Forum

The Expansion of Japanese Food Processors in the Asia-Pacific Region

Paul Riethmuller and Joseph C.H. Chai*

Japanese food processors have been faced with internal and external squeezes in recent years. Internally, the industry is faced with an overall demand ceiling due to Engel's law and a rapidly changing demand structure due to the "westernisation" of the Japanese consumers' taste. Externally, the industry is faced with increased import competition as a result of the liberalisation of the Japanese import market for agricultural and processed food products. Under these pressures, performance of the Japanese food processors in terms of productivity and profitability, is found to be below average, compared with Japanese manufacturing as a whole. Associated with the deteriorating productivity and profitability performance, Japanese food processors have stepped up their foreign direct investment (FDI) activities in the Asia-Pacific region. This development provides both challenge and opportunities for Australian producers and food processors. As most of the Japanese FDIs are either domestic market or export oriented, they are likely to pose serious competition for Australian firms. At the same time, through joint ventures with Japanese firms, the Australian food processors may acquire the inside knowledge of the Asian market which would enable them to capitalise on the enormous opportunities in the Asian food market.

1. Introduction

In recent years, trade barriers in the Japanese market for agricultural commodities and food products have been declining. The substitution of tariffs for import quotas on beef, fruit juices and dairy products are examples of the types of changes which have occurred. Farmers in Japan have responded to these changes in a variety of ways: some have altered the farm's enterprise mix; some have enlarged the scale of their farms; and in more extreme cases, farmers have opted to leave agriculture. The Japanese food processing industry is the major client of the agricultural sector. In 1985, about 90 per cent of the agricultural commodities used in the food and beverage industry in Japan were domestically produced. The protection given to Japanese farming has resulted in food processing firms being faced with prices for inputs such as sugar, milk and rice which are much higher than international prices. Some firms in the food processing industry have claimed this has limited their opportunities on international markets and adversely affected their competitiveness in Japan, causing them to criticise the protection provided to Japanese agriculture. Yet the food processing sector is provided with a high level of protection as measured by effective rates of protection (Yarbrough and Yarbrough 1991).

The food manufacturing sector is affected by the new policy environment for agriculture. Many of the firms engaged in food processing are now either facing increased competition within Japan from foreign food manufacturers or are facing the prospect of increased foreign competition. On the other side of the coin, Japan's food processors will have increased access to lower priced raw material inputs, which will help improve their competitiveness in Japan and in other countries.

The removal of trade barriers has provided an incentive for Japanese firms to set up offshore operations because products exported to Japan - produced by either Japanese or non-Japanese firms - now face fewer barriers than was the case in the late 1980s. This relocation of activities can come about through Japanese firms making direct foreign investments or through the establishment of joint venture arrangements with non-Japanese firms. There are also a variety of other commercial arrangements available to firms, including entering into alliances with foreign

* Department of Economics, University of Queensland, St Lucia

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firms. Relocating of the firm's activities is perhaps the most visible, and often the most controversial, action taken by Japan's food processing firms.

After setting out the structural characteristics of the Japanese food processing industry, this paper examines the offshore activities of Japanese firms in the industry, focusing specifically on the Asia-Pacific region. This region has been explicitly identified by policy makers and by industry representatives in Australia as having the greatest export potential for the Australian food processing industry (Button and Crean 1992; Department of Foreign Affairs and Trade 1994; National Farmers' Federation 1993). Therefore Japanese decisions which impact on markets for processed foods could have significant effects on Australia's export prospects.

2. Characteristics of the Japanese Food Processing Industry

One of the major features of the Japanese food processing industry is its breadth and variety. It consists of two major industries: food and beverages. The food industry consists of 43 different branches producing a wide range of products ranging from seaweeds processing through soy sauce to tofu. The beverage industry is sub-divided into seven branches: soft drink, wine, beer, sake, liquor, tea and coffee, and ice manufacturers.

2.1 Employment and Number of Firms

The Japanese food processing industry provided employment to 1,237,000 people in 1990. These workers represented about 10 per cent of those employed in manufacturing. Though employment declined between 1985 and 1990, the number employed in 1990 was well above the number employed thirty years earlier.

In 1990, there were about 45,000 establishments involved in food manufacturing. About 73 per cent of these establishments had fewer than 20 employees in 1990 while less than 1 per cent had more than 300 employees (Table 1). This pattern of employment is almost the same as the employment structure of Japanese manufacturing as a whole and reflects the numerical dominance of small firms.

The number of firms in food manufacturing in Japan is declining, which may reflect the maturity of the industry and the relocation of production facilities offshore. Also, it could be due to takeover and merger activity as firms seek to achieve economies of scale. In 1982, the first year in which data comparable to that shown in Table 1 were published, there were about 56,700 firms with four or more employees in food manufacturing out of 428,000 in all manufacturing (Statistics Bureau 1986).

Table 1: The Size Distribution of Japanese Firms in Food Manufacturing and in All Manufacturing, 1990[a]

Number of employees	Percentage of firms	
	All manufacturing	Food manufacturing
under 9	56.0	54.0
10-19	19.8	19.1
20-29	10.3	11.5
30-49	5.3	5.5
50-99	4.8	5.7
100-199	2.2	2.8
200-299	0.6	0.8
300-499	0.4	0.4
500-999	0.3	0.1
1,000 or more	0.2	0.1
Total	100.0	100.0
Number of companies	435,966	45,090

[a] The data are for firms with at least 4 employees.

Source: Ministry of International Trade and Industry (1992).

A small number of firms still dominate the Japanese market for many processed foods. This suggests that scale economies may be important. It may also be taken as an indication of the importance of brand names to Japanese consumers. For example, the largest three firms in the instant (cup) noodle market had about 81 per cent of the market; for edible oils, about three quarters of the market was held by the top three firms; and the three firms with the largest share of the beer market supply all but 8 per cent of the market in 1992 (Table 2) (Distribution Economics Institute of Japan 1994). For selected foods it is apparent that production and market share is dominated by a small number of firms except for the traditional Japanese foods of sake, green tea and miso. Some changes are likely to occur in the next few years. Government regulations that have played a major part in the high level of concentration in the beer industry have recently been changed, and this will allow smaller firms into the industry. Similarly, the relaxation of import restrictions on ice cream and other dairy products will result in an erosion of the market share held by the major firms.

Leading companies in the food processing industry include Snow Brand Milk Products Co. (dairy products, margarine and fruit drinks), Nissin Food Products Co., Ltd (noodles), Kirin Brewery Co. Ltd (beer), Kikkoman Corporation (soy sauce), Coco Cola (Japan) Co. Ltd (canned coffee, fruit drinks and cola drinks) and House Foods Industrial Co. Ltd (microwavable convenience foods). Although only two Japanese firms made it into the world's top 20 food processing firms in terms of 1990 sales, 13 Japanese firms were in the top 50[1]. This compares with 26 for the United States and eight for Britain.

2.2 Changes in the Foodstuff Mix 1977-90

Production in Japan's food industry expanded by 25 per cent in volume terms between 1977 and 1990, or about three times more quickly than the population growth. The production index for sugar was the only one to decline, possibly reflecting the substitution of

[1] The firms were in order Taiyo Fishery, Snow Brand Milk Products Co., Kirin Beer, Nippon Ham, Asahi Beer, Ajimoto, Sapporo Beer, Nihon Suisan (Japan Marine), Nichirie, Yamazaki Bread, Ito Ham, Meiji Milk Products Co. Ltd. and Nissin Mills.

Table 2: Production Share and Market Share Held by Three Largest Firms in Selected Food Industry, Japan

Product	Percentage of Japanese production held by largest three firms		Percentage of market held by largest three firms
	1985	1988	1992
Western foods			
Milk powder	37.1	36.1	na
Cheese	71.2	73.2	51.7
Ice cream	52.1	47.0	50.3
Ham	39.8[a]	40.1[a]	30.0
Drinking milk	37.1	36.0	57.3
Beer	89.7	89.4	92.0
Bread	21.0	43.2	52.8
Japanese foods			
Sake	9.7	9.9	19.2
Soy sauce	50.4	51.1	44.1
Green tea	na	na	4.8
Oil for tempura	59.7	59.9	na
Miso	17.3	21.3	na

na - not available
[a] Ham and sausage

Source: Distribution Economics Institute of Japan (1994); Manufactured Food Industry Association (1991).

sweeteners based upon corn syrup and artificial sweeteners for sugar. Marine products, an important part of the Japanese diet, exhibited almost no growth while prepared food and beverages exhibited the most dramatic growth (Table 3).

Table 3: Production Indexes for Food Industries, Japan 1990 (base 1977 = 100)

Food industry	1990
All food industries	125.3
Livestock food	141.8
Processed meat products	158.1
Milk and dairy products	137.7
Marine products	103.5
Milled grain and processed grain products	110.8
Edible oils and processed oil products	132.4
Sugar	75.6
Seasonings	110.5
Beverages	184.2
Sweets	112.6
Prepared food	316.5
Other foods	132.3
Alcoholic beverages	124.9

Source: K. Tsuchiya, personal communication.

2.3 Internal and External Pressures on the Food Industry

In recent years, Japanese food processing industries have been under both an internal and external squeeze. Internally, the industries have been faced with shrinking market demand for their products and a rapidly changing demand structure. In line with Engel's law, the proportion of total household expenditure devoted to food and beverage decreased from 37 per cent in 1969 to 27 per cent by 1991 (Statistics Bureau, 1991).

The income elasticity of demand for most foods tends to be rather low and in some cases negative (Table 4). However, the growth of income and the westernisation of Japanese consumer taste as well as the entry of women into the labour force has generated increased demand for certain types of food, such as western type and convenience foods. The former include livestock products, dairy products, fruits and beverages, the income elasticity of demand for which tends to be high. The latter includes cooked food and eating out. While the percentage shares of most food items in total household food expenditures has been either stagnant or declining during the period 1969-1991, the share of cooked foods and eating out increased sharply. The former rose 3.3 per cent in 1969 to 7.9 per cent and the latter from 9.5 per cent in 1969 to 16.3 per cent by 1991 (Statistics Bureau, 1991).

Table 4: Changes in Quantity Demanded and Income Elasticities of Demand for Major Food Items in Japan, 1963-1985

Item	Average annual growth in demand (%)	Income Elasticities
Rice	-4.0	-1.3
Other cereals	0.7	-0.3
Fish	-0.9	-0.5
Beef	1.2	0.8
Pork	4.4	1.3
Chicken	7.3	1.4
Meat products	2.1	2.1
Fresh milk	2.7	0.9
Dairy products	3.6	1.3
Eggs	0.8	1.3
Vegetables	-0.5	0.4
Fruit	1.7	1.9
Oils and fats	2.9	0.6
Other food	1.4	0.4
Beverages	3.1	1.8
Eating out	2.9	1.4

Source: Sasaki (1993), pp. 434 and 437.

Externally, the Japanese food processing industries are faced with increased import competition. This has happened because of the recent liberalisation of Japan's import market for agricultural and food products. In the past, food processing was under a high level of government protection. At the completion of the Tokyo Round in 1979, the effective rate of protection on Japan's agriculture was about 20 per cent, while on food processing, it was about 50 per cent. This made the food processing industry the most highly protected of Japan's manufacturing industries (Yarbrough and Yarbrough, 1991).

The effective protection rate estimates could be on the conservative side. A number of writers have argued that Japanese business practices represent a non-tariff barrier to entry to the Japanese market. Others have drawn attention to the distribution system, and claimed that this is also a barrier to imports (Anderson and Riethmuller 1992, Bhagwati 1991, Fallows 1989, Ito 1992 and Smith 1991).

Japan has been progressively relaxing import restrictions on food products over the past several years. The result of this progressive liberalisation is that 13 product groups were restricted by quantitative restrictions in 1991[2] compared with 22 just three years earlier. This change was a significant step because Japan had resisted foreign pressure to implement reform of its agricultural protection for many years, keeping the number of product groups protected from import competition by quotas at 22 from 1974 until 1988. Table 5 provides details of the import levels for some of the commodities belonging to the product groups which lost the protection provided by import quotas. While it is apparent that, for many products, the quota was an important restriction, this was not always the case. For example, grape juice imports barely changed, while imports of fresh oranges and orange juice declined. The decline in imports of fresh oranges is somewhat ironic because the Japanese government fought long and hard against United States pressure to maintain import quotas, while the US government regarded Japan's refusal to remove import quotas on oranges as a sign of Japanese intransigence.

[2] Under Japanese law, importers must apply to the government if they wish to be allocated part of the quota. While much of the responsibility for the administration of import quotas lies with MITI, the MAFF is also consulted when decisions are made concerning imports and the allocation of quotas among importers.

Table 5: The Removal of Japanese Import Quotas and Imports

Item	Unit	1985	1986	1987	1988	1989	1990	1991	1992
Orange juice quota[a]	kl	12,500	15,000	8,500	15,000	38,500	48,000	----liberalised----	
Orange juice imports	kl	14,999	12,660	10,810	11,149	20,649	29,067	35,678	55,834
Grapefruit juice quota	kl	6,500	----------	----------	----------	liberalised	----------	----------	----------
Grapefruit juice imports	kl	na	na	na	11,089	11,062	11,731	9,465	14,092
Grape juice quota	kl	4,000	4,500	5,000	6,000	8,000	----------	liberalised	---------
Grape juice imports	kl	3,904	3,466	3,828	5,423	7,489	7,539	11,562	10,448
Apple juice quota	kl	6,500	3,000	4,000	6,000	18,000	----------	liberalised	----------
Apple juice imports	kl	na	na	na	3,956	14,868	42,724	37,454	na
Pineapple juice quota	kl	na	500	na	500	550	----------	liberalised	---------
Pineapple juice imports	kl	357	329	516	428	623	5,034	8,308	5,027
Fresh orange quota	kt	104	115	126	148	170	192	-----liberalised	-----
Fresh orange imports	kt	112	117	123	115	128	145	82	172
Beef quota	kt	159	168	214	274	334	394	---liberalised	------
Beef imports[b]	kt	151	179	220	270	349	376	353	413
Ice cream quota	t	0	0	0	100	110	----------	liberalised	---------
Ice cream imports	t	0	0	0	129	589	2,975	na	na

[a] Does not include straight orange juice.
[b] Beef imports under quota.

Sources: Fruit juices: Jetro (1991); fresh oranges: Jetro (1990); K. Tsuchiya, personal communication, 20 April 1993.

The removal of an import quota has been accompanied in some cases by a surge of interest by firms in the product whose quota has been removed, as the experience with beef and ice cream showed. Prior to the removal of import quotas on beef, there were 38 companies involved in importing beef. Other firms were prevented from entering the industry by the regulatory power of the Livestock Industry Promotion Corporation. When the quota system was abolished in April 1991, some 150 firms ranging from real estate brokers to steel trading companies - rushed to import beef. But the number quickly dropped to about 50 as firms learned that money could be lost very quickly (Mainichi Daily News, 1991).

Import quotas on ice cream kept imports out of Japan until 1988. In that year, the Japanese government announced the availability of a quota of 100t of ice cream and nearly 50 leading supermarkets and dairy industry companies applied for the quota. However, according to industry sources, once freight charges and import duties had been paid, firms found that the landed price of the imported product was not much different to the price of the domestic product. As a result, many of these firms have been deterred from continuing with importing. Levels of imports in 1990 were still very high, however, compared with initial quota levels.

2.4 Capital Intensity, Productivity and Profitability

Food processing firms in Japan used to employ relatively labour-intensive techniques of production. But an analysis of the balance sheets of 91 food processors and 1046 manufacturing firms suggests that their capital intensity rose more rapidly in recent years than that of the manufacturing sector as a whole. By 1990, the capital-intensity of food processing industries had not only caught up, but also surpassed, that of manufacturing as a whole (Manufactured Food Industry Association 1993, p.119).

The relatively high growth of capital intensity of the food processing industry is reflected in the high growth of capital stock in relation to employment. During the 1983-1990 period, employment in the food processing industry increased only marginally, averaging 1.8 per cent per annum, whereas capital stock growth averaged 9.6 per cent annually (Manufactured Food Industry Association 1993, p. 121).

Despite the increased capital intensity of Japanese food processors, both the level and the growth of their labour productivity has remained low in relation to those of manufacturing industry as a whole. As Table 6 shows, the average labour productivity of the food processing industry was less than that of manufactur-

Table 6: Labor Productivity[1], Real Wage Rate[2] for Food Processing and Manufacturing Industries, 1983-90 (Y'000)

Year	Food Processing		Manufacturing	
	Labour productivity	Real wage rate	Labour productivity	Real wage rate
1983	8,552	419	8,776	405
1984	8,645	416	9,697	426
1985	8,840	427	9,647	452
1986	9,371	449	9,775	490
1987	8,955	435	10,831	514
1988	9,067	450	12,345	549
1989	8,838	451	12,921	570
1990	9,216	455	13,227	593
Average annual growth (%)				
1983-90	1.1	1.2	6.0	5.6
Average 1983-90	8,936	438	10,902	500

[1] Value added per employee in real terms.
[2] Average monthly wage in real terms.

Source: Manufactured Food Industry Association (1993)

ing as a whole and the rate of growth of labour productivity during 1983-90, at 1.1 per cent per annum, was also significantly below that of the manufacturing. It is not clear what caused the relatively slow growth of labour productivity in the food processing industry in spite of the increased capital intensity. One of the plausible explanations may be in the limited possibility of substitution of capital for labour.

The relatively low labour productivity of Japanese food processors is also reflected in their relatively low wage rates. The average real wage rate in the food processing industry during 1983-1990 has declined relative to that of the manufacturing industry. During the same period, while the real wage rate grew at an annual average rate of almost 6 per cent in manufacturing industry, real wage rates in the food processing sector moved upward at 1.2 per cent per annum on average.

Given the data on labour productivity and capital intensity of the food processing industry, its capital productivity can be derived as the ratio between its labour productivity and capital intensity. As Table 7 shows, capital productivity of Japanese food processors trended lower than that for the manufacturing sector. During 1983-90, while capital productivity in the manufacturing sector as a whole stagnated, that of food processing industries actually declined.

Total factor productivity is a weighted average of labour and capital productivity. Since both labour and capital productivity of Japanese food processors were lower than those of the manufacturing sector as a whole, we may conclude that total factor productivity of the food processing industry was in general lower than that of the manufacturing sector as a whole during 1983-90. Furthermore, since labour productivity in the food processing sector recorded only marginal growth, and capital productivity actually declined by almost 34 per cent between 1983 and 1990, it is concluded that total factor productivity of Japanese food processors was either stagnant or may even had declined during 1983-90.

In terms of the deflated ratio of ordinary profits to capital, the profitability performance of the Japanese food industry was below that of all manufacturing in the late 1980s (Table 7). However, prior to this, the food industry had consistently outperformed firms involved in manufacturing. A number of financial factors could have been behind the declining profitability performance of the food processing industry in recent years. First, the appreciation of the yen would have resulted in a fall in the yen denominated prices of imports. Second, the removal of some import barriers on processed foods and/or reductions in tariff levels meant that imports could be landed at a lower price in Japan. Third, there was a surge of imports of foodstuffs in the late 1980s which may have made the

Table 7: Capital Productivity[1] and Real Profitability[2] for Food Processing and Manufacturing Industries, 1983-90

Year	Food processing		Manufacturing	
	Capital productivity	Real profitability	Capital productivity	Real profitability
1983	1.04	8.0	1.01	7.2
1984	1.01	8.0	1.06	8.0
1985	0.99	7.8	1.00	6.9
1986	1.01	8.1	0.95	5.7
1987	0.92	7.7	1.00	6.9
1988	0.86	7.0	1.09	8.3
1989	0.74	6.3	1.07	8.5
1990	0.69	6.8	1.01	7.7
Average annual growth (%)				
1983-90	-5.7	-2.3	0.0	1.2

[1] Derived as labour productivity divided by capital-labour ratio.
[2] Nominal profits per unit of capital deflated by appropriate price indexes.

Source: Manufactured Food Industry Association (1993)

Table 8: Growth Rates in Productivity and Profits in Food Manufacturing Industry 1983-90

Variable	Food Processing	All Manufacturing
Employment	+1.8	-
Capital Stock	+9.6	-
Labour/Capital Ratio	-6.7	-5.6
Capital Productivity	-5.7	0.0
Real Wages	+1.2	+5.6
Non-Labour Cost/Capital	-1.6	-1.7
Profits/Capital	-2.3	+1.2

Source: Manufactured Food Industry Association (1993)

processed food market more competitive. Further investigation is needed here.

It is clear that net output in food processing has not kept pace with the growth of investment for structural reasons. Compared with manufacturing as a whole, real output per unit of capital employed has declined in the food processing industry (Table 8). Labour employed per unit of capital has declined consistently over all industry 1983-90. However, the real wage rate is rising in both sectors although at a greater rate in all manufacturing which would explain the trend in the labour capital ratio. Non-labour costs have also declined relative to capital employed. Given these trends, profits per unit of capital has fallen markedly for food processing industry in the period 1983-90 compared with positive growth in all manufacturing. As already noted, labour productivity in food processing has not been enhanced by greater investment

3. Japanese Direct Foreign Investment In Food Processing

Japanese foreign direct investment (FDI) resumed in 1951 after the second world war and since then it has been an important feature of the international economy. The amount of foreign investment was small through the 1950s and early 1960s. This was because the government imposed stringent restrictions on foreign transactions to protect Japan's weak balance of payments position.

A rapid increase in Japan's direct foreign investment occurred in 1972 and 1973, with much of it going into South-East Asia. The Economic Planning Agency (1992) attributes the expansion at this time to the appreciation of the yen which occurred in the aftermath of the breakdown of the Bretton Woods system of fixed exchange rates and the availability of inexpensive labour in South-East Asia.

The second oil crisis, and the uncertainty associated with it, slowed foreign investment until the second major surge began in the mid to late 1980s. This resulted in Japan's overseas investments more than doubling from US$14.5 billion in 1986 to US$35.2 billion in 1991. The appreciation of the yen, which occurred following the Plaza Accord in 1986, was possibly the major underlying reason for this expansion. Concerns in Japan about increased protectionism in export markets and strong global growth may have been additional factors behind this phenomenon. Japanese investment in foodstuffs was an important part of the foreign investment. It increased from slightly more than US$1 billion in 1986 to around US$3.3 billion in 1989 (Economic Planning Agency, 1992).

A noteworthy feature of Japan's direct foreign investment has been the decline in the relative importance of the primary sector. From the latter half of the 1960s and through the 1970s, the primary sector's share of direct foreign investment was high, reflecting the Japanese government's desire to secure access to supplies of primary products. In the early 1980s, the share of the primary sector began to decline as concern about resource security subsided.

3.1 Geographic Location of Foreign Investment

Data collected by the Ministry of International Trade and Industry for 1989 on the establishment of subsidiaries by Japanese manufacturing firms showed that

Table 9: Regional Location of Subsidiaries

Region	Manufacturing (per cent)	Food Manufacturing (per cent)
North America	26.7	25.2
Central/South America	6.1	6.1
Asia	51.9	46.9
Middle East	0.5	nr
Europe	12.1	6.1
Oceania	2.7	4.7
Africa	nr	10.9
Total	100.0	100.0
Number of firms	3,182	147

nr = not recorded.

Source: MITI (1992).

the Asian region was the preferred destination, followed by North America[3]. Oceania attracted just under 3 per cent of the number of subsidiaries established by Japan's manufacturers. Investments in Asia have become the most profitable; in the year to March 1992, Japanese affiliates in Asia made profits of ¥487 billion, compared to ¥6.6 billion in Europe and a loss of ¥208 billion in North America (*Economist*, 1993a). The geographic location of the investment in food manufacturing was almost the same as that of the manufacturing sector as a whole. Asia and North America were the main destinations, followed by Europe and Central/South America. Oceania was the least important region though with proportionally higher investment in food manufacturing (Table 9).

3.2 Types of Off-shore Arrangements Entered into by Japanese Firms

It is not easy to obtain comprehensive data on the activities of Japanese firms in other countries, particularly where such activities take the form of collaborative arrangements with host country firms. Official government statistics include only the deals which involve an exchange of equity. Even then, there is no guarantee that all of the investments will be included because of the way the data are collected.

Besides governments and international agencies, trade magazines, the financial press and private sector researchers also track foreign investment. These sources have been used to illustrate some of the Japanese business arrangements entered into with non-Japanese firms in the Asia-Pacific region. Table 10 provides a selection of the FDI activities of Japanese firms associated with the food processing or food manufacturing industries in other countries in the Asia-Pacific during the late 1980s and early 1990s.

It is apparent that much of the food investment activity in the Asia-Pacific area has involved products being produced mainly for the Japanese market. In most cases, the products involved were those where either the level of protection in the Japanese market has been reduced or the form of the protection has been modified. Many of the Japanese companies involved in activities with foreign firms are major producers of processed foods, and the major form of Japanese food FDI activities in the Asia-Pacific region is either joint venture or wholly-owned enterprise according to this selection.

3.3 Reasons for Foreign Investment

The increased FDI activities of Japanese food companies could be related to the deteriorating productivity

[3] MITI conducts questionnaire surveys of Japanese enterprises' activities abroad: a detailed survey has been conducted every three years beginning from 1981, and since the early 1970s a less detailed survey in those years when the large scale survey is not done. Questionnaires are sent to all firms that have reported their acquisitions to the government of foreign securities. The response rate is about 50 per cent but the large corporations always respond.

Table 10: Selected Japanese Food Processing FDI Projects in Asia-Pacific

Japanese Firm	Product	Location	Form	Market Orientation	Year
Snow Brand Milk Products	Milk powder	Australia	WOE	Exports	1993
Snow Brand Milk Products	Dairy products	Hong Kong	WOE	Domestic market	1992
Meiji Milk Products	Milk and dairy products	Thailand	JV	Exports and domestic market	1988 1990
Meiji Milk Products	Milk powder	New Zealand	-	Exports	1992
Sumitomo	Milk powder, infant and children's food	Malaysia	WOE	Domestic market	-
Hoko Fishing	Cheese	S Korea	JV	Exports	-
Shinmei Chikusan	Beef	China	JV	Exports	1992
Yakult Honsha	Milk drink	Australia	WOE	Domestic market and exports	1994
Mitsubishi, Marubeni, Manno Corp, Itoh Ham	Beef Beef Beef Beef	Australia Australia Australia Australia	WOE WOE WOE WOE	Exports Exports Exports Exports	1991 1991 1991 1991
Snow Brand Milk Products and Sumitomo	Long life milk	Thailand	JV	Domestic market	-
Meiji Milk Products	Chilled milk	Thailand	JV	Domestic market	-
Nippon Meat Packers Inc	Poultry	Thailand	JV	Exports	1990

WOE = wholly-owned enterprise.
JV = joint venture.

Source: Nikkei database and industry and trade sources

and profitability performance of the industry as well as the liberalisation of imports. The investment advantages of Japanese food processors with their access to funds in a climate of balance of payments surpluses together with assured market outlets has caused a redistribution of resources and effort. Furthermore, the availability of raw materials and investment opportunities in the host countries in the Asia-Pacific region have aided this process.

In this expansion of trade, firms may have ownership advantages like a monopoly over a product or a brand name, or a superior knowledge of the market and of marketing techniques. A host country should be expected to have locational advantages such as low-cost labour, abundant supply of low-priced agricultural raw materials, lower artificial barriers to trade, and a positive attitude to foreign investment. In Japan's case, commercial culture seems to dictate that direct control of such activities is preferable to licensing or

other indirect arrangements to secure supply. Japan's multinational food processing firms have expanded FDI in recent years as these conditions have coincided (Dunning 1988).

Evidence on relative costs is missing, but as protection of industry in Japan is reduced, and import barriers are lowered, the relative advantage of FDI increases and multinational firms are likely to seek low-cost materials and goods elsewhere, especially in Japan's case, through off-shore investment restrictions in host countries and the greater investment funds in Japan compared with host countries.

4. Implications for Australia

The removal of trade barriers on agricultural products and processed food products into Japan has raised the level of interest of non-Japanese firms in this market. It has also been associated with a high degree of activity by Japanese firms in other countries, particularly those in the Asia-Pacific region. Japanese firms have sought to tie in with local producers of agricultural commodities or establish their own subsidiaries. This development has several significant implications for Australian food processing industries. The Asian-Pacific region is regarded by many in the local industry as having particular potential for expansion. However, the business activities of many of the leading Japanese food processing firms mean that these firms will also be well placed to take advantage of growth in the processed food markets of this region. Although the average Westerner would not be familiar with Japanese food brands, many Asians are[4,5]. The investment made by the Japanese firms and their involvement in joint ventures with local Asian firms will result in consumers in this region becoming even more familiar with Japanese brand names. This may well provide Japanese firms with a significant advantage over Australian firms in the processed food market in Asia.

Next, Australian firms which do not have any links with Japanese firms are likely to have difficulties in accessing the Japanese market.A common claim made by writers on Japan is that Japanese consumers have particular requirements which are frequently different to those of consumers in other high income countries.One of these requirements is, for example, the emphasis on quality. This suggests that there may be informational advantages and other technology transfer opportunities if the Australian firms are linked up with the Japanese firms.

Another implication is that many products in the Japanese food market have a very short life. A McKinsey study, reported in the *Economist* (1993b), cited the launching of 700 different types of soft drinks in the late 1980s - and the disappearance of 90 per cent of them within 12 months - as evidence of this. There are a number of reasons for the proliferation of new products in Japan, including the nature of the Japanese distribution system, the high spending power of Japanese consumers, the importance attached to product uniqueness by Japanese consumers, and the preference of firms to produce new products rather than to engage in researching what consumers want. With the protection against imports of many processed food products diminishing, reduced profit levels may prevent Japanese firms from maintaining the research effort needed for the product development of the past. Regardless of whether or not this turns out to be the case[6], the Australian food industry will need to devote more resources to market development than it presently does if it is to succeed in Japan. In 1986-87, the industry spent about 0.25 per cent of its turnover on research and development (Department of Industry, Technology and Commerce 1991), a level well below Japanese firms in the development of new products.

Finally, Japanese food processing firms are likely to turn increasingly to countries such as Australia, New Zealand and the ASEAN countries for their input requirements. This will occur as the Japanese agricultural sector contracts because of reduced levels of government support and competition from other sectors for the resources - particularly land - used in Japanese farming. Further development along the lines indicated in Table 10 is most likely.

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[4] Kikkoman, which has been "soy sauce" in the United States for a number of years, is one of obvious exception. Similarly, Suntory, a leading manufacturer of alcoholic beverages in Japan, is well known in Western countries.

[5] One other important factor in brand recognition is the media, particularly satellite television. Viewers in Asia would be more likely to watch Japanese satellite television than viewers in North America, Europe or Oceania.

[6] In recent years, Japanese food manufacturers have been reducing their product line-ups because of shrinking profits caused by the downturn in the economy. Kokkoman has been reducing its line-up since 1991, paring the number of products from 5000 in 1991 to 2500 in late 1992.

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