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The Japanese Beef Market: Recent Developments and Future Policy Options

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The relationship between beef price stabilization and beef import policies is examined. The formula developed to calculate the floor and ceiling prices for beef in Japan is explained. The current complicated administrative arrangements designed to control beef imports is outlined. Some of the major controversial aspects of present import and price policies for protecting the domestic beef industry are examined in some detail. The domestic marketing channels for beef in Japan are being substantially modernized. The development of the central and sub-central wholesale markets; the rationalization of meat slaughtering in producing areas; the development of the trade in part-cuts; and the development of transaction standards and grades for both beef carcasses and more recently beef part-cuts; are all discussed. These changes have influenced, and will continue to influence, beef policy decisions in Japan. Finally, some future beef price support and import policy options are considered. Assuming no legislative alterations, the scope for modest changes to the present arrangements is examined. Should the Japanese Government decide to change the laws governing beef price-support and import policies, it is likely to move to a deficiency payments scheme modelled on the present arrangements for dairy-steer feeder-calves and financed by a variable levy on all beef imported.

From the viewpoint of foreign suppliers of beef, two of the most significant changes to have occurred in the Japanese beef market during the last decade have been the emergence of the Livestock Industry Promotion Corporation (LIPC) as the major institution administering beef import policies and the introduction of the beef wholesale-price stabilisation scheme on May 1, 1975. The background to both these events has been examined by the author elsewhere [9]. This paper both extends the earlier discussion and outlines other important recent developments on the Japanese beef scene. The major objective is to emphasise the extent of recent changes and to suggest some of the implications these developments have for future Japanese beef policy.

The first section of the paper briefly explains the important connection between the operation of the beef wholesale-price stabilization scheme and beef imports. Details of the formula used by the Japanese Government to determine the floor and ceiling prices are spelt-out. The beef importing system which has evolved since the government agency (LIPC) took control is also outlined. The first section concludes with a brief discussion

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of some of the criticisms being levelled at the present arrangements for supporting the domestic price of beef in Japan.

In the second section recent changes in the processing, distribution, grading and marketing of beef in Japan are outlined. Particular attention is given to the development of central meat markets, meat centres in producing areas, and to the rapidly expanding block-meat or part cuts trade.

The third section of the paper considers a range of future policy options for the protection of the domestic beef industry in Japan. Each option is evaluated in terms of its economic and political feasibility and its impact on beef imports into Japan.

The three facets of the Japanese beef scene discussed in this paper need to be considered together. Import policies are closely linked to stabilization strategies, which, in turn, are influenced by the structure of domestic marketing arrangements. Since the domestic marketing situation is being rapidly modernised and re-structured, a major aim of this paper is to suggest how these changes are likely to influence future adjustments in stabilization strategies and hence import policies.

1 The Beef Wholesale-Price Stabilization Scheme and Beef Imports

Beef imports into Japan are now closely connected with the operation of the beef wholesale-price stabilization scheme. In effect beef stocks held overseas by foreign suppliers are being used in a buffer-stock operation to maintain domestic wholesale beef prices within an administratively determined price band. The formula developed to determine the floor and ceiling prices (which establish the price band) is now public knowledge in Japan. A complicated set of administrative arrangements have evolved for controlling the flow of beef into Japan since the Government enlarged the role of the LIPC and formally committed itself to maintaining certain domestic wholesale-beef prices within specified price ranges. Both the stabilization scheme and the present import policies have been, and continue to be, strongly criticised by both domestic and foreign interests.

1.1 The Beef Wholesale-Price Stabilization Scheme in Operation

In outline the Japanese beef wholesale-price stabilization scheme is deceptively simple. As illustrated in Figure 1, a band of prices is established for each Japanese fiscal year for two designated types of wholesale beef carcass: namely wagyu steer 2nd grade and dairy steer 2nd grade. The Japanese Government has assigned to the Livestock Bureau of the Ministry of Agriculture and Forestry (MAF)* the responsibility for trying to keep these two prices within their respective price bands. The prices are to be kept within these price ranges by a kind of butter-stock operation.

When prices rise towards or above the ceiling price, the stocks which MAF can have placed on the market could conceivably come from four different sources. First, there are the "stocks" of beef held by foreign suppliers which can be imported at relatively short notice. Secondly, there are the stocks of previously imported beef actually on hand in Japan. Thirdly, there could be stocks of domestically produced beef previously purchased by the LIPC to

*Now known as the Ministry of Agriculture, Forestry and Fisheries (MAFF).

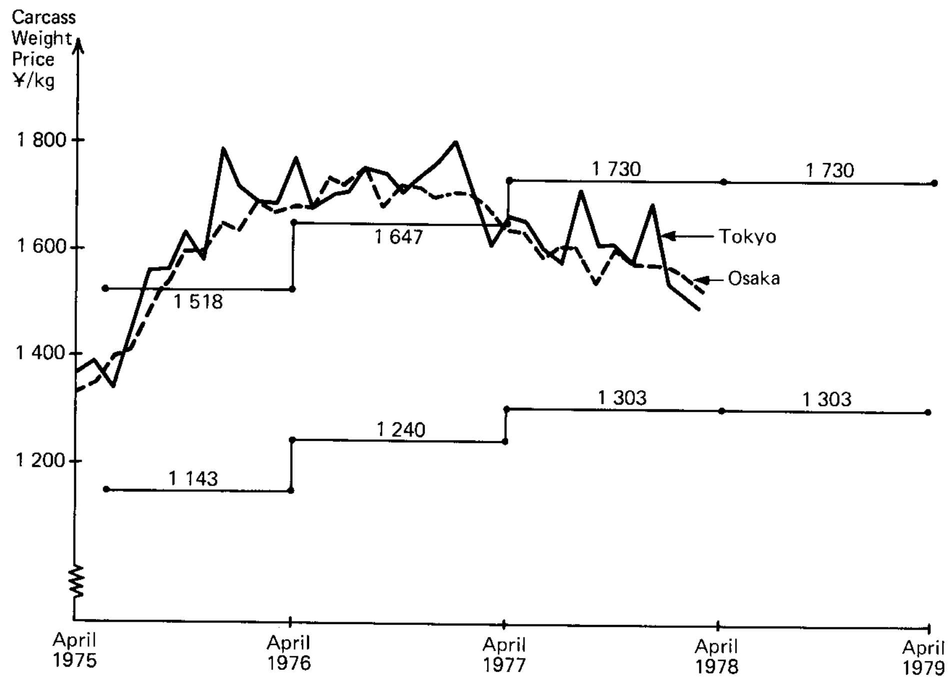

FIGURE 1(a) : Wagyu Steer 2nd Grade : Average monthly prices at Tokyo and Osaka Central Wholesale Markets together with floor and ceiling prices since the introduction of the Wholesale Beef-Price Stabilization Scheme.

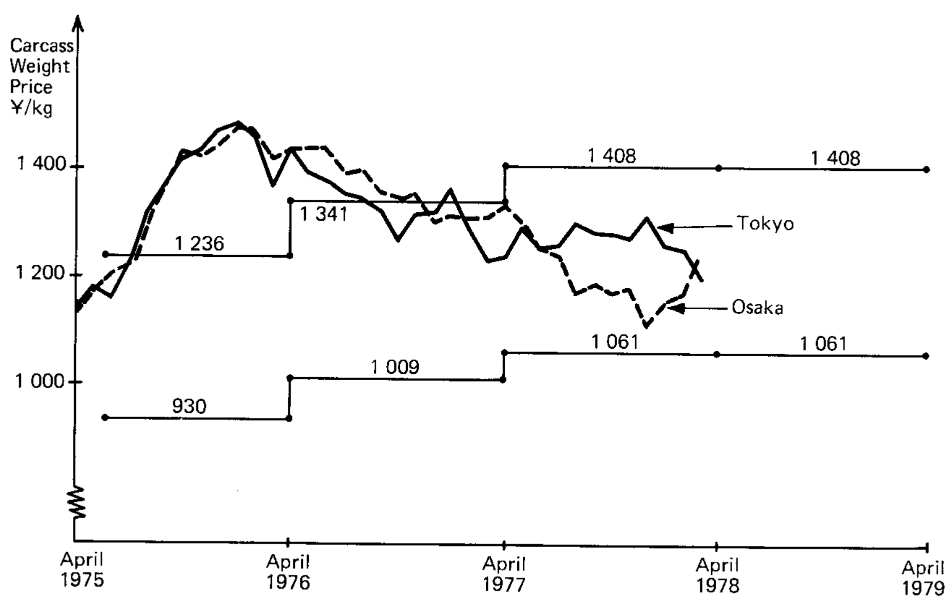

FIGURE 1 (b) : Dairy Steer 2nd Grade : Average monthly prices at Tokyo and Osaka Central Wholesale Markets together with floor and ceiling prices since the introduction of the Wholesale Beef-Price Stabilization Scheme.

prevent prices falling beneath the floor price. Fourthly, there could be stocks held by the co-operative movement as part of their voluntary efforts to with-hold beef from the market during a previous period of low prices.[1]

Since the inception of the stabilization scheme in May 1975, the LIPC has not purchased any domestic beef nor has beef been "voluntarily" withheld from the market by producer co-operatives with the approval of MAF. Therefore only the first two types of stocks have been used to stabilize the market. Furthermore, the emphasis has been on adjusting the flow of imports into Japan rather than manipulating stocks of imported beef held in Japan.

Figure 1 shows that the stabilization scheme has been conservatively administered. Prices have tended to be above the mid-point of the band of prices and they have frequently exceeded the ceiling price. The delay in arranging for imports has often permitted prices to rise "too" high. At the same time it appears that the flow of imports has been retarded when prices move below the middle of the price stabilization band. This last strategy has been adopted as a precaution against the possibility that the price could fall below the floor price if imports were placed on a weak market. In this case MAF would be obliged to accumulate stocks of beef in Japan: (a) by having the LIPC with-hold imports from the market; (b) by directing the LIPC to purchase domestic beef in the market place; or (c) by arranging for co-operatives to "voluntarily" restrain from supplying beef to the market. Not only is storing beef for lengthy periods extremely expensive but such a policy could also severely tax the existing beef storage facilities in Japan.

Under these circumstances while-ever legislation requires that MAF stabilize beef wholesale prices by keeping the prices of the designated beef carcasses within a specified price band, imports will be administered on a short-term stop-go basis. The present stabilization scheme, therefore, represents a major obstacle to the regular flow of beef into Japan.

1.2 Formula for Establishing the Price Band

The basic feature of the Japanese system for stabilizing wholesale beef prices is the establishment of floor and ceiling prices. These two prices define the price band within which the authorities aim to contain market prices. Although the final floor and ceiling prices are the subject of considerable discussion, the Livestock Bureau of MAF have devised a psuedo-objective formula for calculating these prices. Within this framework there is, of course, room for adjusting the figures, should the formula yield politically unacceptable results. Nevertheless, by

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[1] In 1974 the National Federation of Agricultural Co-operatives or ZENNOH (Zenkoku Nōgyō Kyōdō Kumiai Rengokai) was subsidized by MAF to store and hence with-hold beef from the market. There is now a stated policy to encourage (*i.e.* subsidize) the self-control of beef supplies through the four national federations of producer co-operatives concerned with beef. Should beef prices decline sharply MAF will ask these organizations to voluntarily with-hold beef from the market. This strategy will be given priority over instructing the LIPC to enter the market and purchase domestic beef.

Besides ZENNOH the other three producer groups involved are the National Federations of Livestock (Zenkoku Chikusan Nōgyō Kyōdō Kumiai Rengokai), Reclamation (Zenkoku Kaitaku Nōgyō Kyōdō Kumiai Rengokai), and Dairy (Zenkoku Rakuno Nōgyō Kyōdō Kumiai Rengokai) Co-operatives.

understanding the formula it is possible to grasp the factors which will play the major part in determining the floor and ceiling prices in the future.

The actual formula adopted to determine the floor and ceiling prices for 2nd grade wholesale steer beef carcasses is relatively straight-forward. If $P^c{}_f$ represents both the ceiling price P^c and the floor price P_f, then

$$P^c{}_f = [\,(P_o \times I)m + k]\,(1 \pm v).$$

The complications arise from the way in which the variables on the right hand side are defined. As each variable is defined below, details of the 1976 calculation will also be included to demonstrate how the formula was actually used in that year.

P_o is the simple average of the average monthly farm-gate price received by fattening farmers for wagyu steers over the previous 7 years. The data is collected by farm surveys. For 1976, P_o was ¥598 per kg. live weight.

I is the current value of an index of the cost of fattening wagyu steers. To calculate I, first the estimated cost of production for the current year is determined and then this is divided by the actual average cost of production over the last 7 years. In 1976 the initial value was $I = \frac{¥84{,}289}{¥56{,}778} = 1.485$. However, after consultation with the Livestock Industry Promotion Council (LIP Council) and others[2], the final value for I became $\frac{¥84{,}607}{¥56{,}778} = 1.490$. It would seem that there will always be room for dispute over the value of I.

The variables m and k and v are all determined by fitting an equation of the form:

$$Y = m\,X + k$$

where Y is the monthly average wholesale carcass price for 2nd grade wagyu steers for the last 7 years; and X is the monthly average farm-gate price for wagyu steers for the last 7 years; and v is the standard error of estimate for the equation. Since Y is in terms of carcase weight and X is expressed in live weight, this equation captures not only assembly, transport and slaughtering costs, but also takes account of dressing-out percentage. Once this equation has been calculated using OLS regression, numerical values for m, k and v can be obtained. In 1976 the result was as follows:

$$Y = 1.538\,X + 73.36\ (r^2 = 0.961)$$
with $v = 0.141$.

Therefore, for the calculation of floor and ceiling prices in 1976, $m = 1.538$, $k = 73.36$ and $v = 0.141$.

If the 1976 values are now inserted into formula for $P^c{}_f$ given above, the formula yields the following ceiling and floor price for 2nd grade wagyu steers: P^c = ¥1647 per kg. carcass weight; and P_f = ¥1240 per kg. carcass weight (see Figure 1 (a)).

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[2] For details concerning the LIP Council (which should not be confused with the LIPC) see Longworth [9].

To establish the floor and ceiling prices for 2nd grade dairy steers the above P^c and P_f values are multiplied by a factor B. The value of B represents the historical relationship between the wholesale market price in Tokyo and Osaka for wagyu steer and dairy steer carcasses both of 2nd (or middle) grade. It is calculated by dividing the dairy steer price by the wagyu steer price on a monthly average basis. These ratios of monthly average prices are then averaged over the 7 year period. In 1976 the value used for B was 0.814. As a result the values for the dairy steer floor and ceiling prices for 1976 were ¥1,009 per kg. and ¥1,341 per kg. respectively (see Figure 1 (b)).

As already mentioned the greatest room for manipulating the results of the above formula occurs in the calculation of the value for I. However, the resulting prices are not unduly sensitive to arbitrary changes in the estimated cost of production (*i.e.*, the numerator of the formula for I). For example, if this value had been arbitrarily raised 10 per cent in 1976 above the final figure selected, the final floor and ceiling prices for wagyu steers would both have been raised by 9.5 per cent.

Another problem which has been recognised by the Livestock Bureau of MAF concerns the value of B. Traditionally there has been a stable relationship between 2nd grade wagyu steer carcass prices and 2nd grade dairy steer prices. Wagyu carcasses normally attract a premium of 18 to 20 per cent. However, recently this premium has been declining. If there is no stable relationship between these two prices then it becomes invalid to use the above formula to establish the price stabilization band for dairy steers.

To overcome this problem data is now being collected which will allow the formula for P^c_f to be applied directly to the establishment of dairy steer floor and ceiling prices. However, there are likely to be serious problems when the change over to the direct calculation of dairy steer prices is introduced. The national average cost of producing dairy steers is not only significantly lower but also has been rising much less rapidly than the wagyu production costs due to generally larger-scale and better technology on fattening farms with only (or predominantly) dairy steers. As a result the direct application of the formula to the calculation of floor and ceiling prices for dairy steers may actually lower these prices. In any event the direct calculation of the floor and ceiling prices for dairy steer will slow the rate of increase in these prices compared with the independently determined wagyu steer prices.

In the near future, therefore, it is highly likely that the wagyu steer stabilization price band will be moved up faster than the dairy steer band. If at the same time the traditional premium for wagyu carcasses continues to be eroded, it may become impossible for MAF to operate the stabilization scheme as in the past. In fact, once the formula is applied separately to wagyu and dairy steer price determination, it is possible (but unlikely for political reasons) that the floor-price for wagyu carcasses could exceed the ceiling price for dairy carcasses. If the premium for wagyu carcasses becomes small, then MAF could be placed in the paradoxical position of (a) directing the LIPC to buy wagyu carcasses to prevent wagyu prices from falling below their floor price; and (b) directing the LIPC to sell dairy steer beef (or its imported equivalent) to prevent dairy steer prices rising above their ceiling price.

1.3 The Current Arrangements for Importing Beef into Japan

Although there is constant pressure for change both from within Japan and from foreign suppliers, the basic system which has evolved since the LIPC became the dominant institution administering beef imports can be represented by Figure 2. While the diagram is almost self explanatory, certain features of the system need some elaboration and further emphasis.

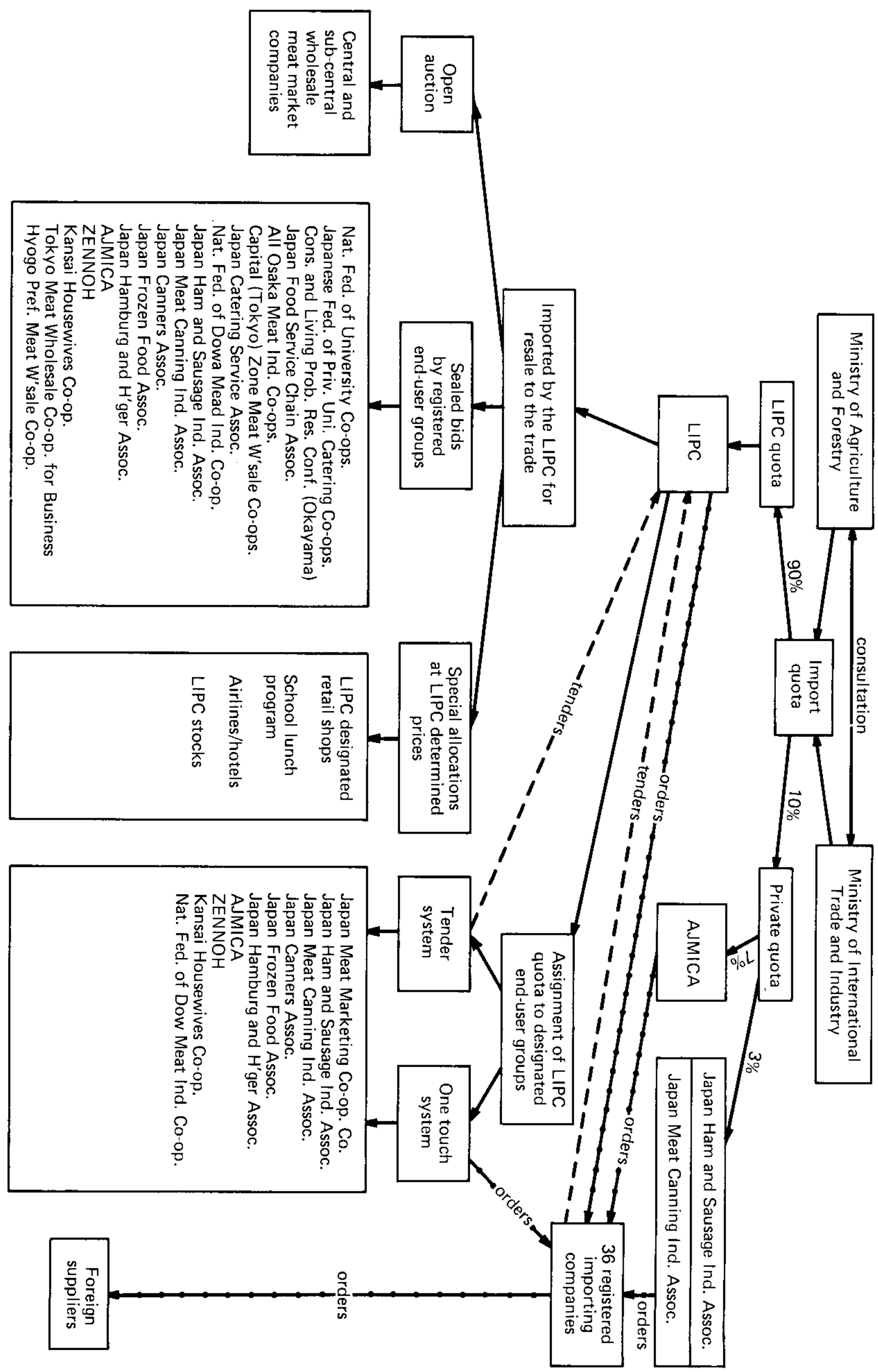

FIGURE 2 : Allocating Access to Imported Beef in Japan

Firstly, all beef is purchased and imported by the registered importing companies irrespective of whether it is part of the LIPC or the private import quota.

Secondly, the LIPC may use its quota to order beef on its own behalf for resale or allocation to the trade, or it may more or less assign its right to import beef to various other end-user or wholesaling groups. If it adopts the second strategy, the beef may be imported by the end-users or wholesalers by the one-touch or under the tender system.[3]

Thirdly, not all beef entering Japan is subject to a predetermined import levy. Certainly the LIPC collects a levy on all one-touch imports. In addition, the Japan Meat Conference (which allocates the private quota among its members) collects a private levy on all private quota beef.[4] However, beef imported by the LIPC both under the tender system and on its own behalf for resale or distribution to special end-user groups, is not subject to any formal levy. The difference between the tenders accepted by the LIPC from importers (as suppliers) and user groups (as purchasers) obviously represents a "profit" or import levy, but it is not specified in advance. In the case of beef imported by the LIPC for resale there would also be a variable "profit" (or levy) involved. The LIPC may also distribute beef to particular end-users (*e.g.*, the school lunch program) at only nominal mark-ups on the landed price. In which case there may be virtually no import levy (or import tax) involved.

Fourthly, the major wholesaler-retailer groups can obtain imported beef through many different channels. For example, Figure 2 shows that the All Japan Meat Industry Co-operative Association (AJMICA or ZENNIKUREN) obtains 70 per cent of the private quota; it may compete by sealed bid for LIPC imported beef; and it may acquire the right to import under either the one-touch or the tender system. The AJMICA is a national federation of prefectural meat industry organizations. The individual wholesaler and large retailer meat companies are members of these prefectural organizations. As can be seen in Figure 2, it is the national organization which has direct access to imported beef through various channels. It must, therefore, allocate these supplies to its prefectural member bodies, who, in turn must allocate the imports to their members (the large wholesalers and retailers); who in turn distribute it to smaller wholesalers and retailers. The larger wholesale and retail companies may also purchase imported beef through the central and sub-central wholesale markets should the LIPC decide to sell imported beef through these channels.

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[3] For more details on the "tender" and "one-touch" systems see Longworth [9].

[4] The Japan Meat Conference (JMC) is a privately organised body dealing with all aspects of meat marketing and trading. Most major commercial groups interested in meat are regular members of the JMC. The full JMC meets only twice each year. However, the major work of the JMC is undertaken by its 4 committees. There are two committees concerned with the modernization of marketing. (One of these concentrates on political and economic aspects and the other on technical aspects of marketing). A third working committee deals with consumer education. The fourth committee concentrates on problems associated with importing meat. These committees publish reports on special topics of interest and use these reports for gaining influence with government and for educating and informing other people in the meat industry.

1.4 Criticisms of the Current Import and Wholesale-Price Stabilization Arrangements

Both the present arrangements for importing beef into Japan and the wholesale-price stabilization scheme have been subject to strong criticism both within Japan and, of course, by representatives of foreign suppliers.

(a) Comments on the present import system

Figure 2 and the additional points made above, serve to illustrate why influential groups such as the Japan Meat Conference, regard the present arrangements for importing beef into Japan as being too complicated. In addition, the Japan Meat Conference argues that under the present arrangements (especially under the tendering system) the LIPC controls the timing and sometimes the quality of beef imports. Importers would prefer to be free to import the quality of meat they prefer when they want it (subject to the broad limits set by the quota period). The Japan Meat Conference would like to see a larger proportion of the total quota allocated to private quota. On the other hand, many end-user groups who are not members of the Japan Meat Conference and who, therefore, cannot get a share of the private quota, prefer the present system.

Apart from the debate as to whether the private quota should be a bigger proportion of the total quota, there is also a continuing controversy over the relative merits of the tender system and the one-touch system for importing LIPC quota beef. The trade (*i.e.*, the Japan Meat Conference) understandably prefers the one-touch system. The LIPC recognises the greater flexibility and efficiency of this system especially for chilled beef. However, from the LIPC viewpoint there are other factors to be considered. First, with the tender system the LIPC can nominate the quality of meat, type of cuts, and the timing of imports it feels will best stabilize the market. As already explained, the *major* function of the LIPC in administering beef imports is to adjust the flow of imports so as to stabilize wholesale beef prices in Japan. To carry out this role it requires the control over the imports it can achieve through the tender system. Secondly, the tender system has another major advantage from the LIPC viewpoint. The LIPC can ask user groups to tender the price they are prepared to pay for a particular kind of beef at a particular delivery date. At the same time the LIPC can ask importers to tender for delivery of this kind of beef in Japan on the specified date. Although they need not, the LIPC can always accept the *lowest* importer tender and the *highest* end-user tender. Under these circumstances the LIPC can, at least in theory, capture *all* the excess profit to be made on imported beef. On the other hand with the one-touch system the LIPC can collect the import levy, but unless this levy is carefully selected and changed frequently (presumably on the basis of "profits" being collected with the tender system plus market intelligence in both the domestic and country of origin markets), it is most unlikely to capture for the public sector, all the profits to be made on imported beef.

Of course, the question as to what the *public sector* (*i.e.*, the LIPC) has done with the profits (*i.e.*, the import taxes) collected from beef imports in the last few years, has become a major issue in Japan since Yokota published his book in March 1977 [23]. As pointed out elsewhere, large amounts of this money have been set aside to support feeder-calf prices [10]. However, this is only one example of the many ways in which the taxes on imported beef are being used to support domestic livestock industries in Japan [8]. On the basis of evidence now available it seems doubtful that the taxes collected by the LIPC have been misappropriated in any way. However, it is unfortunate that the curious secrecy with which the LIPC treated the whole affair [1] has distracted the public's attention from other potentially much larger sums of money which are being accumulated in the *private sector* at the expense of Japanese beef consumers and cattlemen in Australia and New Zealand.

First, there is the legitimate and publicly audited private levy collection by the Japan Meat Conference. All of these funds must be used to promote production and consumption and to help modernize the marketing system. To the extent that this money is used wisely for these purposes, it could work to the benefit of foreign suppliers in the long run. Nevertheless, the amounts involved are large and a little public scrutiny may be justified to ensure that these private levies are being put to good use.

The second private sector "rake-off" is another matter altogether. There is no doubt that the importation of beef into Japan and its distribution to consumers is a highly profitable business for those companies who can get "a piece of the action". The extremely high profit margins in this trade have given rise to all sorts of wild claims in Japan about the activities of a "meat mafia". The issue will not be pursued further here other than to emphasise that the private profits involved are almost certainly much larger than the public taxes collected by the LIPC and about which so much has been heard.

(b) Comments on the Wholesale-Price Stabilization Scheme

Spokesmen for the consumer cause in Japan and representatives of beef exporting countries have been vigorous in their criticism of the methods currently used by the Japanese Government to protect domestic beef production. During 1977 beef became a major topic of interest in the Japanese mass media. Both MAF (and the LIPC) and the traditional meat trade were subjected to significant pressure by the media to explain exactly why beef prices were so high in Japan.

The official view is that Japan should maintain 80 per cent self-sufficiency in beef in the long-term and that to encourage beef farmers to achieve this target, consumers must accept higher but stable prices. However, consumer representatives claim that the present import system and price stabilization arrangement benefit meat wholesaling and retailing companies more than farmers. Furthermore, consumer spokesmen and the media point to the lack of stability in beef wholesale prices despite the so-called stabilization scheme. They emphasise that the scheme has been administered so as to keep prices in the top half of the price bands or above the ceiling prices (see Figure 1).

Although not in public, many producer groups are also unhappy with the current stabilization scheme. The major problem especially from the viewpoint of the diary-steer fattening industry in Hokkaido, Tohoku and Kyushu (the major outlying regions) is that the present scheme has a restricted coverage as regards markets and grades of carcass. As will be discussed below, only 38.1 per cent of all carcasses prepared in Japan in 1976 for example, were graded. Of the wagyu steer carcasses graded in

1976, 55 per cent were assigned to the 2nd grade category. In the case of dairy steers, only 40 per cent of graded carcasses achieved 2nd grade status. The official prices used by MAF (and the LIPC) to determine short-term import and price stabilization strategies are the averages from the Tokyo and Osaka Central Wholesale Markets. In regard to the establishment of the prices for 2nd grade wagyu steer and 2nd grade dairy steer carcasses, these two markets are far from perfect. For instance, in late March 1977, the 2nd grade wagyu steer price per kg. dropped ¥ 400 (18 per cent) in one day and day-to-day variations of ¥200/kg are reasonably common. The major reason for these short-term price movements is that these two markets are thin markets. The number of 2nd grade steer carcasses (either wagyu or dairy) offered for auction on any one sale day is not large. Furthermore, the proportion of the total annual output of these kinds of carcass which passes through these two markets is also relatively small.[5]

Under these circumstances producer groups in the outlying regions question whether the thin Tokyo and Osaka markets faithfully reflect the national beef supply and demand situation. In the short-term (say less than 1 month), one could expect that from time-to-time the Tokyo and Osaka carcass markets are relatively poor guides to the true national beef market situation. However, in the longer term they should reflect the national supply and demand conditions reasonably well given the free flow of information, livestock and meat throughout Japan. Furthermore, MAF and the LIPC both monitor all major beef carcass markets throughout Japan. Therefore, it is most unlikely that they would be mislead by a short-term aberration in the Tokyo/Osaka markets. The scheme currently covers the dominant grades of carcass and the two most important markets. To extend it to other grades and/or markets would be an administratively expensive and unnecessary complication.

2. Modernization of Meat Marketing Channels

A simplified picture of the present marketing channels for beef in Japan is presented as Figure 3. Since the late 1950's there have been very significant changes in the marketing of beef (and pork) in Japan. One major development has been the establishment of central and sub-central wholesale meat markets. Another very important development has been the creation of meat centers in the producing areas and the general rationalization of slaughtering facilities. The changing structure of the slaughtering and processing sector has encouraged the recent expansion of the part-cuts or block-meat trade. With the modernization of the physical handling side of the industry there has been an increased need for the establishment of grading and trading standards to facilitate the pricing function of the marketing system. Initially the grading and transaction standards were developed for beef carcasses but recently similar standards have been established for beef-part-cuts.

One significant point not made clear in Figure 3 is that almost all fat cattle are sold on a dressed weight basis. Although many cattle-fattening farmers

[5] See Table 1 which indicates the size of the Tokyo and Osaka Central Wholesale Markets both relative to the other official markets and the beef trade as a whole.

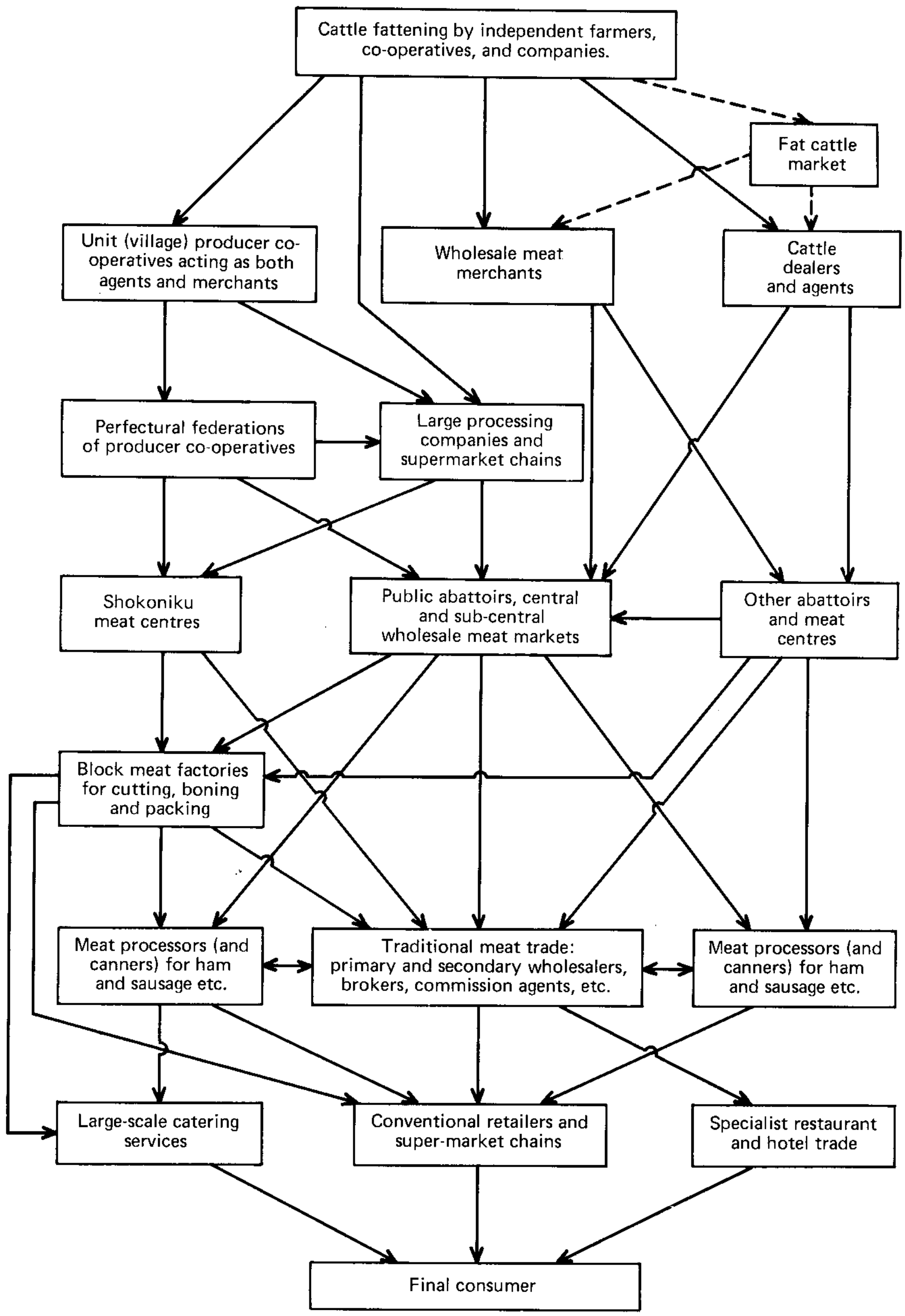

FIGURE 3 : Beef Marketing Channels in Japan

sell directly to producer co-operatives or to large processing companies or to super-market chains or to meat wholesalers, the price is established on a carcass basis. Frequently the cattle are fattened and sold under contract with the final price being determined by reference to the price of the corresponding grade of carcass in a specified central wholesale market on the day the cattle are delivered. The dominance of weight and "grade" selling is a relatively recent development in Japan. Traditionally there were large numbers of registered cattle dealers who visited farms or small local live-animal markets and bought fat cattle ready for slaughter. These dealers had the cattle slaughtered in small local abattoirs and they then sold the meat to local wholesalers or retailers. However, the government program to create large central markets and to rationalize slaughtering facilities, coupled with the rapid decline in the number of farmers keeping cattle [10], has almost eliminated this kind of fat-cattle dealer. These cattle dealers played a major role in traditional rural communities. In particular, dealers were frequently held in high regard as "animal doctors". Now-a-days farmers have access to properly trained veterinarians employed as extension agents either by the prefectural governments or the livestock associations.[6]

2.1 Central Wholesale Markets and Designated Markets

The Japanese Government passed legislation in 1957 which has become known as the Wholesale Meat Market Law. Under this Act the national government has established ten "central wholesale markets". With the passage of the Bill for the Price Stabilization of Livestock Products in 1965 and subsequent prefectural legislation, a further fifteen markets have been designated as "sub-central" wholesale markets. These central and sub-central markets are listed in Table 1 along with the year in which they were opened and an indication of their relative importance. In 1975 of all cattle slaughtered 26.5 per cent passed through these official public markets.

The ten central wholesale markets which operate under the national legislation are all supposed to function in a similar manner. Except for the Osaka market, each market is administered and controlled by a single non-

[6] Livestock extension services in Japan are provided by both the prefectural livestock associations and the prefectural governments. The operations of the Livestock Associations (Chikusankai) are heavily subsidized by MAF and by the prefectural governments. MAF also pays half the salary of all the prefectural government extension personnel. Both national government and prefectural government treasuries frequently criticise the duplication of extension services available to livestock producers.

All livestock farmers belong to at least one unit (village) level farmer co-operative. Membership fees are based on the number of livestock owned. In return for the membership fee, the farmer can expect (among other things) veterinary and animal husbandry advice. To provide this service the unit co-operatives join the prefectural livestock association. Thus they gain access for their members to the extension services of the prefectural livestock association.

At the prefectural level about 90 per cent of the activities of the livestock associations are concerned with technical and management extension. However, all prefectural livestock associations are members of the National Livestock Association (Chuo Chikusankai). The major activity of this group is political lobbying on behalf of livestock farmers (including poultry). Although small relative to ZENCHU (the lobbying arm of the farmer co-operative movement) the National Livestock Association has a significant influence on Japanese livestock policy.

Table 1: Number and Proportion of Adult Cattle Carcasses Transacted in the Central and Sub-Central (Designated) Wholesale Meat Markets in 1975.

Name of Market§	Year in which Market Opened	Number (and Percentage) Adult Carcasses Transacted				
		Japanese Beef Cattle (Wagyu)			Dairy Cattle	
		Cows	Bullocks	Bulls	Steers	Cows
CENTRAL WHOLESALE MEAT MARKETS						
Sendai	1975	*	*	*	*	*
Omiya	1961	1,556 (1)	2,535 (1)	0 (0)	6,518 (2)	11,949 (3)
Tokyo	1966	16,526 (9)	19,770 (9)	89 (1)	26,550 (8)	38,714 (10)
Yokohama	1959	1,572 (1)	3,364 (1)	5 (‖)	2,154 (1)	5,204 (1)
Nagoya	1958	1,694 (1)	1,426 (1)	1 (‖)	1,741 (1)	2,491 (1)
Kyoto	1969	5,712 (3)	6,278 (3)	20 (‖)	5,012 (1)	5,215 (1)
Osaka	1958	1,287 (1)	5,536 (3)	274 (2)	25,845 (8)	6,613 (2)
Kobe	1965	3,966 (2)	2,551 (1)	7 (‖)	210 (‖)	794 (‖)
Hiroshima	1959	4,744 (2)	509 (‖)	37 (‖)	1,514 (‖)	4,946 (1)
Fukuoka	1959	3,302 (2)	3,730 (2)	37 (‖)	4,158 (1)	1,263 (‖)
Sub-total	—	40,359 (22)	45,699 (21)	470 (3)	73,702 (22)	77,189 (19)
SUB-CENTRAL WHOLESALE MEAT MARKETS						
Utsunomiya (Tochigi)	1966	35 (‖)	60 (‖)	0 (0)	505 (‖)	140 (‖)
Gumma	1971	243 (‖)	1,839 (1)	4 (‖)	1,080 (‖)	2,162 (1)
Kawaguchi (Saitama)	1973	147 (‖)	127 (‖)	0 (0)	106 (‖)	817 (‖)
Tachikawa (Tokyo)	1973	2,033 (1)	3,726 (2)	0 (0)	6,514 (2)	7,917 (2)
Yamanashi	1973	†	†	†	†	†
Hamamatsu (Shizuoka)	1967	15 (‖)	37 (‖)	0 (0)	95 (‖)	46 (‖)
Togoheshi (Aichi)	1973	156 (‖)	367 (‖)	0 (0)	195 (‖)	214 (‖)
Gifu	1969	32 (‖)	136 (‖)	0 (0)	1,121 (‖)	162 (‖)
Yokkaichi (Mie)	1966	0 (0)	223 (‖)	0 (0)	32 (‖)	3 (‖)
Matsubara (Osaka)	1973	1,091 (1)	3,538 (2)	806 (6)	6,002 (2)	4,219 (1)
Habikino (Osaka)	1976	‡	‡	‡	‡	‡
Himeji (Hyogo)	1973	242 (‖)	1,106 (1)	2 (‖)	1,036 (‖)	228 (‖)
Okayama	1966	168 (‖)	2,197 (1)	7 (‖)	1,932 (1)	1,026 (‖)
Sasebo (Nagasaki)	1973	946 (1)	428 (‖)	16 (‖)	438 (‖)	487 (‖)
Kumamoto	1973	4 (‖)	0 (0)	0 (0)	0 (0)	18 (‖)
Sub-total	—	5,112 (3)	13,784 (7)	835 (6)	19,056 (5)	17,439 (4)
TOTAL FOR CENTRAL AND SUB-CENTRAL MARKETS	—	45,471 (25)	59,483 (28)	1,305 (9)	92,758 (27)	94,628 (23)
GRAND TOTAL FOR ALL JAPAN	—	179,807 (100)	212,807 (100)	13,507 (100)	341,475 (100)	395,493 (100)

* Sendai Central Wholesale Meat Market was not operating for all of 1975.
† Yamanashi Sub-central Wholesale Meat Market handles only pork carcasses.
‡ Habikino Sub-central Wholesale Meat Market in Osaka Prefecture was not opened until 1976.
§ Where the name of the market does not indicate in which prefecture it is located, the name of the prefecture is given in brackets.
‖ The percentage is positive but negligible.
Source: M.A.F., Statistics and Information Department, *Statistical Yearbook of Ministry of Agriculture and Forestry* (In English) 1975/76 Edition
M.A.F., Meat and Egg Division, *Ready Reference Book on the Meat Industries* (In Japanese) 1977 Edition.

profit making company. (In the case of the Osaka market two non-profit making companies are involved.) This company will normally be controlled by the larger wholesaler/retailer companies who operate in the market as buyers (and sometimes sellers), together with representatives of the farmer organizations and the local municipality. The physical structures (cool-rooms, auction rooms, boning and display/grading areas) are owned by local government authorities and leased to the company running the market for a nominal fee. The original capital required to construct the markets and the modern slaughter-houses closely associated with the markets, originally came from the meat trade, the local government authorities and the national government. The latter has always made the major contribution.

The facilities administered by these central wholesale market companies are, for the most part, up-to-date by world standards. One market (Kyoto) has installed a computerized auction system at which bids are made by pushing buttons with the current offer and other details about the side-of-beef being auctioned, displayed in lights above the head of the auctioneer for all participants to see. This ultra-modern system may soon be installed at other major central wholesale markets.

In principle the company administering the central wholesale market can not influence prices achieved in the market. The company, however, can control supplies reaching the auction room on any one day and in this way it may be able to manipulate prices, especially in the short-run [22]. At least one central wholesale market company (Kobe) has been criticised strongly in the past. One claim made against the Kobe Central Wholesale Market Company involved imported beef. It has been said that one large wholesaler/retailer company used its influence and connections with the Kobe market company to obtain imported beef at very low prices. The beef had been made available to the Kobe Central Wholesale Market Company by the LIPC for sale to the trade by open auction (see Figure 2). However, it seems the imported beef was not always disposed of in this manner but rather it was "allocated" at arbitrarily low prices to one of the largest wholesaler/retailer companies operating in the Kobe market.

The fifteen designated or local markets which operate under prefectural legislation are a less homogeneous group than the central wholesale markets. However, as Table 1 shows, some of these sub-central markets handle large numbers of carcasses. For all practical purposes the designated markets operate in the same manner as the central wholesale markets. For instance, as with the central markets, with one exception, each designated market is administered by a single non-profit making company. The one exception, Kumamoto market, has two marketing companies. As in the case of the Osaka Central Wholesale Market, these two companies conduct their auctions on alternate days.

2.2 Rationalization of Meat Slaughtering in Producing Areas

Following pressure from producer groups and local government authorities, in 1960 the Japanese Government authorized MAF to embark upon a large-scale rationalization of slaughtering and meat handling centers. Apart from the greater efficiency which could be achieved in large modern facilities, local government authorities were also concerned about the health and pollution problems created by the small-scale traditional slaughter houses in densely populated urban areas. The rationalization program has contributed both to a dramatic change in the number and the size distribution of abattoirs and to a significant change in the pattern of ownership of abattoirs in Japan.[7]

By 1977, MAF had heavily subsidized the up-grading or establishment of 88 separate meat handling centers.[8] Initially from 1960 to 1963 the subsidies were aimed at developing centers to facilitate the co-operative shipping of carcasses from producing areas and the creating of chilling capacity in middle to smaller sized cities which could receive these carcasses. From 1963 to 1971 the emphasis was on developing better abattoirs and carcass handling capacity in the rural areas. By 1971 the program had established 80 centers of various kinds. Since 1971 there have been only a further 8 new projects initiated although some of the earlier centers established under the scheme have been further up-dated. However, the meat centers established under the program since 1971 have all been large co-operatively owned boning and packing establishments designed to encourage the development of the part-cuts or block-meat trade.

The term "meat center" can cause confusion in Japan. Broadly there are two categories and Figure 3 has been drawn to emphasise the differences between them. The first group, referred to as SHOKUNIKU, are the large modernized centers where the animals are slaughtered and sold and dispatched in carcass form. While there are cutting, boning and packing facilities at some of these centers, the preparation of part-cuts is not a major activity at these meat centres. The central wholesale markets, the designated markets and the 21 largest shokuniku meat centers are all given special encouragement by being declared tax exempt markets.[9] That is, producers need not pay income tax on animals slaughtered and sold through these channels.

The second type of meat center which has only begun to appear since 1971 is the specialist cutting, boning and packing facility. There are no slaughtering works associated with these centers. Carcasses are brought to these "meat factories" from a central or designated market, from a shokuniku center, or from some other slaughtering establishment, and broken down into cuts and packed ready for distribution to retail outlets.

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[7] The total number of abattoirs in Japan declined from 688 in 1970 to 508 in 1975. The number of large abattoirs (with an annual capacity exceeding 100,000 swine carcass equivalents) increased from 24 to 46 over the same period. Although the number of very small slaughter-houses (annual capacity less than 5,000 swine carcass equivalents) dropped from 275 in 1970 to 154 in 1975, they obviously still play a significant role, especially in the more remote areas.

[8] For some additional comments see Miyazaki [20]. The best source for statistical information on the meat-marketing modernization program is MAF, Meat and Egg Division [13].

[9] Of these 21 SHOKUNIKU meat centers: 1 is also a designated (sub-central) market and is, therefore, owned by a municipal authority; 1 is owned by the NIPPON HAM company; 6 are owned by joint companies (controlled by wholesalers, retailers, producer co-operatives, local government and prefectural government authorities); the remaining 13 are owned by the NOKYO movement (i.e., producer co-operatives). The Hokkaido Prefectural Federation of Agricultural Co-operatives (HOKKUREN), for example, controls 7 large shokuniku meat centers in Hokkaido, all of which are primarily concerned with the slaughtering of cull dairy cows.

Some of these factories go even further and prepare consumer packs for immediate sale in supermarkets. Since 1971 producer co-operatives have been heavily subsidized by MAF to build 8 of these meat factories. In addition, several of the large processing companies have constructed their own large meat centers or factories since 1973.

The development of slaughtering facilities in rural locations close to the production areas was originally intended to encourage producers to have their cattle slaughtered in the more remote areas and then ship the carcasses to the central wholesale markets and designated markets for sale. This would reduce the need to ship live-cattle long distances. Furthermore, the large slaughter houses located close to the central wholesale markets had limited capacity and were expected to become a pollution problem in the long-term. However, with the development of the meat factories and the trade in cut or block-meat the rationalization process has now gone a step further with a rapidly growing proportion of total production by-passing the carcass auctions.[10]

2.3 The Development of the Part-cuts or Block Meat Trade

Stimulated by the efficiency and convenience of handling demonstrated by the part-cut packs imported from Australia, the innovators in the Japanese meat trade have applied similar technology to the distribution and marketing of domestic beef in Japan with considerable success.[11] Table 2 shows how rapidly the concept of breaking beef carcasses down into part-cuts prior to distribution has expanded since the early 1970's. The adoption rate has been particularly rapid in those regions which produce beef predominantly from dairy cattle (Hokkaido, Tokoku, Chubu) and in those areas most remote from the major consuming areas (Hokkaido, Tohoku and Kyushu).

The most striking feature of the shift from carcass trading to part-cuts or block-meat trading has been the emergence of the five large meat processing companies as dominant forces in the fresh beef distribution trade within Japan.[12] These companies have traditionally been concerned with ham and sausage production and not with fresh meat. However, they have now "cornered" a large and growing share of the fresh meat trade.

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[10] This is especially true in regard to carcasses from cull dairy cows (about one-third of all beef carcasses) and, to a less degree, for dairy steer carcasses (another one third — roughly — of the total national output). The traditional wagyu sector still strongly supports the sale of meat in the carcass form.

[11] The cut meat is packed without gas. It seems that quality control has not yet reached Australian standards because the part-cuts prepared in Japan are said to have a shorter shelf-life and require greater additional trimming before final sale than the Australian export product.

Interestingly, despite the obvious advantages, it was not until 1978 that one of the major Australian meat processors and exporters (Thomas Borthwicks and Sons (Aust.) Ltd.) began to offer cut-meat packs to Australian retailers and super-market chains.

[12] The big 5 are NIPPON HAM, PREMA HAM, ITOH HAM, SNOW BRAND and MARYDAI. In regard to their meat processing business (as distinct from their fresh meat activities) these 5 companies controlled 60 per cent of the market in 1974. (See MAF, Meat Egg Division [13].) The next 5 largest companies controlled only 8 per cent of processed meat sales. There has been a marked trend towards greater concentration in this industry over the last decade.

Table 2: Growth of the Beef Part-Cuts Trade in Japan, 1971-1976

Region and Item / Year	1971	1972	1973	1974	1975	1976
HOKKAIDO						
Number slaughtered	28,809	33,918	25,434	43,369	55,283	37,400
Percentage for part-cuts	47.0	40.8	51.7	63.5	47.4	66.2
TOHOKU						
Number slaughtered	26,393	30,485	24,990	34,340	37,396	31,704
Percentage for part-cuts	13.0	14.5	21.9	19.5	29.0	41.9
KANTO						
Number slaughtered	199,115	209,499	153,799	205,645	228,696	181,223
Percentage for part-cuts	8.1	9.0	12.7	45.9	33.3	38.3
CHUBU [HOKURIKU, TOSAN, TOKAI]						
Number slaughtered	127,901	135,973	100,537	124,362	140,656	101,401
Percentage for part-cuts	7.7	10.2	14.6	25.0	39.1	55.9
KINKI						
Number slaughtered	393,749	402,623	299,175	319,648	358,826	317,765
Percentage for part-cuts	4.8	5.7	10.1	13.4	15.6	21.7
CHUGOKU AND SHIKOKU						
Number slaughtered	143,010	146,614	103,946	119,143	146,125	127,907
Percentage for part-cuts	4.4	4.5	0.5	8.8	7.5	9.2
KYUSHU						
Number slaughtered	110,852	127,728	98,020	135,810	176,720	148,222
Percentage for part-cuts	3.8	6.8	20.7	27.1	24.5	33.3
ALL JAPAN						
Number slaughtered	1,029,829	1,086,840	805,901	982,317	1,143,702	945,622
Percentage for part-cuts	7.0	8.2	13.5	25.4	24.3	31.1

Sources: (i) For 1971 to 1975 data: M.A.F., Statistics and Information Department, *Pocket Statistical Book of Agriculture, Forestry and Fisheries* (In Japanese) 1976 Edition.
(ii) For 1976 data: Japan Meat Conference, *Cut Meat Marketing Survey Report* (In Japanese) 1976 Edition.

They can either purchase cut-meat from the NOKYO controlled meat factories or they can process carcasses in their own meat factories and supply the part-cuts direct to retailers. In this way they by-pass the traditional myriad of small wholesalers in the meat trade. Furthermore, with access to very large financial resources, these large companies are in a position to finance small retailers on generous terms. One estimate suggests that these large companies now control up to 40 per cent of the independent retail meat outlets in Japan through financial agreements. In addition to supplying the small independent meat shop, these large companies can further process the meat in their meat factories and supply super-market chains with pre-packed consumer parcels of beef.

MAF has been encouraging the part-cuts trade because it represents a major step towards the more efficient and lower cost marketing of beef in Japan. In 1977 the national government announced several times that MAF was being asked to get beef directly from the producer to the consumer. The aim was to by-pass the traditional lengthy and expensive wholesaling and distributional network by using the recently developed cut-meat distributional channels to achieve lower retail prices.

Although the JMC, which includes representatives of the traditional wholesalers, strongly supports the development of the cut-meat trade[13], sections of the traditional meat trade in Japan must have been placed under great pressure by the sudden expansion of the large processing companies into fresh meat distribution. At the same time this development is not without its critics among producers and their organisations. Producer groups are especially concerned about the establishment of a fair market for cut meat. They are worried about the growing market power of the five major processing companies. Producers want the national government to establish a series of central wholesale markets for cut-meat. The argument is that an auction is necessary to establish fair prices for part-cuts of various kinds. MAF has sought special funds to build the first such market in Tokyo. If these funds are allocated to MAF in the 1978 budget, the first beef part-cuts auction market will open in Tokyo in about 1981.

Opponents of the idea of a part-cuts market point out that it would be a bottle-neck in the physical flow of part-cuts from the meat factories to smaller wholesalers and retailers. If the part-cuts had to be physically presented for sale at the market, much of the gain in distributional efficiency would be lost. One solution would be to sell by description. This approach would also eliminate the huge costs of building the cool rooms and other facilities necessary for the marketing of part-cuts by visual

[13] The JMC has launched a campaign to encourage retailers to display block-meat and differentially price the various cuts according to their relative merits for various purposes. At the same time the retailers have been supplied with eye-catching charts designed to educate the Japanese housewife to buy the most suitable cut for her particular cooking style. At present the vast majority of beef is offered to final consumers in very thin slices, as mince or in cubed form. Under these circumstances the consumer has no way of knowing from what part of the animal the meat has come; whether the meat has come from a wagyu or dairy carcass; or anything else about the meat. She is almost totally dependent on the advice of her butcher. This dependence on the personalised services of the meat retailer has seriously retarded the expansion of meat sales through self-service super-markets. To the extent that the current education campaign convinces housewives they can choose the right cut for their particular purpose, it should hasten the demise of small, inefficient local retail meat outlets.

appraisal. Despite the steps already taken towards establishing formal transaction standards for part-cuts (see below), it is extremely unlikely that such a system could be launched in the near future.

There are at least four reasons why the development of the part-cuts trade should work to the long-term advantage of foreign suppliers of beef to Japan. First, the greatly improved distributional efficiency should help to keep domestic Japanese prices of beef under control thus facilitating a steady expansion in domestic demand for beef. Second, the familiarization of retailers with cut-meat trading and the weakening of the old distinction between imported beef (which arrived at the retail outlet as part-cuts) and domestic beef (which traditionally arrived as sides or quarters) should reduce "butcher resistance" to imported beef.[14] Third, the expanded role of the large ham and sausage processors in the fresh meat trade should encourage these very large companies to renew their efforts to achieve a liberalization of beef import policies.[15] Fourth, and perhaps most important of all, domestic producer co-operatives who no longer sell beef in the form of carcasses have already indicated they do not regard the carcass auction as a useful guide to the fair pricing of part-cuts. They are therefore, likely to press for a change in the policies adopted to support the domestic producer. They are likely to press for a direct deficiency payment system instead of the present carcass-price stabilization scheme. Such a change would remove the major obstacle to more liberal beef import policies.

2.4 Establishment of Transaction Standards and Grades for Beef Carcasses

With the establishment of the first Central Wholesale Meat Market in Osaka in 1958 and the Japanese Government's stated intention to establish similar markets in other centres, MAF officials believed there was an urgent need for a set of national standards to facilitate carcass transactions. The Livestock Bureau of MAF created a 37-man commission to establish "Transaction Standards for Livestock Products" in October 1960. This commission tabled its recommendations in March 1961. Following some further investigations, the first all-Japan Beef Carcass Transaction Standards were finally introduced in late 1961. These standards (or system of grading) have been reviewed and amended in August 1963, January 1970 and during 1975. However, the changes made on each occasion have been relatively slight.

[14] As already mentioned the quality control in Japanese meat factories is not yet up to overseas standards. As a result it seems Australian chilled beef packs are currently attracting a premium over similar quality local packs of block-meat. This is a major reversal of the traditional situation where imported beef sold at a discount of up to 20 per cent on a grade-for-grade basis.

[15] With the establishment of their meat factories and growing involvement with the distribution of fresh meat, the large ham and sausage companies will be seeking a greater share of imported beef. At present the processing and canning industries receive only 3 per cent of the import quota in the form of private quota (see Figure 2) and currently their share can only be imported frozen (not chilled). The large processing companies can, of course, also obtain imports via the LIPC quota by tendering or being allocated the right to import under the one-touch system. They may also purchase imported beef directly from the LIPC or through the central wholesale markets when the LIPC uses this channel to distribute imported beef (see Figure 2).

Initially the selection and training of the graders and the general administration of the grading system was the responsibility of the Japan Meat Conference. However, a new organization called the Japan Meat Grading Association was established on 1st February 1975 to supervise the grading system. The members of the new organization are the LIPC (representing the Japanese Government); the 47 Prefectural Governments; the 4 major national associations representing the meat trade; and the 4 national federations of producer co-operatives.[16] These organizations subscribed the basic capital to establish the Japan Meat Grading Association. Of this basic capital 70 per cent was contributed by the national government through the LIPC. The operations of the grading association are financed by the interest on the basic capital fund and the grading charge incurred by the owners of the carcasses graded prior to sale. The cost of grading was only ¥150 ($(A) 0.60) per carcass in 1977 and the association was operating at a considerable loss.

Although the national government contributed most of the capital to establish the grading authority, the grading scheme is not an official government program. Furthermore it is entirely voluntary. The grading association employed 99 graders in 1977 and offered grading services at 56 meat handling establishments. The proportion of carcasses graded in Japan reached 38.1 per cent in 1976 which was only 3.7 per cent higher than the 1974 figure. Prior to 1974 the proportion of carcasses graded had increased rapidly for some years. However, despite the very low charge and the steady increase in the number of slaughtering facilities with graders in attendance, the proportion of carcasses being graded seems to have levelled off at a little over one third.

The failure of voluntary grading to become more widely accepted by the meat trade may be due primarily to two factors. First, the rapid increase in the proportion of carcasses being sold as block-meat rather than in the carcass form substantially reduces the usefulness of carcass grading. Secondly, the lack of acceptance of the essentially subjective grading system by a large segment of the traditional meat trade. It is widely believed in Japan that the grading system is not appropriate for high quality wagyu carcasses. At the other end of the scale, producers of dairy cow carcasses claim the present grading system discriminates against dairy cow carcasses. The high quality wagyu carcasses are usually sold ungraded to the speciality trade for, by Australian standards, unbelieveably high prices.[17] A rapidly growing proportion of the dairy cow carcasses are now being broken down and distributed as block-meat.

It would now seem very unlikely that the present grading system will ever cover much more than half the carcasses produced in Japan. It will never be possible, therefore, for the Japanese government to launch a beef deficiency payments scheme based on the carcass grading system.

The Japanese carcass grading system is not a classification system nor is it a complete grading system. Although an attempt is made to rank carcasses

[16] The four national federations of producer co-operatives concerned are listed in footnote 1.

[17] For example, one particularly high quality wagyu "heifer" carcass fattened in the famous Matsusaka region and weighing 320 kg., was sold in the Tokyo Central Wholesale·Market in November 1977 for ¥9.6 m. ($(A)38,400)!

from best to worst, for any one grade, the buyers still differentiate between the carcasses on the basis of sex, breed and fattening area. As full details of the various grades are available in English [5] only a brief outline of the Japanese grading system will be presented here. There are 6 categories: "special selection" or "super" grade, "choice", "1st" grade, "2nd" grade, "3rd" grade, and "under-regular grades". No account is taken of breed, age or sex in the formal system. However, at the auction buyers are informed not only of the grade and weight but also the sex, breed and fattening district. Grades are determined on the basis of a half carcass (side), this being the basic unit sold at auction in the wholesale meat markets. Normally the side is cut at the 5th and 9th ribs so as to enable the grader (and buyer) to see the eye of the rib. But the precise spacing of these cuts varies from market to market. This point is of considerable significance since the degree of marbling varies from rib-to-rib on any carcass. Since the score for marbling plays such a vital role in determining the grade, efforts are being made to standardise this aspect of the inspection process.

Fat marbling or *sashi* is one unique feature of the Japanese grading system which warrants some elaboration. In theory, the grading system attempts to de-emphasise this factor which clearly dominates the thinking of traditional producers and wholesalers. The guidelines for graders point out that if a carcass has all the requirements for a higher grade except a sufficiently high *sashi* score, then it should be raised a grade above the level for which it qualifies on the basis of its *sashi* score. In general, however, a *sashi* score greater than +4 is required for "special selection", +3 (or better) for "choice", +2 (or better) for "1st" grade, +1 (or better) for "2nd" grade, and +0 (or better) for "3rd" grade. In practice, therefore, *sashi* scores (which range from 0 to 5) play a deciding part in the Japanese grading system.

One characteristic of the Japanese native breed or wagyu cattle is their capacity to lay down fat between the muscle fibres even when fattened as fully mature beasts. No other breed of cattle can match the fat marbling capacity of wagyu cattle. The emphasis on marbling derives from the cooking methods traditionally employed in Japan where good quality beef has, in the past, almost always been boiled as thin slices. Unless the meat is well marbled this method of cooking toughens the meat and makes it unpalatable.[18] As a result the grading system which was developed before the advent of hamburgers, barbecues, baking ovens and steak grillers in Japan, still emphasises *sashi* scores. Today with the change in cooking methods and consumer tastes, the demand for meat with a low *sashi* score has expanded rapidly and the traditional price premium for all but the very best wagyu meat is being eroded. It is the growth of this "popular beef" market based mainly on dairy steer beef with a low *sashi* score which is of most interest to foreign suppliers.

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[18] One important side issue here concerns the claim by many Japanese that grass-fed beef gives off an unpleasant smell when cooked. Foreigners in Japan, accustomed to grilling or frying beef are inclined to dismiss this argument against imported grass-fed beef without considering the traditional cooking methods of the Japanese. Thinly sliced grass-fed beef does tend to give off an odour when boiled at the table in the Japanese fashion.

2.5 Transaction Standards and Grades for Part-Cuts

In response to the growing volume of beef being distributed in the part-cuts (or block) form, the Japan Meat Grading Association in co-operation with MAF, established a set of transaction standards (or grades) for part cuts of beef in 1975. Since the publication of a guide-book in 1976 [4] there have been concerted efforts to encourage the meat trade to adopt these standards. However, no cut-meat is being formally graded as yet. In fact, the grading association has no staff qualified to grade part-cuts according to the established standards. In future the grading association plans to employ specialist part-cut meat graders but at the present time there are no training programs to produce such people. There are plans to convert the small technical college for retail butchers in Gumma Prefecture into a training center for meat industry personnel. At present this college is financed by ZENNOH, LIPC and others but does not have the support of ZENNIKUREN. Should the Japanese Government decide to upgrade the college, a 3-year course in meat-grading will be introduced. Obviously it will be some time before part-cuts of beef are being formally graded by Japan Meat Grading Association personnel.

At present, as already explained, part-cuts are prepared and packed in meat factories controlled by producer co-operatives or by one of the large processing companies. Each packer is responsible for the quality and packing standards of his product. Apparently the meat grading association occasionally hires "outside" meat experts to check on these meat packing establishments. The question as to which authority should oversee packing standards seems to be a major controversy. The MAF controlled Japan Agricultural Standards (JAS) program conducts regular quality checks on all sorts of processed agricultural products including processed meats (*i.e.*, ham, sausage, and canned meat). However, the grading association argues that cut-meat is not a *processed* product but a *fresh* commodity and, therefore, is not covered by the MAF administered JAS scheme.

Under the newly established wholesale beef part-cuts grading system the meat is to be boned, trimmed of fat and wrapped in vynl and packed in the same manner as the best chilled beef from Australia. The Japanese packers do not as yet use gas. The 13 wholesale cuts described by the program are to be graded "super", "high", "medium", "low", and "processing" on the same basic criteria as adopted for carcass grading. As with carcass grading the system does not distinguish between sexes or breeds. Each pack of meat, therefore, will need to carry the name of the standard cut it contains, the grade, and the breed and sex of animals from which the meat has been derived.

Although the wholesale part-cuts grades have been developed from the carcass grading system, carcasses being broken down for packing and distribution in the block-meat form need not, and in general will not, have been graded as carcasses. The objective of the wholesale part-cuts standards is not to duplicate but to complement the older carcass grading system. Recent trends indicate that a high proportion of beef from dairy cattle will be distributed as cut-meat in the near future. The aim is to have this trade conform to the cut-meat transaction standards recently established.

The arbitrary and subjective nature of carcass grading has already been mentioned as a major reason why it has not been more widely adopted. Wholesale part-cuts grading has similar limitations plus the difficulty of standardizing the way the carcass is broken down into its various cuts. Nevertheless, the need for standard cuts and recognised grades is likely to grow as more and more retailers receive and display their meat as part-cuts. With this development in mind MAF and the grading association have extended the wholesale part-cuts grading system to establish retail trading standards for 9 cuts [12]. Furthermore, a consumer education campaign has been launched by the JMC to acquaint the housewife with these 9 retail cuts and their recommended cooking and preparation methods. As housewives in Japan learn to recognise the different cuts of beef and accept that each cut has a particular use, they will become more discerning customers. To capitalise on these developments foreign suppliers of beef should ensure that their product arrives in Japan not only packed, but also graded to conform with the new Japanese transaction standards for cut-meat.

3. Future Policy Options[19]

At present the traditional or wagyu sector contributes only about one third of the total Japanese beef production, the remaining two thirds coming from dairy cattle. Nevertheless, for historical and political reasons, beef industry policy in Japan has been, and continues to be, dominated by the interests of the wagyu sector. Within the wagyu sector, as argued elsewhere [10], the groups representing the producers of feeder-calves have had a particularly strong influence on policy. The national government has directed MAF to save the wagyu sector from extinction. MAF has, therefore, gradually increased the level of support available to the beef industry over the last 15 years.

The growing government support for beef farmers has also been beneficial for farmers with dairy cattle. Not only has the generous attitude of the government towards beef production enhanced the profitability of fattening dairy cattle for slaughter, but it has also significantly assisted the milk producing segment of the dairy cattle sector. The high prices for cull dairy cows have stimulated heavy culling on the basis of age and milk production. Good prices for steer calves and higher prices for replacement heifers have also focussed attention on the reproductive performance of herds. As a result the generous price-support policies for beef have led to younger, more fertile dairy herds with a higher average output per cow. Any significant changes in Japanese beef policies, therefore, need to be assessed not only in terms of their impact on the various groups of beef producers but also in terms of their impact on the dairy products industry.

While assistance to domestic cattle producers in Japan takes many forms, this section is concerned only with future alternatives to the current price-

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[19] Nakajima [21] and Kagatsume [6, 7] published theoretical critiques of the current Japanese beef import and price stabilization policies in 1977. At least one detailed empirical study of the wholesale-price stabilization scheme also appeared in that year. (See Yori and Kishimoto [25]). The Forum for Policy Innovation (*Seisaku Koso Foramu*) have more recently prepared a policy document based on theoretical analysis [2]. This section will not attempt to summarise or extend these important theoretical papers.

support programs for beef. In this regard there are two broad sets of alternatives to the present beef import policies and wholesale-beef price stabilization arrangements. The first set of alternatives include all the possible changes which could be achieved within the current legislative framework. The second set consists of all the various price-support measures which could be considered under new legislation. The aim of this section is not to exhaustively explore all the possibilities in each of these two sets, but rather to highlight some of the important factors which will influence any future changes in Japanese beef policies. In this regard, the impact of recent changes in the domestic marketing channels for beef discussed in the previous section should not be under-estimated.

3.1 Changes Within the Existing Legislative Framework

The Japanese Government has already moved to give the feeder-calf price-support programs much greater financial backing. The present author has argued elsewhere that this greater financial strength will enable MAF to insulate the feeder-calf market from downward swings in the wholesale beef market [10]. As a result the LIPC could be expected to administer the wholesale-price stabilization scheme more adventurously. No longer should the fear that a drop in wholesale prices could lead to a catastrophic collapse in feeder-calf prices (as occurred in late 1973 and 1974) restrict the ability of the LIPC to allow prices to move below the mid-point of the price band established by the stabilization scheme.

While the above suggestion may seem to be a minor change in the administration of the current policies, if implemented, it could permit Japan to satisfy two of the persistent demands made by Australian and New Zealand spokesmen. Japan could not only set import quotas for longer periods but also permit beef to enter Japan when the trade (rather than the LIPC) thought best. That is, the LIPC would no longer need to control the timing of imports so carefully and hence the government could allow more beef to enter either as private quota or under the one-touch system.

A more radical administrative change which would complement the adjustments just discussed would be for the Japanese Government to make a positive commitment to a domestic buffer-stock of beef. These stocks could be held (when necessary) by the LIPC and/or the producer groups under so-called "self-control" programs. The idea would be for the LIPC to actively enter the domestic market as both a buyer and seller of meat and for the LIPC to hold significant stocks if necessary. At the same time quotas could be fixed at least one year in advance and shipments would be on a regular basis.

The major problem with a meat buffer-stock is the cost of storing chilled and/or frozen meat for any length of time. Furthermore, if meat is purchased either domestically or overseas as fresh or chilled beef and then frozen for long-term storage, it will immediately suffer a significant drop in value. In addition, the freezer space for this kind of operation is not currently available in Japan.

There are undoubtedly other changes in addition to those discussed above which could be achieved without legislative change. The delays in and barriers to legislative change in Japan suggest that every possible avenue for change within the present legislation will be explored before a decision is taken to change the laws governing beef imports. There is unfortunately, one major obstacle for Japanese consumer advocates (and foreign supplier representatives) to overcome before one could anticipate a more adventurous approach to the administration of the current legislation. The LIPC and, therefore, MAF have already had to face stern criticism over the administration of beef policy. Any move which increased the administrative risks — and hence the chances of incurring the wrath of domestic consumers, domestic producers or even foreign governments — would be strongly resisted by the bureaucracy.

3.2 Legislative Changes: The Guaranteed Floor Price and Variable Import Levy Option

If the present import policies and price-support arrangements for beef were to be altered by legislative changes there are, in principle, an enormous range of possible policy options available. In practice, however, for political and budgetary reasons one attractive approach from the view point of the Japanese Government, would be to establish a floor-price and finance the maintenance of this floor-price by a variable levy on beef imports. The floor-price program could, in theory, operate either as a buffer-stock or as a buffer-fund scheme.

A buffer-stock scheme could be established with the LIPC standing ready to buy *all* carcasses in the central wholesale markets which did not attract a bid at or above the floor price for the grade of carcass concerned. These activities could be financed by a variable levy on imports which would no longer be subject to quota restrictions. The import levy would be adjusted to ensure that beef could not be imported and sold profitably at a price below the equivalent floor-price. There would be no attempt to contain upward movements in beef prices within a band of prices as at present. However, since imports would flow in once the price rose above the floor price (and/or the LIPC could start selling stocks), wholesale-beef prices may be more stable than at present.

A move to abandon import quotas and control imports entirely through a variable levy scheme tied to a buffer-stock/floor-price plan would not have many supporters among consumer representatives (or foreign suppliers) unless the floor-prices were set well below the prices now established as the lower limit within which wholesale prices are supposed to be maintained. Producer groups are not likely to support a change to a buffer-stock/floor-price arrangement with a lower floor price than at present. Furthermore, the idea of a buffer-stock would be opposed vigorously by the bureaucracy for reasons discussed in the previous section.

On the other hand, a buffer-fund/deficiency payments approach to maintaining a floor-price for beef may be more acceptable to all concerned. The basic idea would be for the LIPC to make deficiency payments to the owners of carcasses the prices of which fell below the guaranteed floor-price. While the deficiency payments concept has been firmly rejected by the Japanese Government in the past as a means of supporting beef producers, the reasons which have been given are *not* convincing. For instance, it has been argued that for such a scheme to become administratively feasible every carcass would need to be graded and priced in an open-market so as to establish entitlement to the deficiency payment.

As the outline of the current marketing channels discussed above make abundantly clear, this requirement can not be met at present nor is it likely to ever be achieved. But, as demonstrated with the deficiency payments schemes for feeder-calves [10], the Japanese Government is prepared to operate deficiency payments schemes which do not differentiate between grades. Furthermore, in the case of the dairy-steer feeder-calf scheme, the animals do not have to pass through any public market to attract the lump-sum deficiency payment. Clearly a similar deficiency payments scheme for beef carcasses *is* administratively feasible.

Although Japanese consumer advocates and foreign supplies would both like to see a deficiency payments scheme for beef introduced in Japan, the extent to which domestic beef prices would fall and imports increase depends upon how the buffer-fund/deficiency payments scheme is financed. There is no chance that the Japanese Government would completely liberalise the trade in beef and finance the deficiency payments out of consolidated revenue. The budgetary cost would be far too large. Besides, as argued previously [9], beef still has some of the features of a luxury good in Japan. Therefore, the Government would almost certainly seek to finance the deficiency scheme by a variable levy on imports. Some form of tax on beef imports would be necessary in any event, to continue financing the feeder-calf deficiency payments schemes [10]. With the present large gap between world prices and domestic beef prices in Japan, any change from quotas to a variable import levy as a means of controlling beef imports could result in lower consumer prices and larger imports. With the dramatic trade surpluses currently generated by Japan, there is growing political pressure on the Japanese Government to increase beef imports and lower domestic consumer prices. A switch from the present arrangements to a lump-sum deficiency payments scheme modelled on the existing dairy-steer feeder-calf scheme and financed by a variable levy on imports, could allow the Japanese Government to continue to support the returns of beef producers and at the same time, allow more imported beef to reach consumers at lower prices.

4. Concluding Comment

The present arrangements for protecting the production of beef in Japan are not sacrosanct. There are problems with the wholesale-price stabilization scheme. The present import policies, which are closely tied to the operation of the stabilization scheme, have been criticised from all sides. Massive changes have occurred in the location and structure of the cattle raising industries. Marketing channels have undergone major changes both with and without government assistance. The production, handling and distribution of meat is being modernised at a rapid rate. The latest developments in the marketing of part-cuts of beef have been spearheaded by the large meat processing companies. These companies now dominate the once traditional meat wholesaling trade. They have concentrated their efforts on the rapidly growing "popular beef" segment of the market which is based on meat from dairy cattle and imported beef.

These changes in the production and marketing of meat in Japan have not yet had much impact on "beef politics". However, the political influence of both the traditional wagyu cattle producers and the traditional beef wholesale trade must be under challenge. Change, then, is the order of the day in the Japanese beef industry and a major adjustment to the policies designed to protect domestic producers should not be ruled out.

However, a major restraint on the development of future beef import policy in Japan is the frequently restated long-term policy goal of 80 per cent self-sufficiency in beef. If this goal continues to dominate beef policy discussions in Japan then the growth in beef imports into Japan will be largely determined by the rate at which the domestic production can expand. On the other hand, there are now many reasons to suspect that the Japanese Government may be prepared to abandon the 80 per cent self-sufficiency criterion, at least in the short-term. For political reasons it will be retained as a long-term goal. However, there are many other pressing short-term policy goals such as reducing the trading surplus; acquiring rights to fish the territorial waters surrounding Australia and New Zealand; and the lowering of beef retail prices; all of which call for increased beef imports. The time is right, therefore, not only for a significant change in the methods used to support Japanese beef production but also for a general easing of restrictions on beef imports.

References

[1] CHIBA, ATSUKO, "Hyenas Herding Around Beef: Discovering a Veil Covering the Distribution System for Imported Beef", *Economist* (October, 1977), pp. 56-69. (In Japanese).

[2] FORUM FOR POLICY INNOVATION, *A Plan For the Beef Import Liberalization in Japan*, Policy Proposal No. 5 (April, 1978). (In Japanese with English summary)

[3] JAPAN MEAT CONFERENCE, *Cut Meat Marketing Survey Report* (1976), (In Japanese)

[4] JAPAN MEAT GRADING ASSOCIATION, *Guide Book for Beef Wholesale Cuts Grading Standard*, February, 1976, (In Japanese)

[5] JAPAN MEAT GRADING ASSOCIATION, *Commentary on Standards for Use in Carcass Transaction: Part I Beef Carcass.* (1962, as amended in January 1970). (In English)

[6] KAGATSUME, MASARU, "Policy Objective and Policy Means for Beef Imports: With Special Reference to the Price Stabilization Operations of the LIPC", in *Policy Analysis on the Re-Organization of Japanese Agriculture — Policy Objectives and Policy Means.* (Kyoto: Kyoto University Agricultural Policy Study Group, March, 1977). (In Japanese)

[7] KAGATSUME, MASARU, "A Policy Analysis on the Japanese Beef Import and Price Stabilization", *Journal of Rural Problems*, Vol. 13, No. 1 (1977), pp. 9-16. (In Japanese)

[8] LIVESTOCK INDUSTRY PROMOTION CORPORATION, *Annual Report* (1975 and various other issues). (In Japanese)

[9] LONGWORTH, JOHN W., "Institutions and Policies Influencing Japanese Beef Imports", this *Review*, Vol. 44, Nos. 1 and 2 (March and June, 1976), pp. 19-43.

[10] LONGWORTH, JOHN W., "Feeder-Calf Price-Support Policies in Japan", this *Review*, Vol. 46, No. 2 (August, 1978), pp. 103-127.

[11] MINISTRY OF AGRICULTURE AND FORESTRY, LIVESTOCK BUREAU, *The Meat Statistics in Japan* (Various six-monthly issues). (In English)

[12] MINISTRY OF AGRICULTURE AND FORESTRY, LIVESTOCK BUREAU, *Retail Standards for Block Meat (Beef and Pork),* January, 1977. (In Japanese)

[13] MINISTRY OF AGRICULTURE AND FORESTRY, MEAT AND EGG DIVISION, *Ready Reference Book on the Meat Industries*, (Various annual issues). (In Japanese)

[14] MINISTRY OF AGRICULTURE AND FORESTRY, MINISTER'S SECRETARIAT (PLANNING OFFICE), *Summary of Agricultural Stabilization Schemes*, June, 1976. (In Japanese)

[15] MINISTRY OF AGRICULTURE AND FORESTRY, STATISTICS AND INFORMATION DEPARTMENT, *Statistical Yearbook of Ministry of Agriculture and Forestry, Japan*, (Various annual issues). (In English)

[16] MINISTRY OF AGRICULTURE AND FORESTRY, STATISTICS AND INFORMATION DEPARTMENT, *Pocket Statistical Book of Agriculture, Forestry and Fisheries*, (Various annual issues). (In Japanese).

[17] MINISTRY OF AGRICULTURE AND FORESTRY, STATISTICS AND INFORMATION DEPARTMENT, *Statistics of Meat Marketing* (Various annual issues). (In Japanese)

[18] MINISTRY OF AGRICULTURE AND FORESTRY, STATISTICS AND INFORMATION DEPARTMENT, *Statistics on Marketing of Livestock for Meat Use (Survey of Livestock Market)*, (Various annual issues). (In Japanese)

[19] MIYATA, IKUO, "Marketing of Imported Beef and Its Price Formation", *Science of Food*, No. 38 (October, 1977), pp. 62-71. (In Japanese)

[20] MIYAZAKI, HIROSHI, "Meat Centers and Direct Selling of Beef", *Science of Food*, No. 38 (October, 1977), pp. 36-41. (In Japanese)

[21] NAKAJIMA, CHIHIRO, "Policy Aims and Policy Measures of the LIPC with Special Reference to Beef", in *Policy Analysis on the Re-organization of Japanese Agriculture — Policy Objectives and Policy Means* (Kyoto: Kyoto University Agricultural Policy Study Group, March, 1977). (In Japanese)

[22] TAKAHASHI, IICHIRO, "Changes in Competitive Structure in the Meat Wholesale Market — Establishment of the Central Wholesale Market and Its Significance", in KUWABARA AND IWAKATA (eds.), *Economic Approaches to Japanese Agriculture*, (Tokyo: Tokyo University Press, 1969), pp. 204-216.

[23] YOKOTA, TETSUJI, *Why Is Beef So Expensive in Japan?*, Tokyo: Simul Press 1977. (In Japanese)

[24] YOKOTA, TETSUJI, "Ham Manufacturing Industry Moving Toward the Control of Fresh Meat Sales", *President* (September, 1977), pp. 111-117. (In Japanese)

[25] YORI, T. AND KISHIMOTO, Y., "Empirical Study on Beef Price Stabilization", *Agricultural Accounting Studies*, Vol. 10 (1977), pp. 10-22. (In Japanese)