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The Changing World of International Beef Trade

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Abstract

The tariffication of the Japanese beef import quota has resulted in a fall in the wholesale price over the period 1991 to 1993. However, the price reduction at wholesale level of imported beef had not been reflected in the retail prices of Japanese outlets until the second half of 1993. This indicates a level of imperfect competition in the Japanese wholesale distribution chain characterised by the inability of the wholesale sector to pass on the reduction in prices. For a period from late 1991 to mid 1993, the retail price of beef remained high, with the gains of "liberalisation" being accumulated by the wholesale sector. This has arguably lead to a less than optimal export level of beef from exporting countries, including Australia, into Japan.

Introduction

During the 1960s, Japan's high rate of economic growth brought about a decrease in the comparative advantage of Japanese agriculture. In the 1970s, the trade surplus and revaluation of the yen led to a further liberalisation of agricultural products. Processed agricultural products, and non-basic products not included in 'selective expansion' products or state trading products, were liberalised. Finally, in the 1980s, Japan began to forge ahead as one of the world's economic leaders.

In contrast, however, the US economy lost ground in relation to other economies. The accumulating trade deficit of the US with Japan put pressure on the Japanese government to liberalise trade and increase the size of imports. Increasingly, the international agricultural market has become beset by surpluses, as a result of the recession in the world economy and the continued agricultural protection of industrialised countries. This pressure on the international agricultural market led to an agreement to include agricultural issues in the GATT discussions. At this time the combined effects of Japanese trade protection policies and the revaluation of the yen made Japanese agricultural markets even more attractive to foreign suppliers. These two factors lead to the creation of a substantial difference between the domestic and international prices for agricultural products (Saeki 1989, Kobayashi *et al.* 1991 and ABARE 1993). The revaluation of the yen was a reflection of Japan's rise as one of the largest and most dynamic economies in the world, and as such the exchange rate was driven by the world's markets. The issue of trade protection policies in agriculture is as a result of Japan seeking to fulfill certain national objectives. The specific goals of Japanese interventionist policies in agriculture are to ensure a secure and adequate food supply, stable producer and consumer prices, a high level of agricultural productivity and a secure and equitable standard of living for its rural sector (ABARE,

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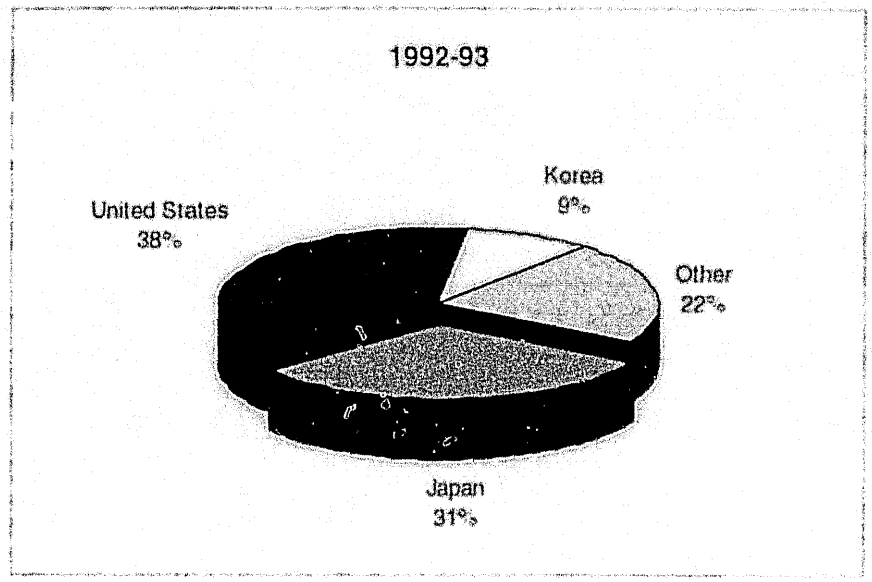
1988). These goals result from cultural demands which are politicised by interest groups from the farming community and its constituents. Thus a great deal of pressure is being exerted on the political decision makers to balance domestic political pressure against external political pressure (George, 1984).

Japan has developed into a large importer of beef products, and although Australia has lost market share in Japan to the U.S. (Alston *et al.* 1989, ABARE 1991, Morison 1991) since the 1970s, Japan is a major market for Australian beef sales. In 1993 total Australian exports of beef were 805kt, with almost 250kt being exported to Japan (Figure 1).

Figure 1: Australian beef exports by destination



Source: ABARE, 1993

Australia-Japan bilateral trade agreement

Japan has become a large importer of beef largely because of its low levels and small scale of domestic beef production (Longworth 1983, ABARE 1988). In the 1960s Japan was almost self sufficient in supplying domestic beef, but by 1991 less than half of total consumption was being produced domestically. Domestic beef prices have also remained high because of continued restrictive beef import policies. However, the Japanese market is now being progressively opened to imports of beef and other agricultural products, including the highly emotive issue of rice. The results of the current GATT round will determine the extent to which the Japanese market will be subject to import competition. Prior to 1991, Japanese beef imports were restricted by a combination of import quotas and a 25% *ad valorem* tariff. In 1991 the bilateral agreements between Australia and Japan and the U.S. and Japan that had been signed three years earlier were enacted.

- Import quotas were abolished from April 1991 and replaced by an *ad valorem* tariff set at 70% in JFY 1991 but reducing to 60% in JFY 1992 and 50% in JFY 1993.

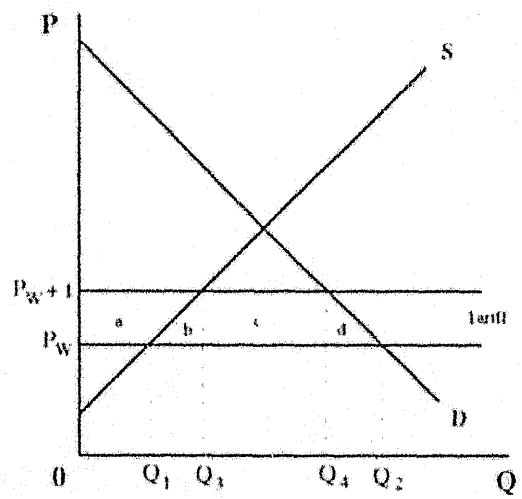
- The allowance of provisions for emergency action to be taken during this three year period: if imports appeared likely to exceed a level calculated at 120% of the previous year's imports or a level of imports equal to the quota level in JFY 1990 compounding by 20% over each of the succeeding three years (which ever was the higher).

- Emergency action would take the form of an additional tariff of 25 percentage points but would involve prior consultation with suppliers.

The effects of a tariff are well documented, with results being more predictable than the previous quota system in place which was regulated by the Livestock Industry Promotion Corporation of Japan (LIPC). The argument for the tariffication of the Japanese import quotas was on the basis that tariffs are more transparent in their effect and simpler for exporting countries to comply with, as well as being consistent with GATT guidelines (Runge and Stanton, 1988).

In Figure 2 a tariff of t dollars is imposed on imports in the Japanese domestic market of beef. If the government of Japan imposes a tariff on imports of beef of t dollars, the domestic price of beef will rise by the full amount of the tariff, from P_W to $P_W + t$. Under free trade, domestic production will be at Q_1 and consumption at Q_2. If the tariff is imposed, production will rise from Q_1 to Q_3 units because existing domestic producers will increase their prices by the extra amount of the tariff and thus allow marginal producers who had previously found it unprofitable to now enter the market. Consumption of beef falls, due to the higher price, and hence, the quantity demanded falls from Q_2 to Q_4.

Figure 2: The effect of an import tariff



The imposition of a tariff causes a reduction in beef imports due to:

i) domestic output expanding to a level which depends on the elasticity of the domestic supply curve, and

ii) domestic consumption falling depending on the elasticity of domestic demand[1].

With the imposition of a tariff, the price that consumers pay for beef increases (Figure 2), which implies a loss of consumer surplus. Consumers lose the area under the demand curve which lies between the two price lines ($a + b + c + d$), whereas domestic producers gain by the tariff (a). The government can also gain because of the new source of revenue, indicated by area c, which is redistributed to the economy. So the net result is that the economy as a whole loses $b + d$, which is the deadweight loss of the tariff.

The built-in mechanism of the 10% *per annum* reduction in the tariff from 1991 to 1993 should have resulted in a decrease of the area $a + b + c + d$ under the demand curve. This is because as the value of the tariff (t) falls, so too will the difference between the world price (P_W) and the domestic price ($P_W + t$). The result of these reductions should have been expressed as a fall in the domestic retail price of beef. However, from Figure 3, it can be seen that the reduction of retail beef prices in Japan, over the period of tariff transition, fell by 6% for the domestic Japanese beef types, and only 13% for Australian beef and 10% for U.S. supplied beef.

The nominal rate of protection[2] for beef in Japan is still considered high, with Mues *et al.* (1991) estimating the nominal rate of protection for Australian chilled grassfed carcasses at 259%. Both Mues *et al.* (1991) and Wahl *et al.* (1991) used wholesale price data in their estimation methods for rates of protection in of beef Japan. However neither converted from Australian and U.S. carcass specifications, respectively, to the Japanese specification of imported full-sets. According to AMLC specification, 1kg of beef carcass is estimated to produce 0.41-0.45kg of boneless full-set beef, after the bones, trimmings and unwanted cuts are removed. So both studies' tariff equivalents can be seen to be high according to Mori (1993), who further indicates that if the effective tariff prior to 1991 was indeed around 200%, and with the assumption of a price elasticity of beef being unity, the price at the time should have fallen from 300 Yen/kg to 170 Yen/kg after the tariffication.

A potential problem is that most analyses of prices in Japan rely on data from the *Family Income and Expenditure Survey*, which although comprehensive, has the shortcoming of categorising beef as one commodity. Another potential problem with the price data is that the home surveys underestimate retail consumption because they do not include the restaurant and hospitality trade. MAFF estimated that as little as 25% of imported beef was consumed at home in 1986, with another 38% being consumed away from home and 37% in processed form (Mori, 1993).

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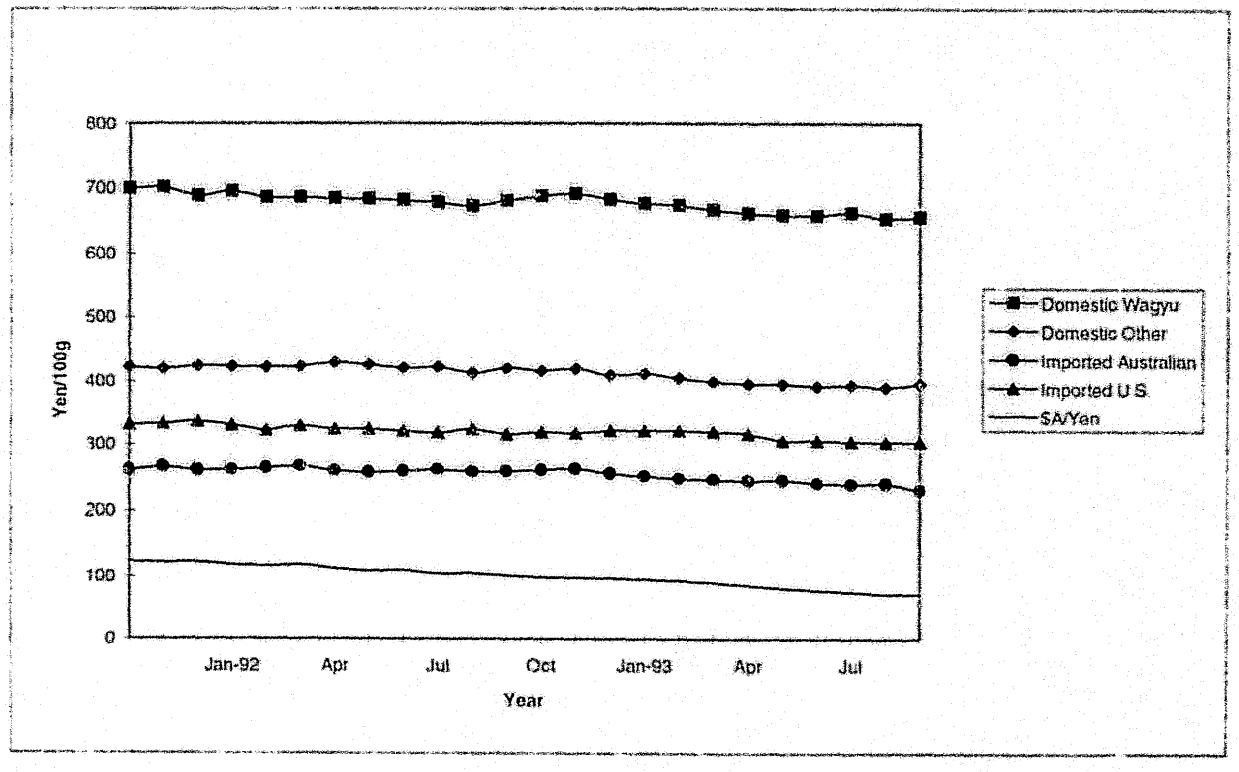
[1] According to Dyck (1988), the own price elasticity of demand for beef is estimated to be greater than 1.0.

[2] The nominal rate of protection for any product is the difference between the price of the domestic product and the landed price of the imported product, expressed as a percentage of the landed price

Figure 3: Japanese domestic retail prices



Source: LIPC (Japan), Sydney Office, 1994.

Note: The above beef categories are averages of 4 different cuts of beef: chuck; brisket; sirloin and round.

The Japanese Market

Retail prices in Japan fell in 1993 by about 12% (ABARE, 1993) largely because of the volume of beef diverted from the U.S. market, via the entitlement scheme, where Australian exporters receive a 75¢/lb entitlement from the AMLC for selling into export markets. The current arrangement is putting added pressure on the U.S. market in that an exporting firm that wishes to increase its allocation of shares to export into the U.S will attempt to sell as much as possible into other export markets, such as Canada, South Korea and Japan, with the expectation of receiving more entitlement shares the following year. This seems to have created pressure on the Japanese industry from exporters prefering to export to Japan and thereby gain entitlements rather than selling on the Australian domestic market for which they accrue no extra export entitlements.

Recent price data seem to indicate that while prices have fallen they have not fallen by the full extent of the tariff reduction, some 20% since 1991, especially if the appreciation of the Yen, of around 40% from 1991-93 is taken into account (Figure 3). One possible explanation for the lack of the expected fall in Japanese domestic retail prices is the dominance in the distribution system by a hereditary underclass, which in feudal Japan, was restricted to "unclean trades" such as slaughtering. To quote from a report in *The Australian Financial Review*:

> "Although there is nothing outwardly to distinguish them from other Japanese, they retain tightly held, clannish control over some sectors of the economy, a powerful non-tariff barrier "

This group is known as the *burakumin* or "village people" and were traditionally vilified as *eta* or "great filth". They remain powerful because of the high prices and large volumes handled by a relatively small number of families. Thus, the possibility exists that the reduced wholesale prices are not being passed on as quickly to the consumers at the retail level (George, 1993). One form of collusion that is exhibited primarily by the construction industry, and others, in Japan is *dangô*. *Dangô* is a negotiation among bidders for Japanese contracts in which it is decided by the competing firms which one will get the contract. The designated firm submits a high bid and its "rivals" bid still higher, thus maintaining the illusion of competition. For the companies involved this is a congenial way to do business because under *dangô* each company knows that it will eventually "win" a contract or a tender without having to go to the trouble of competing (McMillan, 1991). Mues *et al.* (1991) also observed that marketing margins were higher, from saleyard to retail, than in Australia or the U.S., and that with tariffication these margins were assumed to decline.

An insight into this close-knit market came from Banker's Trust, an Australian company contemplating an investment of up to $80 million in feedlots to supply the Japanese market. The company commissioned a market research firm to study Japan's beef industry, but one of the researchers was kidnapped when trying to establish exact supply and distribution routes in the Nagoya region. The man was released unharmed a week later (The Australian Financial Review, 1993).

The latest GATT developments

The resolution of the seven year Uruguay Round of the GATT on the 15th of December, 1993, will positively impact on Australia and other exporting countries. Australia is forecast to expand its exports by $5 billion annually and lift national income by $2.5 billion under the new market access arrangements. Australia's farm sector will directly benefit from the greater market access, and in particular, Australia's $3.8 billion beef industry is forecast to benefit by an increase of $340 million a year from extra exports by 2000 (Australian Financial Review, 1993).

The new GATT phase commences on the 1st of January, 1995 although exact details of the GATT agreement on beef have not been finalised as yet by the major importing and exporting countries. However, the likely outcomes for the key Australian beef markets are given below.

- Japan's current level of tariff protection will remain at 50% until 1995 and then reduce to 38% by the year 2000 (ABARE, 1993). This represents a 22% cut in protection over the six year period, in contrast to the 30% drop in the effective level of protection in 1993 alone. The 1993 figure comprises a 20% appreciation of the Yen and the 10% scheduled duty reduction under Japan's bilateral agreement.

- The United States Meat Import Law (MIL) will be changed to a base level quota of 640kt and an above quota tariff of about 31%. Australian access to the U.S. market has declined by 11% since 1991, and the MIL has been triggered in each of the 4 years by Australian exports of beef. Under the GATT, the variable trigger level of the MIL will be replaced by a fixed quota/tariff system. The Australian quota for 1995 will be 380kt with an above quota tariff of 31.4% declining to 15% by the year 2000 (ABARE, 1993).

- South Korea has acceded to completely liberalise its beef import market by the year 2001. However, this is about 3½ years later than the Koreans had agreed to, in 1991, under bilateral pressure from Australia and the U.S.

- The Adriessen/Kerin assurance has been reaffirmed by the E.C., thereby precluding subsidised E.C. beef exports to Australias traditional markets.

- The sanitary and phytosanitary agreement allows for the resolution of the safe usage of growth promotants in beef production.

Conclusions

Beef export opportunities rather than domestic demand will offer the greatest hope for expansion for Australia and other exporting countries. The nations comprising the Pacific Rim will continue to drive the growth in world beef trade, with consumption in Japan being the major source of demand (ABARE, 1994).

The new access arrangements with the U.S. will benefit the Australian beef industry because the current system has resulted in costly instability because of the uncertainty built into the variable trigger mechanism of the MIL. The new system allows for greater stability and a guaranteed access level, and moreover the new access level is a substantial increase over current levels.

It seems to date that while there has been a general trend for Japanese domestic retail prices to fall, the major determinants of price volatility are the exchange rate and seasonal factors in the exporting countries, rather than the phased three year reduction in the tariff level itself. Indeed it was the depreciation of the $A against the Yen which saw prices paid to Australian farmers increase by 10% in 1993 over the same period in 1992. If this one-off factor is disregarded, then the Australian beef industry may well have narrowly escaped serious financial uncertainty. With good rains in the North of Australia, however, the supply of beef will fall and is likely to remain low for the next 2-3 years (ABARE, 1994). This herd rebuilding will reduce the current pressure on the system and may, in fact, even result in Australian exporters being unable to entirely fill the 380kt U.S. quota in 1995.

Another concern for the Australian beef industry is the recent appreciation of the Australian dollar. With the latest budget estimates for inflation and economic growth being revised upwards by the Australian federal government, the $A has gained around 6% on both the U.S. and Japanese currencies. It will be interesting, under this scenario, to keep tabs on the retail prices in Japan if the $A continues to gain on the Yen.

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