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Japan's Large Scale Retail Store Law: a cause of concern for food exporters?

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Abstract

The Large Scale Retail Store Law has been a feature of the Japanese distribution system in one form or another for almost 40 years. It has been viewed by critics as a form of non-tariff barrier and an impediment to imports. Others view the Large Scale Retail Store Law as just another part of a distribution system that fits in, and has served Japanese society well. Reforms planned for the distribution system are likely to benefit Japanese agriculture just as much as foreign suppliers to the Japanese market. ©2000 Elsevier Science B.V. All rights reserved.

Keywords: Japan; Distribution; Non-tariff barrier; Retailing; Deregulation

1. Introduction

The distribution system is one part of the Japanese economy that has attracted a fair amount of interest in recent years because of the importance attached to it during negotiations between Japan and the United States about the trade imbalance between the two countries. The United States applied pressure to Japan through the Structural Impediment Initiative Talks of the late 1980s and early 1990s and, more recently, through the World Trade Organization case involving the distribution of Kodak film in Japan. While the United States complaint, that Japan's distribution system discriminated against Kodak, was not accepted by the WTO in its January 1998 ruling, opinions differ as to the complexity of the distribution system, its effect on consumer prices and the role it has played in the trade imbalance between Japan and the United States (Hsu, 1994, pp. 104–107). In mid-December 1997, the Liberal Democratic Party — Japan's ruling party — announced it was planning to remove one part of the regulations governing the distribution system that has proven particularly contentious, at least as far as critics of Japan are concerned. This regulation is known as the Large Scale Retail Store Law or *Daitenho*. The decision to abolish the Large Scale Retail Store Law should close the book on one more area of foreign criticism of Japanese practices. While the removal of the Law will possibly see further increases in the number of large western-style supermarkets in Japan, it is questionable whether the removal of the law will make much difference to the ease of foreign access to

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Japan's markets. The reason for this is that the Large Scale Retail Store Law is just one part of Japan's distribution system and, from the viewpoint of firms supplying the Japanese market, a part that may not be particularly important compared to understanding the requirements of Japanese consumers.

2. Main features of the distribution system

Obviously, wholesalers are an important part of the distribution system. The origins of the large wholesale companies in Japan can be traced back to the Edo Period (1603–1867) when different parts of the country used different mediums of exchange.[3] Currency was gold, silver and *zeni* (which was usually copper), and the prices of different commodities were set in different currencies. In Edo (modern-day Tokyo), for example, miso and soy sauce were priced in gold at the wholesale level, but these articles in Kansai were priced in silver. Tofu and soba and other everyday items were priced in units of *zeni*. The actual system was quite complicated with official rates of exchange being set by the *bakufu* (the shogunal government), but moneychangers set the actual rates. Wholesalers facilitated exchange between firms and consumers from different parts of the country by accepting the different coinage resulting in savings in transaction costs between buyers and sellers. In the early seventeenth century, product quality from cottage industries was not standardized, market information was imperfect and transport systems were fragmented (Kitchell, 1995). A multi-tiered wholesale system evolved to enable risk sharing.

There were 391 574 wholesalers in 1997, a decline of 8.8% from their numbers in 1994 (Distribution Economics Institute of Japan, 1999, p. 4). Between 1982 and 1994, their numbers at first increased and then they declined. Japanese wholesalers fall into a number of different categories. There are primary wholesalers and secondary wholesalers. The primary wholesalers buy from the manufacturers or from foreign producers and sell to other wholesalers (these are the secondary wholesalers), to producers, to retailers or to foreign clients. The secondary wholesalers sell to other wholesalers, to manufacturers or other users or to foreign firms. Table 1 shows the numbers of wholesalers in each of these categories as well as their sales. It is clear from Table 1 that the relative proportion of different types of wholesalers and the proportion of sales held by each type of wholesaler remained relatively constant between 1985 and 1994.

One feature of the Japanese economy that writers often allude to is that it is a dual economy in the sense that there are many small and mainly anonymous firms existing side-by-side with a relatively small number of large, often internationally famous firms. In the wholesaling industry, this situation certainly exists. Firms with 100 or more employees made almost 36% of sales in 1997, while only 5.3% of sales were made by firms with four or fewer employees. The first group of wholesalers represented only 0.8% of wholesalers while the small firms represented about 45% of wholesalers. The relative importance of the two groups of firms was almost completely unchanged between 1991 and 1997 (Distribution Economics Institute of Japan, 1997, p. 11 and Distribution Economics Institute of Japan, 1999, p. 10). As for the numbers of wholesalers, those with 100 or more employees decreased from 3526 in 1991 to 3211 in 1997 while for the wholesalers with four or fewer employees, the number fell from 214 720 to 177 151. The small volume of sales made by wholesalers with four or fewer employees means that whether or not they are high cost probably has relatively little effect on the overall cost structure of the wholesaling industry. Eleven of the top 20 wholesalers, in terms of sales in 1997, were primarily involved with the food industry; the main product for a further six of these firms were pharmaceuticals; while books, compact discs and textile were the most important items handled by the other firms in the top 20 (Distribution Economics Institute of Japan, 1999, p. 67).

Retail outlets are varied in type. At the top of the pyramid, in terms of prestige, are the department stores. These have a long history in Japan; Mitsukoshi, one of the best known and most prestigious, was founded as a dry goods store in 1673 by the Mitsui family. Department stores are generally close to railway stations, making them a convenient place for consumers to shop, and they supply a wide range of commodities, including food. The location of department stores close to railway stations also has historical precedence. During the Edo period, and before,

[3] This discussion draws on material held at the Edo-Tokyo Museum, Sumida-ku, Tokyo.

Table 1
Distribution of wholesalers and nominal sales, by type of wholesaler[a]

Type of wholesale trade	Number of establishments (%)				Annual sales (%)			
	1985	1988	1991	1994	1985	1988	1991	1994
Primary wholesalers	33.8	34.5	34.4	35.0	39.7	41.1	42.7	39.8
Direct trade with other sectors	11.3	11.5	11.5	12.0	20.5	18.5	19.6	17.6
buy from producers and sell to industry	10.2	10.6	10.4	11.0	17.5	16.4	17.8	16.0
buy from producers and sell to foreign countries	0.8	0.6	0.6	0.5	2.4	1.3	1.1	1.0
buy from foreign countries and sell to industrial users	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.4
buy from foreign countries and sell to foreign countries	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.1
Direct trade with retailers	13.0	13.3	13.0	13.0	9.2	9.5	9.1	11.4
buy from producers and sell to retailers	12.7	13.0	12.4	12.5	8.3	9.3	8.8	11.0
buy from foreign countries and sell to retailers	0.3	0.3	0.6	0.5	0.9	0.2	0.3	0.4
Sole wholesalers	9.5	9.7	9.9	10.0	9.9	13.1	14.0	10.8
buy from producers and sell to wholesalers	8.8	8.9	8.8	8.9	9.1	10.3	9.4	9.0
buy from foreign countries and sell to wholesalers	0.7	0.8	1.1	1.1	0.9	2.8	4.6	1.8
Secondary wholesalers	41.5	40.8	40.7	40.9	27.9	25.5	24.2	27.9
Intermediate wholesalers	9.2	9.2	10.0	10.0	11.7	9.4	11.1	13.1
buy from wholesaler and sell to wholesalers	9.2	9.2	10.0	10.0	11.7	9.4	11.1	13.1
Final wholesalers	32.4	31.6	30.7	31.0	16.2	16.1	13.1	14.9
buy from wholesaler and sell to industrial users	15.3	14.2	13.4	14.1	8.9	8.6	5.8	6.0
buy from wholesaler and sell to foreign countries	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
buy from wholesaler and sell to retailers	16.7	17.2	17.0	16.6	7.0	7.3	7.1	8.7
Other wholesale trade	24.7	24.6	24.9	24.1	32.5	33.5	33.1	32.3
sell between head office and branches	1.5	1.3	1.1	1.1	4.5	4.9	3.5	3.7
buy between head office and branches	22.6	22.9	23.3	22.5	27.8	28.5	29.4	28.4
buy from its own manufacturing facility	0.5	0.4	0.5	0.5	0.2	0.2	0.2	0.2
Total[b]	294	317	355	337	421	439	565	509

[a] Source: 1985 and 1988 data Distribution Economics Institute of Japan (1993), p. 12; 1991 and 1994 data Distribution Economics Institute of Japan (1999), p. 12.
[b] Wholesaler numbers are in '000; sales are in ¥ trillion.

merchants used to operate close to river crossings and/or shrines — in other words, natural gathering places. In 1997, about 55% of department-store sales were made in the six major cities Tokyo, Osaka, Kyoto, Kobe, Nagoya and Yokohama (Distribution Economics Institute of Japan, 1999, p. 53).

Supermarkets and convenience stores have been becoming more common, although even with a 50% increase in numbers between 1991 and 1997, they still represented only 13.5% of retail establishments in 1997. One of the reasons for the growth of convenience-store numbers was that, following the bursting of the bubble economy in the early 1990s, some of the space in buildings previously occupied by offices became vacant. In many cases, convenience stores occupied the vacant space. Improved economic conditions may see some of these areas revert to office use. Sales by supermarkets and convenience stores grew from 23.2% of retail sales in 1991 to 30.8% in 1997. Convenience stores employ sophisticated technology. This enables them to be manned on a 24-hour basis by relatively unskilled part-time workers. Utility bills, such as electricity and gas can be paid at convenience stores; water is paid for at post offices.

An advantage that supermarkets share with convenience stores over other forms of retailers in the food sector — particularly the small family owned and operated 'mom and pop' shops — is that they are able to provide prepared meals that can be consumed at home. According to Dai-Ichi Kangyo Bank (1998), this part of the food industry is an intermediate category that is distinct from restaurants, on the one hand, and meals cooked at home, on the other. In recent years, this has been perhaps the most rapidly growing part of the food industry in Japan, expanding more rapidly than food consumption in restaurants and more rapidly than the

Table 2
Distribution of retail outlets and nominal sales by type of outlet[d]

Type of store	Establishments (No.)			Sales (%)		
	1991	1994	1997	1991	1994	1997
Department stores	478	463	480	8.0	7.4	7.2
with sales area >3000 m^2 (6000 m^2 in Tokyo and 11 major cities)	395	398	407	7.7	7.2	7.0
with sales area <3000 m^2(6000 m^2 in Tokyo and 11 major cities)	83	65	73	0.3	0.2	0.2
General supermarket	1683	1804	1886	6.0	6.5	6.7
with sales area >3000 m^2 (6000 m^2 in Tokyo and 11 major cities)	1152	1360	1543	4.9	5.6	6.1
with sales area <3000 m^2 (6000 m^2 in Tokyo and 11 major cities)	531	444	343	1.0	0.9	0.7
Supermarkets where sales of clothing, food or living related items <50% of sales	379	468	625	0.1	0.1	0.1
Specialty supermarkets[a] (selling area 250 m^2 and over)	7186	25 171	32 208	5.7	12.0	13.8
clothing sales 70% or more of sales	625	3111	4550	0.4	0.6	0.8
food sales 70% or more of sales	5214	16 096	17 626	4.4	9.2	10.0
living related goods 70% or more of sales	1347	5964	10032	1.0	2.1	3.1
Convenience store (selling area 30 m^2 to under 250 m^2)	41 845	28 595	36 586	4.9	2.8	3.5
24 h convenience store	9627	13 431	20 531	1.1	1.6	2.4
Other supermarket	67 281	84 505	120 577	6.5	5.8	6.8
Specialty store	1 009061	930 143	839 966	47.2	42.6	40.4
clothing 90% or more of sales	156 193	147 478	126 383	5.6	5.1	4.1
food 90% or more of sales	297 015	263 681	230 167	7.9	7.3	6.0
living related goods 90% or more of sales	555 853	518 984	483 416	33.6	30.2	30.3
Miscellaneous retail store/sub specialty store	463 099	429 267	387 982	20.5	22.9	21.5
clothing, food or living related goods <50% of sales	1853	2009	1927	0.1	0.2	0.2
clothing 50% or more of sales	75 537	65 733	62 882	4.0	3.5	3.3
food 50% or more of sales	212 146	185 509	154 914	6.7	6.6	5.3
living related goods 50% or more of sales	173 563	175 857	168 132	9.7	12.6	12.7
Miscellaneous	14 571	na[c]	Na	1.2	na	Na
Total[b]	1 605 583	1 499 948	1 419 685	142 291	143 325	147 754

[a] Data on specialty supermarkets for 1991 are not comparable to the data for 1994 and 1997 because of definitional change.
[b] Sales are in ¥ billion
[c] Not available.
[d] Source: Distribution Economics Institute of Japan (1997), p. 29 and 49, and Distribution Economics Institute of Japan (1999), p. 28 and 48.

consumption of food completely prepared in the home. Sales in 1996 were almost ¥ 4 trillion as compared to ¥ 3 trillion in 1990 (Dai-Ichi Kangyo Bank, 1998, p. 8). Specialty stores, selling items such as clothing, electronic goods, or food and the general category of miscellaneous retail stores are by far the most numerous with their combined numbers exceeding one million in 1991, 1994 and 1997. They provided employment to over 60% of people working in the retail sector (Table 2).

Table 3
Average annual growth in multi-factor productivity in wholesale and retail trade for selected OECD countries, 1970 to 1994[a]

Country	Growth (%)
Japan	2.5
Denmark	1.8
Belgium	1.4
Finland	1.4
Sweden	1.3
Canada	0.9
Germany	0.8
USA	0.6
Australia	−0.1
United Kingdom	−0.1
OECD average	0.7

[a] Source: Industry Commission (1997).

In view of the large numbers of retail outlets and wholesalers relative to Japan's population, the distribution system has attracted criticism. The East Asia Analytical Unit (1997) of the Australian Department of Foreign Affairs and Trade, for example, says that Japan's distribution system is "notoriously inefficient" (p. 251) without saying what they mean by inefficient. Quiggin (1996) explains that efficiency involves a complex mixture of positive analysis and normative judgment. What one group — government advisers in Australia — considers to be inefficient might be considered to be highly efficient by another group — Japanese or foreign businesses that are successfully supplying consumers in Japan.

The Industry Commission (another Australian government agency) made estimates of productivity in the wholesale and retail trade for a number of OECD countries for the period 1970 to 1994 and found that, in terms of multi-factor productivity, Japan had the highest annual growth. Between 1970 and 1994, average growth in labor and capital productivity in the wholesale and retail trade averaged 2.5%, compared with 0.6% for the United States, −0.1% for Australia and 0.7% for the 15 OECD countries involved in the analysis (Table 3). Because the presence of many small firms would, in all probability, pull the industry performance down,[4] this result suggests that large Japanese firms engaged in wholesaling and retailing could be achieving productivity growth rates higher than their western counterparts.

The Commission points out that analyzing an industry, such as the retail industry or the wholesale industry, is difficult. In Japan, this is probably even more so than in countries like the United States, Canada or Australia since many of the premises used for the small family operated retail and wholesale operations are also used as the family home. Often the people running these operations are elderly or are only working part time. Under such circumstances, attempting to place a value on the inputs (such as labor or the building) in these operations is difficult. In addition, factors such as convenience are not easily included in measures of productivity. Japanese households tend to shop more frequently than their western counterparts. This is due to a number of factors. For example, the small size of Japanese houses in the major cities — but not necessarily in the dormitory suburbs that are the outer boundaries of these cities — means that storage space is less than in countries like Australia or the United States . The nature of the Japanese diet, with its high content of vegetables and sea-food, makes households more predisposed to frequent shopping since commodities such as these are usually best consumed fresh and soon after purchase. It is not uncommon to see crustaceans and other sea animals being sold live in Japanese stores. Also, the high population density means that roads in the major population centers are often crowded and that parking areas are congested. Factors such as these result in consumers shopping locally and often. It would be most unusual to see Japanese shoppers climbing onto trains in Tokyo or other major cities loaded down with their grocery provisions for the next week. Survey data obtained for Fukuoka (this is a city of about one million people located on the southern island of Kyushu) give some idea of Japanese shopping patterns. An interesting point that emerges from the table is that ownership of a car does not necessarily lead to a decrease in shopping frequency and an increase in bulk purchases (Tables 4 and 5).

Kotaro (1994) presents data on a range of measures relating to the distribution system. These include annual sales per employee, the gross margin ratio (the ratio of sales minus purchases to sales), the inventory ratio (the ratio of inventories to sales) and the relative

[4] A rough estimate of productivity differences between large and small firms can be obtained from sales per employee. In 1994, sales per employee in the wholesale establishments with 100 or more employees were ¥ 261.8 million, while for firms with 1 or 2 employees, sales were ¥ 41.8 million per employee (Distribution Economics Institute of Japan, 1997, p. 11).

Table 4
Shopping habits in Fukuoka, 1996[a]

Item	Almost every day (%)	2 to 3 times per week (%)	Once a week (%)
Shopping frequency	30.1	42.2	21.2
Use of car			
Often	26.2	45.0	24.3
Occasionally	34.5	39.9	19.4
Not used	38.3	37.0	11.1

[a] Source: Food and Agricultural Policy Research Center, 1997, p. 83.

Table 5
Time spent shopping and the mode of transport in Fukuoka, 1996[a]

Time	On foot (%)	By bicycle (%)	By private car (%)
Up to 5 min	52.9	47.9	42.1
5–10 mins	30.4	40.7	31.2
10–20 min	13.1	8.8	21.1
20–30 min	0.5	–	3.4
30–40 min	–	–	0.2
Other responses	3.1	2.6	2.0
Total	100.0	100.0	100.0

[a] Source: Food and Agricultural Policy Research Center, 1997, p. 83.

value-added productivity ratio (this is the ratio of the value added per employee in the distribution industry to that in the manufacturing industry). Kotaro goes to some trouble to point out weaknesses associated with the data he presents before concluding that "on the basis of aggregate figures, we cannot conclude that the efficiency of the system is less than those of Europe and the United States ..." (p. 80).

3. The Large Scale Retail Store Law

The Large Scale Retail Store Law has been discussed by a number of authors, including Czinkota and Kotabe (1993), Fahy and Taguchi (1994), Riethmuller (1994), Terada (1994), Watanabe (1993) and JETRO (1998). Hence, the following discussion will be kept brief. The Law has been a part of the regulatory landscape in Japan in one form or another for over 40 years. Under the law, new store openings, changes in operating hours and store expansions had to gain prior approval from the Ministry of International Trade and Industry (MITI). MITI sought advice from local businesses (including the operators of small shops) before approval could be given for the establishment of new stores or for changes in the mode of operation of existing large-scale stores. The reason for this is that the Law was introduced to protect the interests of small and medium-sized retailers. Through the 1990s, the government made a number of changes to the Large Scale Retail Store Law in response to social and economic developments within Japan and the pressure of trading partners, particularly the United States. The social and economic developments included the increased affluence of the Japanese, a growth in dormitory suburbs outside the major cities and increased westernization. A 1991 change to the regulations altered the definition of what constituted a Category I large store from one with a sales area of 1500 m^2 to one with a sales area of 3000 m^2 while operating hours for large stores were lengthened. Importantly, the 1991 revisions meant that the maximum time for the various applications and approvals to pass through the approval system was set at 12 months (JETRO, 1998). This compared with up to ten years in certain (extreme) cases under the old arrangements.

A second reform of the Law took place in 1994. Regulations limiting operating hours were relaxed and stores up to 1000 m^2 in area were exempted from the

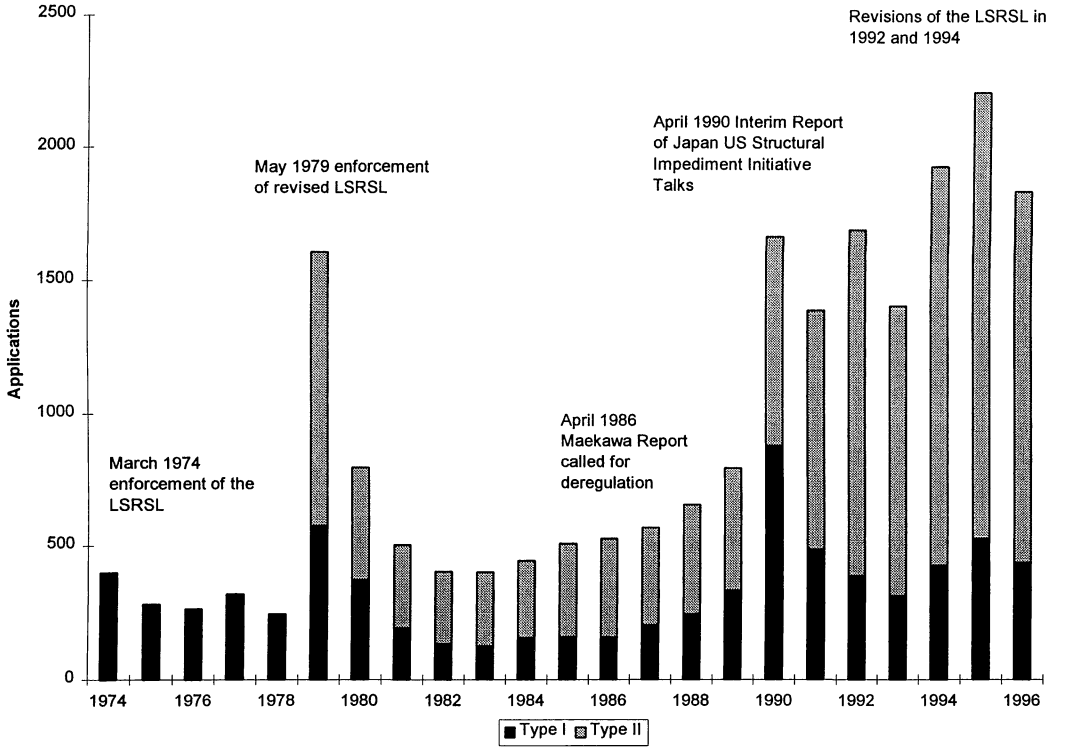

Fig. 1. Applications to open large retail outlets, Japan.

approval process. These and other regulatory changes were seen as ushering in lower costs for Japanese retailers. Figure 1 shows the number of applications for permission to open new stores lodged with the Ministry of International Trade and Industry. It seems to indicate that at least as far as applications to open new stores were concerned, the change in the Law probably did make a difference. However, the late 1980s and the early part of 1990 were the years of the bubble economy. It may have been the retailers' expectation that the boom that led, at least partly, to the large number of applications would last forever.

From the viewpoint of exporting countries, the abolition of the Large Scale Retail Store Law is unlikely to make much difference. While the Law regulated store size, retailers allocating floor space to the sale of imported goods were exempt from some of the regulations that other retailers not handling imported goods had to conform to. This preferential treatment may have been an incentive for retailers to carry imported commodities. Hence, it is possible that the abolition of the Law may actually reduce the carrying of imported commodities by some retailers. Knetter (1997) investigated 37 seven digit German manufacturing industries and found that unit values of German exports to Japan were systematically higher than unit values of German exports to the United States, the United Kingdom and Canada. To the extent that this reflects German firms capturing rents associated with non-tariff measures in Japan — including the distribution system German firms (and presumably firms from other countries) stand to lose these rents with distribution reform in Japan. At a more aggregate level, it is questionable whether abolition of the Law will result in a lowering of Japan's trade surplus. To the extent that removal of the Law leads to a more efficient allocation of resources in Japan, export-oriented industries or import-competing industries might expand, which could lead to an increase in Japan's trade surplus with the rest of the world. Miyagiwa (1993) made this point.

New regulations will come into force when the Large Scale Retail Store Law goes. Under the arrange-

ments that were introduced in 1998 to take effect in 2000, the Central Government will set the standards to be used in the screening of applicants for the opening of large stores. However, detailed criteria and the application of the standards will be the work of the prefectural and local governments. Prefectural governments will have to be consulted and their approval obtained before new stores can be constructed while the local governments will designate, in accordance with town planning and zoning laws, where large retail stores may be constructed. Environmental consideration will be important, as will social issues, such as traffic noise and congestion. Opponents of the proposed system say that local governments could use their power to tighten restrictions on large retailers.

Critics of the current distribution system have argued that it has contributed to high prices in Japan. However, this ignores the services that are embodied in the various components of the distribution system. For example, the small family-operated shops, located near suburban railway stations, are extremely convenient for single-person households and for households where married couples both work, since shopping can be done quickly on the way home from work. In a country where 11 million of the 43 million households in 1995 were single-person households, this is of some importance (Asahi Shimbun, 1996, p. 50). Small shops provide higher levels of personal service than is usually found in a supermarket, providing information on product quality and in some cases, short-term credit to shoppers.[5] In addition, these shops perform a storage function for Japanese consumers which is important, given the small size of Japanese houses in the major urban centers. In any case, the evidence that the Japanese distribution system is complicated and expensive is not clear-cut. Pirog and Lancioni (1997) find, from a comparison of distribution costs in the United States and Japan, that distribution–cost structures are very similar for a number of product categories in the two countries.

[5] Neilsen (1993), based on his experience as a food industry executive in Japan, points out that Japanese companies do not draw a clear line between a product and a service. Greeting a customer or providing gift-wrapping services, perhaps considered wasteful by some, are parts of the product produced by many Japanese firms.

The establishment of large supermarkets does not have universal support in Japan. Recent surveys of consumers have shown that traffic congestion, the construction of unsightly car parks and the impersonal nature of supermarkets are common concerns of consumers and residents living close to supermarkets. Elderly consumers — a group whose importance is rapidly increasing — are more likely to prefer the personal service of small stores to the less personal service offered by supermarkets.

4. What difference would a changed distribution system for food make to Japanese consumers?

This part of the paper will present some highly approximate estimates of what effect changes in the distribution system might have on Japanese consumption of a range of foods. To obtain these estimates, some idea is needed of how prices and incomes in Japan might change as a result of a reformed distribution system. Estimates of the difference between Japanese food prices and what the food prices 'should' be differ, depending on where one looks for information. The Australian study referred to earlier, citing OECD data, said that Japanese prices at the factory gate for products that they did not specify are 14 and 3% higher than those in the United States and Germany, respectively; yet, at the retail level the prices were 50% dearer than in the United States and 35% higher than in Germany (East Asia Analytical Unit, 1997, p. 254). Thus, it might be that Japanese prices are perhaps 40% higher than in other high-income countries because of the distribution system. On the other hand, Japan's Ministry of Agriculture, Forestry and Fisheries (MAFF) claims Tokyo's food prices in November 1996 were about 20% higher than in other major cities, such as New York, Paris and London. Moreover, the MAFF study found that foods popular among Japanese consumers — such as pickled plums, soysauce and miso — are cheaper in Tokyo than in Paris, Geneva and London. The only city they were dearer (and this was by 4%) was New York. (Japan International Agricultural Council, 1997; Food and Agricultural Policy Research Center, 1997). Such divergent estimates highlight the difficulty of making cross-country comparisons of prices at the retail level.

Food sold in high-income countries usually has a high level of service embodied in it. Bandyopadhyay (1998a) observes that as an economy develops, "household income and wage rates both increase, raising the opportunity cost of time and effort that the household spend on purchasing activities. Thus, the shadow price and demand for distribution services will rise too" (p. 171). There are also differences in food quality, even within countries, as the following example of beef prices collected from Ito Yokoda's Higashi-Murayama store shows.[6] This store sells beef sliced 2–3 mm in thickness for use in sukiyaki, a popular Japanese dish. The correct thickness is critical for the cooking process. If thicker than 3 mm, or thinner than 2 mm, the beef cannot be used in sukiyaki. In March 1998, the prices per 100 g. of beef were as follows: Super Wagyu ¥ 680; Wagyu ¥ 498; Holstein ¥ 328; and Angus ¥ 258. The first three types of beef are domestically produced while the last comes from Nebraska. Other stores, such as D-Mart (operated by Japan's largest retailer in terms of 1997 sales, Daiei Inc.) were selling US beef prepared in a similar fashion for ¥ 108 per 100 g. It is not feasible to make comparisons at this level of detail so one is forced to use published estimates. On the basis of the estimates presented earlier, it might be argued that, with a completely revamped distribution system conforming to some ideal that critics of the distribution system have not publicly outlined, Japanese food prices could fall by about 30% — the average of the 40% price difference reported in the Australian report and the 20% estimated by MAFF. With regard to the effects on Japanese incomes of a reformed distribution system, an increase of 1% is plausible, although a conservative estimate might be 0.5% and an optimistic one 1.5%.

Information on price and income elasticities is also needed. Kanai et al. (1993) provide a comprehensive listing of estimates of price elasticities that have been obtained for food items from over a dozen (mainly Japanese) studies. They also provide estimates of expenditure elasticities. Although the expenditure elasticity is, in general, not the same as the income elasticity, expenditure elasticities were used as approximations to income elasticities.

The @RISK (Palisade, 1996) spreadsheet program was used to estimate percentage changes in consumption for rice, dairy products, different types of beef, fruits and beverages. For those items where a minimum and a maximum value of the price or expenditure (income) elasticity was found, a uniform, probability distribution was specified and elasticity values were sampled from this distribution. The price change associated with a revamping of the distribution system and the associated income change were specified as a triangular distribution, with a minimum value, a maximum value and a most likely value set. For the distribution of price changes, the minimum was −40%, the maximum −20% and the mean −30%. For the income change the values were 0.5%, 1.5% and 1%. The percentage change in consumption was the sum of the price change times the price elasticity and the income change times the expenditure (income) elasticity. Cross price effects were not included. Five hundred simulations were run. The estimates of the percentage change in consumption are in Table 6.

The results should be regarded as extremely tentative, but nonetheless we can make the following points. First, the change in the distribution system is unlikely to make much difference to rice consumption. Per capita consumption is estimated to increase, on average, by about 5%, but the consumption increase could be below 2%. Japanese consumption of rice has been declining as diets have become increasingly westernized. Changes in market access that seem likely to continue after the current minimum market access arrangements finish will no doubt see Japanese farmers competing with imports on the basis of quality and uniqueness. Second, while it seems that the consumption of imported beef would be expected to increase with changes in the distribution system, the domestic beef producers would benefit to a much greater extent than countries exporting to Japan. This is because both Wagyu beef and dairy beef show very high increases in consumption when price falls and income increases. However, as indicated earlier, the estimates in Table 6 do not include cross commodity effects. It is conceivable that, had these been included, changes in consumer prices associated with a revamped distribution system may have resulted in Japanese consumers

[6] Ito-Yokado Co. Ltd, in 1997, was the second largest of Japan's retailers (after The Daiei, Inc.) with ¥ 1.547 trillion in sales. It was also the largest operator of convenience stores as the parent company of Seven-Eleven Japan Co., Ltd (Distribution Economics Institute of Japan, 1999). It is also the parent company of the 7-Eleven Group in the USA.

Table 6
Percentage change in per person consumption of selected food items, Japan

Food item	Change in consumption			Elasticities	
	minimum (%)	maximum (%)	mean (%)	price	income
Rice	1.9	8.9	5.2	−0.14 to −0.26	−0.46 to −1.21
Dairy products	17.5	41.4	27.9	−0.72 to −1.09	0.5 to 1.09
Wagyu beef	63.2	121.6	93.2	−3.02	2.55
Dairy beef	38.9	73.2	56.0	−1.78	0.77
Imported beef	20.3	39.1	30.3	−0.95	1.81
Fruits	17.0	41.4	28.2	−0.71 to −1.06	1.56 to 1.74
Beverages	10.8	20.0	15.7	−0.46	1.92
Price change	−20.0	−40.0	−30.0		
Income change	0.5	1.5	1.0		

cutting down their consumption of imported beef and substituting domestic dairy and Wagyu beef for imports. Third, the consumption of dairy products and fruit might increase by about 40% on average. What is more likely, however, is that Japanese consumers would substitute higher quality fruits and dairy products, rather than increase their consumption by the amount indicated from the simulations. Finally, beverage consumption is predicted to change the least of all the items. This reflects the fact that the demand for beverages is fairly price inelastic.

5. Concluding comments

Claims that the Japanese distribution system is closed, difficult and inefficient may have been a disincentive for some exporting firms to attempt to get into the Japanese market. On the other hand, the recent changes in the system and the planned removal of the Large Scale Retail Store Law should not be seen as guaranteeing easy access to Japanese consumers. The Japanese food-processing industry is a large industry that has advantages over its foreign competitors. Its brands are well known to Japanese consumers, and firms in the industry would be expected to better understand their market than foreign competitors, since most of these would be western. Generally speaking, consumers — not just in Japan — seem to prefer domestically processed foods to imported foods.

For foreign firms planning on entering the Japanese market, it needs to be remembered that even if the reform of the distribution system lowers costs, Japanese food processors would benefit just as much as their foreign competitors, and possibly more because in many food industries Japanese firms tend to be dominant. Therefore, it is possible that reform of the distribution system — argued for by countries such as the United States and Australia — could actually see firms from these countries face increased competition on international markets from Japanese firms faced with improved balance sheets because of lower costs and/or improved sales in Japan. Bandyopadhyay (1998b) found from an econometric analysis of trade flows between 23 OECD countries for 1960 to 1990, that lowering distribution costs increases a country's exports and may or may not increase its imports.

The removal of the Large Scale Retail Store Law means, in theory, that it will be easier for increased openings by large stores. However, the cost and availability of land and the profitability of large supermarket operations relative to other investment alternatives may result in firms deciding no expansion is the best policy. The Ministry of Agriculture, Forestry and Fisheries is generally opposed to the use of agricultural land for US style malls. This opposition strikes a common chord with many Japanese. The view that has been taken in this paper is that the Japanese distribution system has evolved in a manner that fits in well with the Japanese environment and it may well have developed as it has with or without the regulatory framework within which it operates. It is continuously evolving, just the distribution systems in Japan's trading partners are continuously evolving. The fact that the Japanese system has some differences from that found elsewhere does not mean that it is inefficient, either in a technical sense or in an economic sense.

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