they can use their distributors to secure the data required. The retailers have the information of their local demand, but makers in general do not have such an information. The information is asymmetric between manufacturers and retailers. Is there an incentive for retailer to reveal his information to the manufacturers? This problem can be formulated in a game with incomplete information. From the analysis of information sharing between a manufacturer and a retailer, it can be shown that the retailer's profit in the case of private information is larger than the case of public information. Hence there is not an incentive for retailers to reveal their information to the manufacturers. It can be also shown that the joint profit of a manufacturer and a retailer is maximized in the case of public

vertical cooperation from the informational aspect (see Maruyama[1988]).

Naturally some uncertainties remain, but these can be reduced by distributing the risks involved among the group members. Specific risk-sharing tools include systems for offering rebates and returning unsold products. When business partnerships are constantly being formed and dissolved, by contrast, market uncertainties are much more difficult to handle.

IV. Selective Distribution Channel

4.1 Brand Loyalty and Sales Promotion

In the preceding section the selective distribution was explored in relation to the problem of vertical cooperation within a channel. It deals with the vertical dimension of the channel. Now we will shed lights on the strategic interaction between channels. In the past few years, several model-oriented papers have helped the economics of channels of distributions. These papers include McGuire and Staelin[1983], Bonanno and Vickers[1988], Moorthy[1988], Lin[1988], and Shugan and Jeuland[1988]. In these models the problem of interbrand competition in marketing channel choice are explored focusing on the price competition.

In selecting a marketing channel manufacturers take into consideration the effect of retailers' sales promotion on consumers' brand loyalty. It is usually seen that the manufacturers who employ selective distribution policies place an importance on this point. This aspect is examined here.

4.2 Distribution Channel Choice and Interbrand Competition

The marketing channel choice is formulated in a multi-stage game; manufacturers' selection of the distribution channel policies and the shipping prices, and retailers' selection of the sales promotion and the retail prices. It can be shown that selecting a open distribution channel is the sub-game perfect Nash equilibrium in the strategic interaction when the ratio of brand loyal consumers is small. However, when the ratio of brand loyal consumers is large, selective distribution can be an equilibrium.

The configuration of distribution channel differs from market by market, and from one country to another. By using the above result, we can see that open distribution policies are prevalent for daily necessities in Japan because the product is standardized and the consumer's brand loyalty is week. On the other hand, there are brand loyal consumers for the motor vehicles and electronic appliances, hence selective distribution can be seen in these industries.

Part D: Policy Recommendations

I. The Standpoint of Deregulation in Japanese Retailing

As suggested, there are considerable differences in productivity between businesses of different sizes in Japanese retailing. If it is accepted that competition at the retail level causes leveling of differences in productivity, the existence of such differences would suggest that there is considerable room for increased competition in the Japanese retail industry. One possible reason for this is the Large-scale Retail Store Law.

In addition to differences in productivity between businesses employing different number of workers, there are also differences in productivity between independent and chain outlets. Improved efficiency provided through chain store operations has strengthened such differences in productivity. As discussed above, the existence of differences in productivity between independent and chain businesses suggests that there is still room to further promote competition between companies by further introducing chain store operation into other retail sectors.

In this respect, the system of licensing has a major impact on liquor, and rice and cereal retailers, and causes a low proportion of chain store businesses. In business areas with a low proportion of chain store businesses, and where independent outlets are numerous, for example sectors like vegetable and fruits, fresh fish, confectionery and bakery, retail outlets are small in scale and have low productivity. The Large-scale Retail Store Law may have played some role in helping these small retail outlets to survive. In order to improve sales efficiency through the promotion of competition, improvement of the management of the Large-Scale Retail Store Law should be promoted, or the law should even be abolished.

Deregulation is important for consumers as it may cause the lowering retail prices, in addition to further improving distribution efficiency. In Japan, supermarkets, for instance, which were originally lower price-oriented, have changed their strategy in the process of expansion by placing emphasis on factors such as convenience, assortment, and better services. Convenience stores, which are growing rapidly, emphasize factors such as convenience and services, but not low prices. In Japan, the largest discount store has annual sales of about 100 billion which is a tenth of that of the largest retail company, the same stores's parent. In addition, discount stores have a small share among leading retail companies. Discount stores are not well developed in Japan.

There are several factors to explain this. First, Japanese consumers are more

oriented toward high quality customer service than lower prices. Second, as seen in the extensive adoption of the suggested price system, Japanese manufacturers have been eager to avoid price-oriented competition at the retail level in order to maintain retail prices. Furthermore, there is the effect of the Large-scale Retail Store Law. The law raises entry costs both timewise and fundwise for new store opening. In addition, after entering the market, such costs will be easily passed on to consumers in the form of higher retail prices. Those who have achieved the market entry are protected from the entry of their rival companies by the law. Adjustment and agreement on sales conditions between the existing outlets and newly opening outlets also has resulted in the restriction of competition. In this respect, too, the law has brought about demerits to consumers in the form of reduced competition at the retail level.

II. Market Access

Though Long-term continual relationship has a stabilizing effect, it simultaneously reduce the possibilities for changing business partners. It cause delays in responses to advantageous deals, and it limit the opportunities open to newcomers in the market. In preferring to stick with their old partners, Japanese firms may not be motivated by a conscious desire to shut out foreign competitors, but their behavior undeniably has just such an effect. One byproduct of long-term continual relationships, we may say, is an unintentional restriction of the market access.

It has been noted above that communication costs can be minimized when deals are arranged between two partners that have a long-standing relationship. At the same time, however, the Japanese firms working together tend not to put the details of their agreements down on a paper. There have the nature of an implicit contract with ambiguous contents, and this hinders the settlement of the problems if the partners happen to quarrel. Third parties cannot easily intervene to resolve the disputes, since the specifics of the contract are so vague. For foreign companies in particular, the problems that arise from the lack of transparency in contractual terms make doing business quite difficult.

As for the exclusive effects of vertical restraints and selective distribution policy the Japanese anti-monopoly act is well provided as a law, and it is not less restrictive that the US. The problem is how to execute and manage the anti-monopoly act under the rule of reason. It is necessary in principle to assess both the efficiency-enhancing effects and the anti-monopoly effects. In this respect, recent work of research in the theory of industrial organization would be useful and it is hoped to be utilized more.

Toward removing impediments to access to the Japanese market the transparency of business practices would be proceeded and the exclusive

effect must be checked by anti-monopoly act. This does not necessarily mean the abolishment of the Japanese business practices and the thoughtless tightening of anti-monopoly act, which impede the efficiency of Japanese economy. The transparency of the Japanese business must be proceeded in individual commercial transactions. But giving information about the Japanese market and a political assistance of access to the Japanese market such as OTTO must be utilized more. In addition to a quick and sure management of anti-monopoly act by the Fair Trade Commission, political assistance of the consultation for anti-monopoly act guideline must be work in effective.

III. Price differential between Home and Abroad

There are also problems with business practices in Japan as regards international price differentials. The first problem to be taken up is problems of exclusive dealing and selective distribution channel policy. There are three aspects to this problem:

(1) If an existing manufacturer adopts exclusive dealing for market foreclosure, newly entering companies are restricted in their opportunities to use the existing specified outlets, and may have to use other less efficient distributors or to develop their own network if the number of distributors is limited. As a result, entry costs get higher, and exclusive dealing "raises rivals' costs," leading to higher retail prices to be established through competition after entry. This is argued in Comanor & Frech [1985]. The criticism to this report may be found in Mathewson & Winter [1987] and Schwartz [1987]. It is argued that as there is the possibility of the existing distributor terminating an exclusive distribution contract and switching to a newly entering company, the existing company should try to secure the existing efficient distributor by lowering their shipping prices. It will lead to reduction of shipment prices. Then, exclusive dealing does not necessarily lead to higher retail prices. There are no conclusive theories yet in this regard.

(2) Exclusive dealing may be used as a condition to make a cartel among manufacturers effective. This problem was claimed by Telser [1960]. When manufacturers form a cartel for shipping prices, resale price maintenance acts to prevent breaking of that cartel. Even if a manufacturer secretly reduces its shipping prices, breaking the cartel, the sales of its products will not increase and it will realize a loss for the amount of price reduction if retail prices are uniform under the resale price maintenance. If a distributor is handling products of a number of manufacturers of a cartel, he will stop his efforts to sell the products of the other manufacturers and will put all his efforts into selling products of the manufacturer making the price reduction. Then, the sales of the products of the manufacturer making the price reduction will

increase. Exclusive dealing may function to prevent such occurrence. What should be controlled under the anti-trust law on the basis of these arguments should not be exclusive dealing, but the manufacturers] cartel itself.

(3) There are other arguments which say that exclusive dealing raises retail prices. The channel selection by manufacturers, determination of shipping price and determination of retail prices is formed as a three-stage game in a market with product differentiation. The selective distribution channel policy has an aspect of raising retail prices when compared with an open distribution channel even if there is no cooperation between manufacturers.' For a commitment in the form of adoption of a selective distribution channe policy in channel selection has an effect of suppressing price competition at the retail level. This aspect should be noted as a problem of a selective dist-ibution policy including a system of specified agency.

The second problem to be taken up is a negative effect on price competition when individual business practices, mainly the *Tatene* pricing system (a suggested retail price), are combined. If actual prices are far below *Tatene* on which transactions are based will lose their meaning. If a manufacturer tries to maintain *Tatene* pricing system under such circumstances, the seller will accept products returned, and *Henpinsei* (returning of products) may be used as a mean to maintain *Tatene*, leading to rigidity of retail prices.

An existence of a complex rebate system in Japan makes it difficult for retailers to voluntarily and rationally set prices, and tends to encourage them to simply sell products referring to manufacturer's desired retail prices. In addition, it is said that although Japan has excellent distribution services, price competition is not necessarily satisfactory. One of the reasons for it may be that as price competition is restricted under the *Tatene* pricing system, they tend to engage in non-price competition.

A problem with offering full after-services is that they are usually not separated from the products themselves. Service cost, in other words, are tacked on to the costs of the goods, pushing up their prices. High price partly reflects a high distribution services. But the problem is that, when consumers make a purchase, they have no way of telling how much they are paying for the item itself and how much for the services. Now that consumer values are far more diversified than before, many people would prefer to do without the services if this lowered prices. Henceforth retailers should be encouraged to separate the auxiliary services from the goods, clarifying their respective prices and giving customers greater purchasing choices. Such a sift would invigorate competition in retailing.

In the above, the problems of the Japanese business practices are discussed from the standpoint of price competition. It should be necessary to carry out

theoretical and empirical studies of price forming mechanism at the distribution level in relation to price differentials between Japan and the other countries.

Appendix: Implementation of Daiten Ho

Daiten Ho (Large Scale Retail Store Law) covers the two types of stores:

(1) The *first type*, stores with 1,500 square meters (or 3,000 square meters in large cities [Seirei Shitei Toshi]) and more; and

(2) The *second type*, stores with 500 to 1,500 square meters (or 500 to 3,000 square meters in large cities).

1. Store A plans to build a large scale retail store.

■□ 2. Store A conducts a *Pre-Explanation* [Jizen Setsumei]' to local government, chamber of commerce, and local business on the four conditions:

open days of the week,
floor space,
closing time,
the number of store holidays

■□ 3. Local chamber of commerce and local stores give an "agreement".

○ 4. Store A files *Article 3 Application* (Application for a building permit) to the Governor.

○ 5. The Governor sends the application to the MITI minister.

○ 6. The MITI minister asks the local chamber of commerce whether the store A will affect the existing local business.

a. If no, Store A may file *Article 5 Application* to the Governor and will be approved.

b. If yes, then proceeds to 7.

■□ 7. Store A, and local business must meet in the *Pre-Sho Cho Kyo* [Jizen Sho Cho Kyo].

○ 8. Store A files an *Article 5 Application* to a Governor

○ 9. The Governor sends the application to the MITI minister

■○ 10. The *Formal Sho Cho Kyo* (an Abbreviation for Shogyo Katsudo Chosei Kyogikai examines on

open days of the week
floor space
closing time
the number of store holidays.
the Sho Cho Kyo consists of local retail stores, local consumers, and scholars.

○ 11. Chamber of Commerce express its opinion.

○ 12. *Large Scale Retail Store Commission* [Daikibo Kouri Tenpo Shingikai] examines the case.

○ 13. Local government expresses its opinion.

○ 14.   The MITI minister recommends on the conditions for building.

○ 15.   The MITI minister gives an approval.

○ **Specified by Daiten Ho**

☐ **Administrative guidance or practices**

      On 8 May 1991 amendments of Daiten Ho and four related law were passed by the Japanese government. These amendments abolished the *Sho Cho Kyo*, reduced the maximum application process time to one year, and issued guidelines for the reduction of additional restrictions being operated by local authorities. These measures are to come into force in 1992. (■)

Table A-1 Contribution to GDP

Percentages

Sector	1974	1976	1978	1979	1980	1981	1982	1983	1984	1985	1986
Distribution Industry	15.2	15.1	14.4	14.5	15.3	14.9	15.0	14.9	14.2	13.7	13.2
Manufacturing Industry	33.6	30.7	29.6	29.3	29.2	29.0	29.0	29.1	29.8	29.8	29.3

Data: OECD National Accounts Volume II 1974-1986

Table A-2 Proportion of Persons Engaged

Percentages

Sector	1974	1976	1978	1979	1980	1981	1982	1983	1984	1985	1986
Distribution Industry	16.8	17.5	17.7	17.7	17.8	17.9	18.0	17.8	17.7	17.5	17.6
Manufacturing Industry	26.9	25.1	24.0	23.7	24.0	24.1	23.8	23.8	24.3	24.3	24.0

Data: OECD National Accounts Volume II 1974-1986

Table A-3 Distribution of Shop Size in Retailing (Number of Outlets)

Size of Persons	Number of Outlets (percentages)						Number of Outlets (thousand)		
	1974	1976	1979	1982	1985	1988	1982	1985	1988
1 to 2	62.5	61.9	61.1	60.2	57.7	54.0	1,036.0	940.0	874.4
3 to 4	23.3	23.7	24.0	24.0	25.1	26.1	412.7	408.2	422.1
5 to 9	10.2	10.3	10.5	10.9	11.7	13.2	187.9	190.4	214.0
10 to 19	2.7	2.7	2.8	3.1	3.6	4.3	54.2	57.9	70.4
20 to 49	1.0	1.1	1.3	1.4	1.6	1.9	24.3	25.4	31.4
1 to 49	99.7	99.7	99.7	99.6	99.6	99.5	1,715.1	1,621.9	1,612.3
50 and more	0.3	0.3	0.3	0.4	0.4	0.5	6.4	6.7	7.4
Total	100.0	100.0	100.0	100.C	100.0	100.0	1,721.5	1,628.6	1,619.8

Data: Census of Commerce, MITI

Table A-4 Distribution of Shop Size in Retailing (Number of Persons Engaged)

Size of Persons	Number of Persons Engaged (percentages)						Number of Persons Engaged (thousand)		
	1974	1976	1979	1982	1985	1988	1982	1985	1988
1 to 2	28.7	28.4	27.4	26.2	24.1	21.0	1,669.0	1,523.0	1,437.7
3 to 4	22.8	23.0	22.6	21.8	21.7	20.8	1,388.2	1,372.3	1,424.0
5 to 9	18.4	18.3	18.2	18.2	18.7	19.5	1,161.6	1,180.8	1,337.0
10 to 19	10.2	10.2	10.4	11.1	12.0	13.5	708.4	758.3	923.6
20 to 49	8.8	9.2	10.3	11.1	11.6	13.3	703.1	735.3	909.4
1 to 49	88.9	89.2	88.9	88.4	88.0	88.0	5,630.3	5,569.6	6,031.7
50 and more	11.1	10.8	11.1	11.6	12.0	12.0	739.2	759.0	819.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	6,369.4	6,328.6	6,851.3

Data: Census of Commerce, MITI

Table A-5 Distribution of Shop Size in Retailing (Annual Sales)

Size of Persons	Annual Sales (percentages)						Annual Sales (billion yen)		
	1974	1976	1979	1982	1985	1988	1982	1985	1988
1 to 2	15.1	14.8	14.5	14.0	12.7	11.2	13,183	12,942	12,832
3 to 4	19.1	19.3	19.0	18.9	18.4	16.8	17,721	18,761	19,246
5 to 9	21.1	21.5	20.8	22.0	21.6	21.0	20,627	21,951	24,095
10 to 19	12.4	12.5	12.4	12.5	13.5	14.8	11,791	13,694	16,948
20 to 49	11.3	11.4	12.6	12.6	13.2	14.8	11,798	13,402	16,998
1 to 49	78.8	79.5	79.2	79.9	79.4	78.5	75,12142	80,750	90,121
50 and more	21.2	20.5	20.8	20.1	20.6	21.5	18,851	20,969	24,719
Total	100.0	100.0	100.0	100.0	100.0	100.0	93,971	101,719	114,840

Data: Census of Commerce, MITI

Table A-6 Number of Retail Outlet

Classification	1966	1972	1979	1982	1985
General Merchandise	0.2	0.2 (- 3.7)	0.2 (4.1)	0.2 (5.3)	0.2 (-5.3)
Food and Beverages	51.2	47.6 (0.2)	43.9 (0.5)	42.2 (- 0.4)	41.2 (-2.4)
Texture, Apparel and Accessories	14.4	13.8 (0.7)	14.2 (2.0)	14.1 (0.8)	14.1 (-1.8)
Consumer Durable	7.0	7.5 (2.4)	8.1 (2.8)	7.3 (- 2.4)	7.1 (-2.7)
Total Number (thousand)	1375.4	1,495.5 (1.4)	1,673.7 (1.6)	1,721.5 (0.9)	1,628.6 (-1.8)

Notes: The number in parenthesis is the annual average percentage change.
　　General Merchandise: JSIC 53 General Merchandise
　　Food and Beverages: JSIC 55 Food and Beverages
　　Texture, Apparel and Accessories: JSIC 54 Texture, Apparel and Accessories
　　Consumer Durable: JSIC 5711, 5712 Furniture
　　　　　　　　　　　　JSIC 5713, 5714 Fixture
　　　　　　　　　　　　JSIC 574 Household Appliances
Data: Census of Commerce, MITI

Table A-7 Number of Persons Engaged

Classification	1966	1972	1979	1982	1985
General Merchandise	4.7	4.6 (3.1)	6.2 (6.6)	6.1 (1.4)	6.2 (0.2)
Food and Beverages	42.6	37.3 (1.2)	35.9 (1.6)	36.3 (2.6)	37.1 (0.5)
Texture, Apparel and Accessories	17.2	14.6 (0.6)	13.1 (0.6)	12.5 (0.4)	11.9 (- 1.6)
Consumer Durable	8.8	8.8 (3.5)	8.3 (1.3)	7.1 (- 2.5)	6.7 (- 2.3)
Total Number (thousand)	4,193.0	5,141.0 (3.5)	5,960.0 (2.1)	6,369.0 (2.2)	6,327.0 (- 0.2)

Notes: The number in parenthesis is the annual average percentage change.
Data: Census of Commerce, MITI

Table A-8 Retail Sales

Classification	1966	1972	1979	1982	1985
General Merchandise	11.4	11.2 (17.3)	14.5 (18.9)	13.5 (5.8)	13.6 (3.1)
Food and Beverages	39.4	30.7 (12.8)	29.8 (14.1)	30.5 (9.4)	31.3 (3.5)
Texture, Apparel and Accessories	17.2	13.4 (12.8)	11.7 (12.5)	10.8 (5.7)	10.5 (1.7)
Consumer Durable	9.3	9.7 (18.4)	7.8 (11.1)	7.0 (4.5)	6.7 (1.6)
Total Sales (billion yen)	10,684.0	28,293.0 (17.6)	73,564.0 (14.6)	93,971.0 (8.5)	101,719.0 (2.7)

Notes: The number in parenthesis is the annual average percentage change.
Data: Census of Commerce, MITI

Table A-9 Number of Persons Engaged per Retail Outlet

Classification	1966	1972	1979	1982	1985
General Merchandise	57.3	86.4 (7.1)	102.2 (2.4)	91.7 (3.3)	110.1 (6.3)
Food and Beverages	2.5	2.7 (1.3)	2.9 (1.0)	3.2 (3.3)	3.5 (3.0)
Texture, Apparel and Accessories	3.7	3.6 (- 0.5)	3.3 (- 1.2)	3.3 (0.0)	3.3 (0.0)
Consumer Durable	3.8	4.0 (0.9)	3.6 (- 1.5)	3.6 (0.0)	3.7 (0.9)
Total Average	3.0	3.4 (2.1)	3.6 (0.8)	3.7 (0.9)	3.9 (1.8)

Notes: The number in parenthesis is the annual average percentage change.
Data : Census of Commerce, MITI

Table A-10 Retail Sales per Outlet

(10,000 yen)

Classification	1966	1972	1979	1982	1985
General Merchandise	35,391.7	115,694.2 (21.8)	294,281.6 (14.3)	299,987.4 (0.6)	392,379.9 (9.4)
Food and Beverages	597.6	1,221.6 (12.7)	2,984.1 (13.6)	3,957.7 (9.9)	4,740.5 (6.2)
Texture, Apparel and Accessories	929.2	1,838.7 (12.0)	3,639.0 (10.2)	4,191.6 (4.8)	4,668.7 (3.7)
Consumer Durable	1,030.0	2,461.1 (15.6)	4,230.1 (8.0)	5,201.6 (7.1)	5,955.9 (4.6)
Total Average	776.8	1,891.8 (16.0)	4,395.4 (12.8)	5,458.8 (7.5)	6,245.6 (4.6)

Notes: The number in parenthesis is the annual average percentage change.
Data : Census of Commerce, MITI

Table A-11 Sales Floor Space per Retail Outlet

Square meters

Classification	1966	1972	1979	1982	1985
General Merchandise	891.7	1,929.3 (13.7)	3,189.2 (7.4)	2,947.3 (- 2.5)	3,790.0 (8.7)
Food and Beverages	26.5	32.5 (3.5)	40.9 (3.3)	45.3 (3.5)	48.4 (2.3)
Texture, Apparel and Accessories	39.5	51.7 (4.6)	58.8 (1.9)	62.8 (2.2)	64.5 (0.9)
Consumer Durable	44.3	70.5 (8.1)	78.6 (1.6)	93.3 (5.9)	100.0 (2.3)
Total Average	32.6	40.9 (3.9)	51.2 (3.3)	55.4 (2.6)	58.0 (1.5)

Notes: The number in parenthesis is the annual average percentage change.
Data : Census of Commerce, MITI

Table A-12 Density of Retail Outlets

Classification	1966	1972	1979	1982	1985
General Merchandise	0.0	0.0	0.0	0.0	0.0
Food and Beverages	7.0	6.6	6.3	6.1	5.5
Texture, Apparel and Accessories	2.0	1.9	2.0	2.0	1.9
Consumer Durable	1.0	1.0	1.2	1.1	1.0
Total Average	13.8	13.8	14.4	14.5	13.5

Data: Census of Commerce, MITI

Table A-13 Share of Sales by Different Types of Operation

percentages

Kind of Operation	1982	1985		1988	
Department Stores	7.3	7.8	(3.7)	8.3	(6.2)
General Merchandise Stores	9.8	10.9	(6.5)		(4.4)*
Shopping Centers	9.7	10.4	(5.4)		(5.8)*
Voluntary Chains	8.4	10.2	(7.0)	11.2	(7.5)
Franchise Chains	4.2	4.4	(4.9)		(14.7)*
Convenience Stores	2.3	3.3	(15.8)		
Food Supermarkets	4.4	4.7	(5.1)		
Volume-Sales Electric Appliance Outlets	0.8	1.0	(12.5)	1.4	(14.9)
Consumer Cooperatives	1.4	1.8	(11.3)		(7.4)**
Agricultural Cooperatives	1.8	1.8	(3.8)		(0.6)*
Door-to-door Sales	1.7	2.1	(10.8)		(5.6)**
Mail-order Business	0.7	0.8	(9.1)		(17.7)*

Notes: (1) The number in parenthesis is the annual average percentage change.

(2) (*) denote 1987 data, and (**) denote 1986 data.

Data: Census of Commerce, MITI, Japan Department Store Association, Japan Chain Stores Association, Japan Voluntary Chain Association, Japan Franchise Association, etc.

Source: 90 Nendai no Ryutsu Bijon, MITI, 1989.

Table A-14 Concentration in Retailing

	CR$_{10}$	CR$_{25}$	CR$_{50}$	CR$_{100}$	CR$_{200}$
1968	4.8	7.6	10.0	12.0	
1970	5.8	9.4	12.1	14.3	
1972	6.7	10.7	13.5	16.1	
1974	7.4	12.1	15.1	18.2	21.0
1976	6.6	11.4	13.6	16.5	19.3
1979	6.7	10.7	13.4	16.3	19.4
1982	6.5	10.4	13.0	15.9	19.2
1985	6.8	10.9	13.8	17.1	20.8
1988	7.3	11.2	14.2	17.6	21.5

Data: Census of Commerce, MITI, Nikkei Ryutsu Shinbun
Source: Maruyama et.al.[1991], "Distribution System in Japan", *Keizai Bunseki*,
No.123, Economic Research Institute, Economic Planning Agency.

Table A-15 Changes in the Proportion of
the Number of Retail Chain Stores

percentages

1968	1979	1982	1985	1988
7.0	17.0	19.0	20.0	22.0

Source: Census of Commerce, MITI

Table A-16 Proportion of Retail Outlets by Chain Stores

Percentages

Classification	Share of Chain Stores
Retail Trade Total	21.9
53 General Merchandise	65.0
Food	
55 Food and Beverages	16.9
Consumer Non-durable	
54 Texture, Apparel and Accessories	28.7
581 Drug and Toiletries	23.7
Consumer Durable	
56 Motor Vehicles, Bicycles and Carts	26.2
57 Furniture, Fixture and Utensils	15.6

Data: Census of Commerce 1988, MITI
Source: Maruyama, M. et.al.[1991]. op.cit.

Table A-17 Share of Retail Sales by Chain Stores

Percentages

Classification	Share of Chain Stores
Retail Trade Total	60.7
53 General Merchandise	87.3
Food	
55 Food and Beverages	48.6
Consumer Non-durable	
54 Texture, Apparel and Accessories	62.6
581 Drug and Toiletries	44.2
Consumer Durable	
56 Motor Vehicles, Bicycles and Carts 74.8	
57 Furniture, Fixture and Utensils	52.0

Data: Census of Commerce 1988, MITI,

Source: Maruyama, M. et.al.[1991]

Table A-18 Annual Sales per Person Engaged (Productivity) in Retailing

Size of Persons	Productivity (10,000 yen)						Difference of Productivities (%)					
	1974	1976	1979	1982	1985	1988	1974	1976	1979	1982	1985	1988
1 to 2	399.	522.	653.	790.	850.	893.	27.6	27.4	28.4	31.0	30.8	29.6
3 to 4	634.	842.	1,034.	1,277.	13,67.	13,52.	43.9	44.2	45.0	50.1	49.5	44.8
5 to 9	869.	1,177.	1,412.	1,776.	1,859.	1,802.	60.1	61.7	61.4	69.6	67.3	59.8
10 to 19	926.	1,227.	1,470.	1,664.	1,806.	1,835.	64.1	64.3	63.9	65.3	65.4	60.8
20 to 49	976.	1,246.	1,512.	1,678.	1,823.	1,869.	67.5	65.3	65.7	65.8	66.0	62.0
1 to 49	674.	895.	1,101.	1,334.	1,450.	1,494.	46.6	46.9	47.9	52.3	52.5	49.5
50 and more	1,445.	1,907.	2,300.	2,550.	2,763.	3,016.	100.0	100.0	100.0	100.0	100.0	100.0
Total	760.	1,004.	1,234.	1,475.	1,607.	1,676.	100.0	100.0	100.0	100.0	100.0	100.0

Data: Census of Commerce, MITI

Table A-19 Distribution of Shop Size in Wholesaling (Number of Outlets)

Size of Persons	Number of Outlets (percentages)						Number of Outlets (thousand)		
	1974	1976	1979	1982	1985	1988	1982	1985	1988
1 to 2	20.4	21.4	21.6	23.3	22.5	21.8	99.9	93.0	95.3
3 to 4	23.6	24.6	25.0	25.2	25.4	25.2	108.1	105.1	110.1
5 to 9	28.7	28.6	28.5	27.9	27.9	27.9	119.6	115.1	121.6
10 to 19	15.6	14.9	14.8	14.1	14.4	14.8	60.5	59.3	64.7
20 to 49	8.5	7.9	7.7	7.2	7.5	7.8	30.9	30.9	34.0
50 to 99	2.2	1.9	1.8	1.6	1.7	1.8	7.0	6.9	7.8
1 to 99	99.0	99.2	99.3	99.3	99.3	99.3	426.0	410.3	433.5
100 and more	1.0	0.8	0.7	0.7	0.7	0.7	2.8	2.7	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	428.9	413.0	436.4

Data: Census of Business, MITI

Table A-20 Distribution of Shop Size in Wholesaling (Number of Persons Engaged)

Size of Persons	Number of Persons Engaged (percentages)						Number of Persons Engaged (thousand)		
	1974	1976	1979	1982	1985	1988	1982	1985	1988
1 to 2	3.1	3.6	3.8	4.3	4.1	3.9	174.7	163.6	169.1
3 to 4	7.3	8.3	8.7	9.1	9.1	8.8	373.7	362.9	380.6
5 to 9	16.7	18.0	18.6	19.0	18.7	18.3	777.1	748.9	792.7
10 to 19	18.4	19.1	19.6	19.6	19.7	19.8	802.0	787.1	858.1
20 to 49	22.3	22.5	22.6	22.1	22.5	23.0	902.7	901.3	994.8
50 to 99	13.0	12.3	12.0	11.5	11.6	12.0	469.9	463.4	520.7
1 to 99	80.8	83.8	85.3	85.6	85.7	85.8	3,500.1	3,427.3	3,716.1
100 and more	19.2	16.2	14.7	14.4	14.3	14.2	590.8	571.2	615.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	4,090.9	3,998.4	4,331.7

Data: Census of Business, MITI

Table A-21 Distribution of Shop Size in Wholesaling (Annual Sales)

Size of Persons	Annual Sales (Percentages)						Annual Sales (billion yen)		
	1974	1976	1979	1982	1985	1988	1982	1985	1988
1 to 2	0.9	1.1	1.2	1.3	1.2	1.3	5,081.	5,348.	5,830.
3 to 4	3.1	3.5	3.9	4.0	3.9	4.1	16,039.	16,581.	18,251.
5 to 9	9.2	9.8	10.8	10.7	10.4	11.1	42,487.	44,664.	49,592.
10 to 19	12.1	12.5	13.7	12.9	13.1	14.1	51,297.	55,956.	62,784.
20 to 49	17.7	17.9	19.1	17.7	18.2	19.3	70,569.	78,041.	86,233.
50 to 99	12.7	12.2	12.8	12.0	12.0	12.2	47,942.	51,534.	54,584.
1 to 99	55.7	57.0	61.5	58.6	58.9	62.1	233,416.	252,125.	277,274.
100 and more	44.3	43.0	38.5	41.4	41.1	37.9	165,121.	176,165.	169,210.
Total	100.0	100.0	100.0	100.0	100.0	100.0	398,536.	428,291.	446,484.

Data: Census of Business, MITI

Table A-22 Number of Wholesale Outlet

							Percentages
Classification	1968	1972		1979		1982	1985
General Merchandise	0.0	0.0		0.0	(0.3)	0.0 (- 1.3)	0.2
Food and Beverages	26.7	26.3	(1.8)	23.7	(3.7)	22.2 (2.7)	22.7 (- 0.3)
Apparel and Accessories	8.7	8.4	(1.4)	7.8	(4.0)	7.3 (3.1)	7.1 (- 2.3)
Consumer Durable	2.7	3.4	(8.2)	3.8	(7.0)	3.8 (5.1)	3.7 (- 2.2)
Total Number (thousand)	235.0	255.8	(2.1)	366.9	(5.3)	426.7 (5.2)	411.5 (- 1.2)

Notes: The number in parenthesis is the annual average percentage change.
 General Merchandise: JSIC 49 General Merchandise
 Food and Beverages: JSIC 512 Farm, Livestock and Aquatics
  JSIC 513 Food and Beverages
 Apparel and Accessories: JSIC 511 Apparel and Accessories and Notions
 Consumer Durable: JSIC 5151 Furniture and Fixture
  JSIC 5153 Tatami ·
  JSIC 5046 Household Electric Appliances
Data: Census of Commerce, MITI

Table A-23 Number of Persons Engaged

									Percentages
Classification	1968	1972		1979		1982		1985	
General Merchandise	1.7	1.9		1.4	(- 1.2)	1.3	(0.3)	1.5	(3.5)
Food and Beverages	19.8	20.3	(3.4)	21.5	(3.8)	21.0	(2.9)	21.9	(0.7)
Apparel and Accessories	10.3	9.8	(1.6)	9.3	(2.1)	8.8	(1.7)	8.6	(- 1.3)
Consumer Durable	2.9	4.4	(14.0)	4.4	(3.0)	4.2	(1.8)	3.9	(- 2.7)
Total Number (thousand)	2,684.0	2,997.7	(2.8)	3,667.7	(2.9)	4,084.1	(3.7)	3,993.4	(- 0.7)

Notes: The number in parenthesis is the annual average percentage change.
Data: Census of Commerce, MITI

Table A-24 Wholesale Sales

					Percentages
Classification	1968	1972	1979	1982	1985
General Merchandise	16.0	19.6	15.8 (11.0)	19.0 (20.5)	19.6 (3.5)
Food and Beverages	18.3	18.0 (12.6)	21.9 (17.5)	20.0 (9.8)	20.7 (3.5)
Apparel and Accessories	5.1	5.0 (13.8)	4.5 (12.7)	3.8 (7.1)	3.8 (2.4)
Consumer Durable	1.8	3.4 (33.4)	3.4 (14.4)	3.1 (9.9)	3.2 (3.7)
Total Sales (billion yen)	62,817.0	106,780.0 (14.2)	274,545.0 (14.4)	398,536.0 (13.2)	428,291.0 (2.4)

Notes: The number in parenthesis is the annual average percentage change.
Data: Census of Commerce, MITI

Table A-25 Number of Persons Engaged per Wholesale Outlet

Classification	1968	1972	1979	1982	1985
General Merchandise	726.7	1134.0	1044.0	1052.0	
Food and Beverages	8.5	9.0	9.1	9.1	9.4
Apparel and Accessories	13.4	13.6	11.9	11.5	11.8
Consumer Durable	12.3	15.1	11.6	10.5	10.3
Total Average	11.4	11.7	10.0	9.6	9.7

Notes: The number in parenthesis is the annual average percentage change.
Data: Census of Commerce, MITI

Table A-26 Wholesale Sales per Outlet

(10,000 yen) -

Classification	1968	1972	1979	1982	1985
General Merchandise	16,002.5	410,524	833,634 (10.6)	1,517,191 (22.1)	85,360.4 (-24.8)
Food and Beverages	182.5	285.3 (11.8)	691.9 (13.5)	845.5 (6.9)	945.9 (3.8)
Texture, Apparel and Accessories	156.3	248.2 (12.2)	435.4 (8.4)	487.8 (3.8)	564.4 (5.0)
Consumer Durable	181.7	418.5 (23.2)	668.8 (6.9)	766.2 (4.6)	913.6 (6.0)
Total Average	267.3	417.4 (11.8)	748.2 (8.7)	933.4 (7.7)	1,040.8 (3.7)

Notes: The number in parenthesis is the annual average percentage change.
Data: Census of Commerce, MITI

Table A-27 Density of Wholesale Outlets

Classification	1968	1972	1979	1982	1985
General Merchandise	0.0	0.0	0.0	0.0	0.0
Food and Beverages	0.6	0.6	0.7	0.8	0.8
Apparel and Accessories	0.2	0.2	0.3	0.3	0.2
Consumer Durable	0.1	0.1	0.1	0.1	0.1
Total Average	2.4	2.4	3.2	3.6	3.4

Data: Census of Commerce, MITI

Table A-28 Share of Wholesale Sales by Chain Stores

Percentages

Classification	Share of Chain Stores
Wholesales Trade Total	80.3
49 General Merchandise	99.7
Production Goods	
501 Textiles less Apparel	72.3
502 Chemicals	85.7
503 Minerals and Metals	86.1
506 Recovered Materials	47.6
Capital Goods	
504 Machinery and Equipment	86.5
505 Building Materials	65.7
Consumption Goods	
511 Apparel, Accessories and Notions	65.7
512 Farm Livestock and Aquatics	63.9
513 Food and Beverages	75.7
514 Drug and Toiletries	81.9
515 Furniture, Fixture and Utensils	62.9
519 Miscellaneous	71.3

Data: Census of Commerce 1988, MITI

Source: Maruyama, M. et.al.[1991]

Table A-29 Proportion of Wholesale Establishments by Chain Stores

Percentages

Classification	Proportion of Chain Stores
Wholesales Trade Total	36.5
49 General Merchandise	55.5
Production Goods	
501 Textiles less Apparel	24.2
502 Chemicals	50.2
503 Minerals and Metals	50.6
506 Recovered Materials	9.5
Capital Goods	
504 Machinery and Equipment	52.9
505 Building Materials	24.6
Consumption Goods	
511 Apparel, Accessories and Notions	30.6
512 Farm Livestock and Aquatics	22.5
513 Food and Beverages	37.2
514 Drug and Toiletries	45.1
515 Furniture, Fixture and Utensils	29.7
519 Miscellaneous	34.1

Data: Census of Commerce 1988, MITI

Source: Maruyama, M. et.al.[1991]

Table A-30 W/R Ratios

	1982	1985	1988
			Percentages
W/R Ratio	3.53	3.44	3.10
(Wholesale Sales/Retail Sales)			
W/R Ratio for Consumer Goods	2.31	2.26	2.08
W/R Ratio of Inventories	2.31	1.55	1.38
(Wholesale Inventory/Retail Inventory)			
W/R Ratio of Establishments	0.225	0.229	0.241

Note: Wholesale data are based on merchant wholesalers.

Data: Census of Commerce 1982,1985,1988, MITI

Source: Maruyama et.al.[1991]

Table A-31 Proportion of Wholesale Sales by Class of Major Customers

	1982	1985	1988
			Percentages
Sales to Wholesalers			
(W-W Ratio)	41.9	37.3	38.2
Sales to Retailers and Repair Shops	24.0	24.4	25.9
For Export	7.4	7.9	5.6
Sales to Household	0.6	0.6	0.6
Consumers and Individual Users			
Sales to Other Customers	26.1	29.8	29.7

Note: These data are adjusted by deducting the amount of transaction

between companies' head offices and their branches.

Data: Census of Commerce 1982,1985,1988, MITI

Source: Maruyama et.al.[1991]

Table A-32 Share of Wholesale Sales by Type of Wholesalers (1988,1985)

Percentages

Classification	Total	1st-Stage Wholesales	2nd-Stage Wholesales	Other Wholesales
Wholesales Trade Total	100.0	41.1 (39.7)	25.5 (27.9)	33.5 (32.5)
49 General Merchandise	100.0	64.7 (57.7)	32.2 (38.3)	3.1 (4.0)
Production Goods				
501 Textiles less Apparel	100.0	45.5 (51.8)	38.8 (33.2)	15.7 (15.0)
502 Chemicals	100.0	46.1 (44.3)	17.1 (19.5)	36.8 (36.2)
503 Minerals and Metals	100.0	41.1 (30.3)	21.8 (28.1)	37.0 (41.5)
506 Recovered Materials	100.0	27.3 (16.7)	61.4 (74.4)	11.4 (8.9)
Capital Goods				
504 Machinery and Equipment	100.0	30.6 (31.8)	12.5 (12.9)	56.9 (55.4)
505 Building Materials	100.0	38.2 (37.9)	32.4 (34.7)	29.4 (27.4)
Consumption Goods				
511 Apparel, Accessories and Notions	100.0	45.2 (47.7)	25.8 (25.1)	28.9 (27.1)
512 Farm Livestock and Aquatics	100.0	28.9 (29.4)	42.5 (37.2)	28.6 (33.4)
513 Food and Beverages	100.0	35.4 (35.0)	22.2 (24.7)	42.4 (40.3)
514 Drug and Toiletries	100.0	33.5 (33.6)	11.6 (13.1)	54.9 (53.2)
515 Furniture, Fixture and Utensils	100.0	44.5 (46.3)	21.8 (21.3)	33.7 (32.4)
519 Miscellaneous	100.0	39.4 (41.6)	25.1 (27.8)	35.5 (30.6)

Notes: The numbers in parentheses are 1985 data.
Data: Census of Commerce, MITI, 1985 and 1988.

Table A-33 Vertical Linkage in Wholesaling (1979,1986)

Percentages

Classification	Proportion of Wholesale Company Affiliated to Keiretsu	Affiliated to Manufacturers	Affiliated to Wholesalers
Wholesales Trade Total	21.8 (19.0)	70.6 (65.0)	35.5 (44.0)
49 General Merchandise	25.6 (24.0)	82.0 (80.0)	26.2 (40.0)
Production Goods			
501 Textiles less Apparel	10.9 (13.0)	59.9 (47.0)	48.4 (63.0)
502 Chemicals	26.8 (23.0)	80.8 (82.0)	27.8 (28.0)
503 Minerals and Metals	34.6 (27.0)	76.6 (74.0)	29.9 (36.0)
506 Recovered Materials	8.7	51.0	54.0
Capital Goods			
504 Machinery and Equipment	37.6 (28.0)	86.0 (83.0)	19.3 (25.0)
505 Building Materials	20.8 (16.0)	69.3 (65.0)	38.5 (46.0)
Consumption Goods			
511 Apparel, Accessories and Notions	13.8 (15.0)	66.2 (59.0)	39.3 (51.0)
512 Farm Livestock and Aquatics	12.7 (14.0)	29.8 (23.0)	74.5 (81.0)
513 Food and Beverages	19.4 (21.0)	68.7 (67.0)	35.7 (41.0)
514 Drug and Toiletries	40.7 (39.0)	81.0 (79.0)	25.5 (33.0)
515 Furniture, Fixture and Utensils	16.0 (17.0)	54.5 (54.0)	52.2 (52.0)
519 Miscellaneous	17.1 (14.0)	67.1 (54.0)	41.0 (58.0)

Notes: The numbers in parentheses are 1979 data.
Data: The Basic Survey of Commercial Structure and Activity, MITI, 1979 and 1986.

Table A-34 Annual Sales per Person Engaged (Productivity) in Wholesaling

Size of Persons	Productivity (10,000 yen)						Difference of Productivities (%)					
	1974	1976	1979	1982	1985	1988	1974	1976	1979	1982	1985	1988
1 to 2	1,533.	1,960.	2,403.	2,943.	3,297.	3,464.	12.6	11.7	12.3	10.5	10.7	12.6
3 to 4	2,222.	2,686.	3,358.	4,300.	4,578.	4,802.	18.3	16.0	17.2	15.4	14.8	17.5
5 to 9	2,913.	3,440.	4,350.	5,476.	5,970.	6,261.	24.0	20.5	22.3	19.6	19.3	22.8
10 to 19	3,472.	4,146.	5,205.	6,409.	7,117.	7,321.	28.6	24.7	26.7	22.9	23.1	26.6
20 to 49	4,186.	5,054.	6,349.	7,824.	8,664.	8,674.	34.5	30.1	32.5	28.0	28.1	31.6
50 to 99	5,151.	6,276.	8,009.	10,215.	11,130.	10,498.	42.4	37.4	41.1	36.6	36.1	38.2
1 to 99	3,639.	4,316.	5,404.	6,682.	7,367.	7,469.	30.0	25.7	27.7	23.9	23.9	27.7
100 and more	12,147.	16,765.	19,508.	27,948.	30,854.	27,488.	100.0	100.0	100.0	100.0	100.0	100.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	43.4	37.8	38.4	34.9	34.8	37.5

Data: Census of Business, MITI

Table B-1 Relative Productivity, International Comparison

	Japan	US	Germany	UK	France	Italy
(1) Distribution Sector VAPE/Total Industry VAPE						
1979	0.80	0.74	0.71	0.61	0.84	N.A.
1982	0.82	0.71	0.69	0.55	0.82	0.96
1985	0.76	0.70	0.68	0.58	0.82	0.90
(2) Manufacturing Sector VAPE/Total Industry VAPE						
1979	1.21	1.07	0.97	0.89	1.02	N.A.
1982	1.20	1.07	0.93	0.88	0.96	0.99
1985	1.19	1.12	0.95	0.95	0.97	1.02
(3) Distribution Sector VAPE/Manufacturing VAPE						
1979	0.67	0.69	0.73	0.69	0.82	N.A.
1982	0.69	0.66	0.75	0.63	0.86	0.98
1985	0.64	0.63	0.71	0.61	0.85	0.88

Note: VAPE: Value Added per Person Engaged
Sources: OECD National Accounts, Volume II, 1974-1986

Table B-2 Ratio of Part-time Worker

Percentages

Classification	1978	1981	1986
Wholesale Trade	5.1	4.9	5.3
49 General Merchandise			1.5
50 Textile, Machinery, and Building Materials, etc.	3.5	3.2	3.4
51 Apparel, Food, and Furniture, etc.	6.9	6.8	7.3
52 Agents and Brokers	16.0	16.0	18.0
Retail Trade	14.1	13.4	14.9
53 General Merchandise	8.6	9.0	11.6
54 Dry Goods, Apparel and Accessories	12.0	11.8	12.8
55 Food and Beverages	19.7	19.0	19.6
56 Motor Vehicles, Bicycles and Carts	2.0	2.1	2.8
57 Furniture, Fixture and Household Utensil	9.6	9.6	10.6
58 Miscellaneous	17.7	16.0	17.0
Eating and Drinking Places	21.9	25.4	29.2
59 General Eating and Drinking Places	24.4	27.6	30.3
60 Other Eating and Drinking Places	17.3	21.2	26.8

Source: Establishment Census of Japan, 1986, Statistics Bureau, Management and Coordination Agency

Table B-3 Unit Labor Costs, Japan US Comparison

	base year	1975	1977	1979	1981	1983	1985	1987
Japan	1980	0.51582	0.59147	0.57242	0.56316	0.56242	0.59705	0.59585
US	1980	0.41186	0.45890	0.54546	0.65296	0.70161	0.72499	0.76351

Source: OECD National Accounts

Table B-4 Gross Margin Ratio, International Comparison

Percentages

	Gross Margin Ratio		Ratio of Total Gross Margin on Retail Sales
	Wholesale	Retail	
Japan	11.9 (1978), 11.2 (1986)	27.0 (1978), 27.1 (1986)	63.4 (1978), 57.6 (1986)
US	19.4 (1986)	31.0 (1986)	49.7 (1986)
Germany	12.7 (1981), 12.6 (1985)	34.5 (1981), 34.2 (1985)	58.0 (1981), 58.9 (1985)
UK	13.4 (1984), 26.9 (1982)	27.6 (1984)	55.6 (1984)
France	19.2 (1982), 21.8 (1985)	26.6 (1982), 29.6 (1985)	48.8 (1982), 55.3 (1985)

Source: Maruyama et al.[1989],[1991]

Table B-5 Gross Margin Ratio, Ratio of Operating Cost, and Ratio of Operating Surplus in Wholesaling (1979,1986)

Percentages

Classification	Ratio of Gross Margin	Ratio of Operation Cost'	Ratio of Operating Surplus
Wholesales Trade Total	11.2 (11.9)	7.8 (7.7)	3.4 (4.2)
49 General Merchandise	3.0 (2.9)	1.2 (1.6)	1.8 (1.3)
Production Goods			
501 Textiles less Apparel	13.3 (12.2)	9.1 (7.5)	4.2 (4.7)
502 Chemicals	12.6 (12.8)	9.4 (8.9)	3.2 (3.9)
503 Minerals and Metals	9.2 (9.9)	6.2 (6.3)	3.0 (3.6)
506 Recovered Materials	18.6	14.6	4.0
Capital Goods			
504 Machinery and Equipment	17.2 (17.8)	13.0 (11.8)	4.2 (6.0)
505 Building Materials	18.3 (18.7)	11.9 (11.4)	6.4 (7.3)
Consumption Goods			
511 Apparel, Accessories and Notions	23.5 (20.9)	18.1 (14.8)	5.4 (6.1)
512 Farm Livestock and Aquatics	8.6 (10.4)	5.5 (5.7)	3.1 (4.7)
513 Food and Beverages	13.7 (12.4)	9.8 (8.1)	3.9 (4.3)
514 Drug and Toiletries	17.5 (16.7)	14.3 (12.7)	3.2 (4.0)
515 Furniture, Fixture and Utensils	19.5 (22.6)	14.9 (16.1)	4.6 (6.5)
519 Miscellaneous	15.6 (16.8)	11.4 (11.8)	4.2 (5.0)

Notes: The numbers in parentheses are 1979 data.

Data: The Basic Survey of Commercial Structure and Activity , MITI, 1979 and 1986.

Table B-6 Gross Margin Ratio, Ratio of Operating Cost, and Ratio of Operating Surplus in Retailing (1979,1986)

Percentages

Classification	Ratio of Gross Margin	Ratio of Operation Cost	Ratio of Operating Surplus
Retail Trade Total	27.1 (27.0)	21.4 (19.7)	5.7 (7.3)
General Merchandise	23.2 (24.0)	21.5 (19.0)	1.7 (5.0)
Food			
Food and Beverages	25.4 (25.2)	19.8 (17.6)	5.6 (7.6)
Consumer Nondurable			
Texture, Apparel and Accessories	36.2 (33.0)	28.9 (24.6)	7.3 (8.4)
Consumer Durable			
Motor Vehicles, Bicycles and Carts	24.8 (25.6)	19.0 (18.2)	5.8 (7.4)
Furniture, Fixture and Utensils	29.4 (30.1)	23.7 (21.9)	5.7 (8.2)

Notes: The numbers in parentheses are 1979 data.

Data: The Basic Survey of Commercial Structure and Activity , MITI, 1979 and 1986.

Table B-7 Inventory Rate, International Comparison

Percentages

	Inventory Rate				Inventory Rate As a Whole	
	Wholesale		Retail			
Japan	4.6 (1982),	4.4 (1985)	10.7 (1982),	9.7 (1985)	26.9 (1982),	24.8 (1985)
US	9.2 (1982),	11.0 (1986)	12.3 (1982),	12.6 (1986)	22.3 (1982),	23.2 (1986)
Germany	7.7 (1981),	7.3 (1985)	12.1 (1981),	12.3 (1985)	26.3 (1981),	26.6 (1985)
UK	9.0 (1982),	8.1 (1984)	12.1 (1982),	11.6 (1984)	29.3 (1982),	28.6 (1984)
France	10.0 (1982),	9.9 (1985)	12.3 (1982),	12.1 (1985)	23.9 (1982),	23.7 (1985)

Source: Maruyama et al.[1989],[1991]

Table B-8 Inventory Rate in Retailing (1979,1986)

Percentages

Classification	
Retail Trade Total	**9.4 (9.5)**
General Merchandise	11.0 (12.3)
Food	
Food and Beverages	19.5 (17.7)
Consumer Nondurable	
Texture, Apparel and Accessories	4.4 (5.4)
Consumer Durable	
Motor Vehicles, Bicycles and Carts	10.9 (11.0)
Furniture, Fixture and Utensils	5.8 (6.2)

Notes: The numbers in parentheses are 1979 data.

Data: The Basic Survey of Commercial Structure and Activity,
MITI, 1979 and 1986.

Table B-9 Inventory Rate in Wholesaling (1979,1986)

Percentages

Classification	
Wholesales Trade Total	19.8 (18.7)
49 General Merchandise	54.3 (46.6)
Production Goods	
501 Textiles less Apparel	9.4 (10.6)
502 Chemicals	20.9 (22.1)
503 Minerals and Metals	23.5 (24.2)
506 Recovered Materials	25.4
Capital Goods	
504 Machinery and Equipment	13.0 (13.3)
505 Building Materials	14.4 (12.9)
Consumption Goods	
511 Apparel, Accessories and Notions	7.4 (7.6)
512 Farm Livestock and Aquatics	54.3 (46.8)
513 Food and Beverages	22.2 (21.0)
514 Drug and Toiletries	10.0 (10.3)
515 Furniture, Fixture and Utensils	10.8 (9.5)
519 Miscellaneous	12.5 (13.0)

Notes: The numbers in parentheses are 1979 data.
Data: The Basic Survey of Commercial Structure and Activity , MITI, 1979 and 1986.

Table B-10 Diffusion of Information Technology in Retailing

	1983	1984	1985	1986	1987	1988	1989	1990
Number of Stores with JAN Bar Code Reader POS System	1,909	2,725	4,212	7,930	11,711	21,348	42,880	70,061
Number of POS System	4,740	7,255	12,196	29,706	40,591	63,981		183,497

Note: JAN: Japan Article Number
Data Source: Distribution System Research Institute

Table B-11   Ratio of Entry and Exit   (1981/1986)

Percentages

Classification	Rate of Increase	Rate of Entry	Rate of Exit
Mining	- 2.9	2.0	4.5
Construction	0.9	3.1	2.2
Manufacturing	0.0	3.0	2.9
Electricity, Gas, Heat Supply and Water	- 3.4	1.7	4.6
Transport and Communication	1.6	4.2	2.7
Wholesale and Retail Trade (Including Eating and Drinking Places)	0.1	4.7	4.6
Financing and Insurance	2.5	5.7	3.5
Real Estate	1.6	4.2	2.8
Services	1.9	4.8	3.1

Note: Each rate is the annual average percentage change.

Source: Establishment Census of Japan, 1986, Statistics Bureau, Management and Coordination Agency

Table B-12   Difference of Retail Productivity in 1982, International Comparison

	Average Productivity ($1,000)	Standard Deviation ($1,000)	Coefficient of Variation
(1) Sales of Outlet per Person Engaged			
Japan	62.3	23.4	0.38
France	71.6	18.2	0.25
(2) Sales of Outlet per Employee			
France	89.9	12.3	0.14
US	72.7	6.7	0.09
(3) Sales of Corporation per Person Engaged			
France	73.5	22.7	0.31
Germany	80.3	17.6	0.22
UK	52.5	10.5	0.20

Note: The conversion of the currency unit is based on PPP.

Source: Maruyama et al.[1991]

Table B-13 Productivity of Independent and Chain Outlets in Retailing (1968-1988)

	1968	1979	1982	1985	1988
Proportion of the Number					
of Chain Stores (percentages)	7.0	17.0	19.0	20.0	22.0
Sales per Outlet (million yen)					
(A) Independent	7.65	24.41	29.57	32.97	35.71
(B) Chain Store	101.53	120.86	127.47	180.90	196.49
(B)/(A)	13.27	4.95	4.31	5.48	5.50
Sales per Workers (million yen)					
(C) Independent	2.78	8.75	10.42	11.17	11.34
(D) Chain Store	6.37	19.05	21.90	23.69	24.38
(D)/(C)	2.28	2.18	2.10	2.12	2.15

Data: Census of Commerce, MITI

Source: Maruyama, M. et.al.[1991]

Table B-14 Productivity of Independent and Chain Outlets (Sales per Person Engaged in 1988)

Industrial Classification	(1) Share Indp. (%)	(2) Share Chain (%)	(3) Product. Total (mil. yen)	(4) Product Indep. (mil. yen)	(5) Product. Chain (mil. yen)	(6) (5)/(4)
Wholesale Trade Total	24.6	75.4	95.1	49.0	137.1	2.8
Wholesale less Agents and Brokers	24.6	75.4	95.1	49.1	137.2	2.8
General Merchandise	0.3	99.7	1360.2	67.6	1453.4	21.5
Textiles, Machinery and Materials	24.5	75.5	81.6	46.3	108.4	2.3
Textiles less Apparel	31.9	68.1	114.0	67.3	168.7	2.5
Chemicals	19.4	80.6	104.7	53.3	136.3	2.6
Minerals and Metals	17.2	82.8	170.4	81.0	221.0	2.7
Machinery and Equipment	20.9	79.1	65.5	42.4	76.5	1.8
Building Materials	43.1	56.9	60.7	39.5	102.1	2.6
Recovered Materials	57.3	42.7	24.1	17.0	54.9	3.2
Apparel, Food and Furniture	38.4	61.6	70.7	51.1	92.9	1.8
Apparel, Accessories and Notions	37.6	62.4	51.8	41.9	60.5	1.4
Farm, Livestock and Aquatics	44.6	55.4	115.7	76.0	200.2	2.6
Food and Beverages	33.6	66.4	65.7	42.7	90.3	2.1
Drug and Toiletries	25.3	74.7	54.5	38.8	63.2	1.6
Furniture, Fixture and Utensils	46.7	53.3	42.8	34.0	55.4	1.6
Miscellaneous	36.8	63.2	67.8	47.7	89.8	1.9
Retail Trade Total	42.4	57.6	16.5	11.3	24.8	2.2
General Merchandise	13.1	86.9	39.7	37.2	40.1	1.1
Department Store	12.8	87.2	40.1	39.3	40.3	1.0
Other Retail Stores	34.1	65.9	22.9	15.8	29.8	1.9
Texture, Apparel and Accessories	40.1	59.9	15.0	10.3	21.7	2.1
Texture and Beddings	59.6	40.4	13.1	10.9	18.3	1.7
Men's Clothing	35.3	64.7	14.9	8.6	24.9	2.9
Women's and Children's Clothing	32.7	67.3	17.2	11.2	23.2	2.1
Footwear	35.8	64.2	12.7	7.7	20.3	2.6
Other Apparel and Accessories	40.1	59.9	14.4	10.4	19.5	1.9
Food and Beverages	55.9	44.1	13.6	11.2	18.7	1.7
Grocery	28.3	71.7	20.9	15.1	24.6	1.6
Beverages and Seasoning	91.0	9.0	17.8	17.3	24.1	1.4
Meat and Poultry	61.1	38.9	12.1	10.4	16.4	1.6
Fresh Fish	76.3	23.7	11.9	10.7	18.8	1.8
Cured Food	68.7	31.3	12.6	11.1	18.1	1.6
Vegetable and Fruit	77.6	22.4	11.9	11.0	16.7	1.5
Confectionery and Bakery	66.3	33.7	6.5	5.8	8.5	1.5
Rice, Barley and Other Cereals	72.4	27.6	18.3	16.6	25.0	1.5
Other Food and Beverages	59.3	40.7	8.6	7.4	11.4	1.5
Motor Vehicles, Bicycles and Carts	26.2	73.8	26.6	16.0	34.9	2.2
Motor Vehicles	23.5	76.5	29.8	19.5	35.5	1.8
Bicycles and Motorcycles	71.3	28.7	9.6	8.0	19.6	2.5
Furniture, Fixture and Utensils	50.7	49.3	16.8	12.2	27.6	2.3
Furniture, Fixture and Tatami	57.6	42.4	15.0	11.4	26.5	2.3
Hardware and Kitchenware	47.3	52.7	16.2	11.2	26.9	2.4
Chinaware and Glassware	64.3	35.7	10.5	9.0	15.0	1.7
Household Appliances	47.4	52.6	18.8	13.5	29.4	2.2
Other Household Utensils	61.5	38.5	14.3	12.6	18.1	1.4
Miscellaneous	49.5	50.5	13.1	9.6	20.1	2.1
Drug and Toiletries	58.3	41.7	12.0	10.0	16.7	1.7
Farm and Garden Supply	54.7	45.3	20.2	17.1	26.0	1.5
Fuel	39.4	60.6	24.1	19.1	29.1	1.5
Book and Stationery	58.1	41.9	6.4	5.0	10.5	2.1
Toys, Sport and Music Instruments	45.0	55.0	16.7	12.5	23.3	1.9
Camera and Photo Supply	39.5	60.5	13.1	8.6	20.1	2.3
Watches, Glass and Opticals	44.9	55.1	11.2	8.2	16.1	2.0
Secondhand Stores	80.6	19.4	9.2	8.5	13.3	1.6
Others	58.6	41.4	11.6	9 0	19.3	2.1

Table B-15 Extent of Organization in the Japanese Retail Industry

	Sales (million yen)	(%)	Number of Stores	(%)
(1) Retail Trade Total				
1985.	101,718,812.	100.0	1,628,644.	100.0
1988.	114,828,936.	100.0	1,619,599.	100.0
(2) Conventional Department Stores				
1985.	6,618,044.	6.5	254.	0.02
1988.	7,657,110.	6.7	254.	0.02
(3) Chain Stores				
1985.	10,486,133.	10.3	5,618.	0.3
1988.	12,133,088.	10.6	6,455.	0.3
(4) Voluntary Chains				
1985.	10,356,600.	10.2	53,540.	3.3
1988.	12,850,900.	11.2	55,392.	3.4
(5) Franchise Chains				
1985.	1,812,617.	1.8	26,653.	1.6
1988.	2,525,285.	2.2	27,577.	1.7
(6) Sub-Total (2)-(5)				
1985.	29,274,394.	28.8	86,065.	5.3
1988.	35,166,383.	30.6	89,678.	5.5

Source: Maruyama et al.[1989],[1991]

Table B-16 Variation of Retail Productivity by Store-Type

		Japan		US	
		Sales (1,000 yen)	(%)	Sales ($)	(%)
(1) Retail Average	1982.	14,753.	100.0	71.81	100.0
	1985.	16,073.	100.0		
(2) Department Store	1982	36,317.	246.2	65,441.	91.1
	1985.	41,164.	256.1		
(3) Mass Merchandiser	1982.	29,437.	199.5	67,888.	94.5
	1985.	31,218.	194.2		
(4) Food Retailer Average	1982	12,416.	100.0	102,453.	100.0
	1985.	13,535.	100.0		
(5) Supermarket	1982.	25,501.	205.4	154,336.	150.6
	1985.	26,082.	192.7		
(6) Convenience Store	1982.	16,751.	134.9	N.A.	N.A.
	1985.	16,261.	120.1		

Source: Maruyama et al.[1989][1991]

List of Data Sources

(Classification: D Distributive Trade, M Manufacturers, R Retail Trade, T Total Industry, W Wholesale Trade)

SOURCE NUMBER	COUNTRY	SOURCES	CLS	Establishment	Firms	Persons Engaged	Employees	Sales	Gross Margin	Inventory	Trade Notes & Accounts RCVL.	Sales Floor Space	Value Added
JP-1	JAPAN	SHOUGYO TOUKEI (SHOWA 57) (Census of Commerce, 1982)	W	O		O		O		O			
			R	O		O		O		O		O	
JP-2	JAPAN	SHOUGYO TOUKEI (SHOWA 60) (Census of Commerce, 1985), 1988	W	O		O		O		O			
			R	O		O		O		O		O	
JP-3	JAPAN	Report on 4th Basic Survey of Commercial Structure and Activity	W					O	O				
			R					O	O				
JP-4	JAPAN	Report on 5th Basic Survey of Commercial Structure and Activity	W					O	O				
			R					O	O				
JP-5	JAPAN	HOUJIN KIGYOU TOUKEI NENPOU (Annual Financial Report for Corporations)	W					O		O	O		
			R					O		O	O		
US-1	U.S.A.	1982 Census of Wholesale Trade	W	O	O		O	O		O			
US-2	U.S.A.	1982 Census of Retail Trade	R	O	O		O	O					

VARIABLES

List of Data Sources

(Classification: D Distributive Trade, M Manufacturers, R Retail Trade, T Total Industry, W Wholesale Trade)

SOURCE NUMBER	COUNTRY	SOURCES	CLS	VARIABLES									
				Establish-ment	Firms	Persons Engaged	Employees	Sales	Gross Margin	Inventory	Trade Notes & Accounts RCVL.	Sales Floor Space	Value Added
US-3	U.S.A.	Statistical Abstract of the U.S.A.,1987	R, D			O							
US-4	U.S.A.	Current Business Reports BW-87-13	W					O	O	O			
US-5	U.S.A.	Current Business Reports BR-86-13	R					O	O	O			
US-6	U.S.A.	Current Business Reports BR-13-87S	R							O			
US-7	U.S.A.	Quarterly Financial Report for Manufactur-ing,Mining,and Trade Corporation(4Q 1986)	W, R					O		O	O		

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List of Data Sources

(Classification: D Distributive Trade, M Manufacturers, R Retail Trade, T Total Industry, W Wholesale Trade)

SOURCE NUMBER	COUNTRY	SOURCES	CLS	VARIABLES									
				Establishment	Firms	Persons Engaged	Employees	Sales	Gross Margin	Inventory	Trade Notes & Accounts RCVL.	Sales Floor Space	Value Added
GE-1	F.R.G.	Handels-und Gaststätten-zählung 1979	W, R	O	O	O		O				O	
GE-2	F.R.G.	Handels-und Gaststätten-zählung 1985	W, R	O	O	O		O					
GE-3	F.R.G.	Statistisches Jahrbuch 1984	W					O	O	O			
GE-4	F.R.G.	Statistisches Jahrbuch 1985	R					O	O	O			
GE-5	F.R.G.	Statistisches Jahrbuch 1987	W, R							O			
GE-6	F.R.G.	Statistisches Jahrbuch 1988	W, R					O	O	O			
UK-1	U.K.	Employment Gazette Historical Supplement No.1,February 1987 & November 1987	W				O						
UK-2	U.K.	Business Monitor SDM26, Wholesaling 1985	W		O			O	O ('84 only)	O			
UK-3	U.K.	Business Monitor SDO25, Retailing 1982	R	O	O	O		O	O	O			
UK-4	U.K.	Business Monitor SDO25, Retailing 1984	R	O	O	O		O	O	O			

List of Data Sources

(Classification: D Distributive Trade, M Manufacturers, R Retail Trade, T Total Industry, W Wholesale Trade)

VARIABLES

SOURCE NUMBER	COUNTRY	SOURCES	CLS	Establish-ment	Firms	Persons Engaged	Employees	Sales	Gross Margin	Inventory	Trade Notes & Accounts RCVL.	Sales Floor Space	Value Added
FR-1	FRANCE	Enquete Annuelle D'Entreprise Dans Le Commerce 1982	W, R		O	O		O	O	O			
FR-2	FRANCE	Enquete Annuelle D'Entreprise Dans Le Commerce 1985	W, R		O	O		O	O	O			
FR-3	FRANCE	Enquete D'Etablissement Dans Le Commerce 1982	R	O		O		O				O	
IT-1	ITALY	6° censimento generale dell'industria, del commercio, dei servizi e dell'artigianato 26 ottobre 1981 volume II	W	O	O	O							
			R	O	O	O						O	
OECD	STATES OF OECD	OECD National Accounts Volume II 1974-1986	D, M, T			O							O

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List of Data Sources

(Common Data Sources)

SOURCES	VARIABLES		
	Purchasing Power Parities for GDP	Exchange Rates	Population Mid-year Estimates in thousands)
OECD National Accounts Volume I 1970-1985	O		
OECD National Accounts Volume I 1960-1986	O	O	
United Nations, Demographic Yearbook 1985			O

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