Figure 13-2 Effects of Butter Import Liberalization


The figure above is adapted from the IMK text. The scenario is one in which Japan has an import restriction on butter. If Japan were to remove the restrictions on imported butter, the gains to the consumers, in total, have been estimated to be 79 billion yen. The loss to butter-producing households (producers) would be 63 billion yen. So, the gains from liberalization of butter are greater for the consumers than the loss that would be suffered by the producers. These are estimates of the areas in our costs/benefits of a tariff graph we study in class. These are real-world estimates for Japanese butter.

## Below is a translation (by Y. Kawabe) of the IMK text.

Because the number of consumers who benefit from liberalization is so large, the benefit per consumer will be small, even if the benefit is large for consumers as a whole. On the other hand, the number of producers who will suffer losses due to liberalization is small, so even if the overall loss is small, the per capita loss will be large.

For example, let's consider the butter example above. For simplicity, let's assume that liberalization does not change butter consumption and production. As we have already calculated, consumers as a whole will gain 79 billion yen from trade liberalization, but the annual butter consumption per consumer is about 600 g (Ministry of Agriculture, Forestry and Fisheries "Food Supply and Demand Table"). Even if the price of butter is reduced to one-third due to trade liberalization and the price is reduced from 300 yen to 100 yen per 200 g , the annual profit per consumer is $(300-100)$ yen $\times 600 \mathrm{~g} \div 200 \mathrm{~g}=$ It's only 600 yen, and it's only 50 yen per month.

On the other hand, the annual production of butter in Japan is 63,000 tons, and if the price is reduced to one-third and the price of butter of 1.5 million yen per ton drops to 500,000 yen, the dairy farmers as a whole will suffer a loss of ( 1.5 million yen $-500,000$ yen $) \times 63,000=63$ billion yen. According to the Ministry of Agriculture, Forestry and Fisheries "Livestock Statistics", the number of dairy farmers in Japan in 2011 was 21,000 , so the annual loss per household was 63 billion yen $\div 21,000$ units $=3$ million yen. It will be 250,000 yen per month. Even if the consumer's profit (gains) exceeds the producer's profit (gains) as a whole, it can be seen that
the producer's loss overwhelms the consumer's profit (gain) on a per capita basis (Fig. 13-2).

Parsons' comment: In the Japanese text, they use the word "rieki" 利益 which can mean "profits", but also more generally, "benefits". Here, we mean the change (loss or gain) in PS and CS, so I have written "gains" in parentheses after "profits".

