EFFECTS OF TRADE RESTRICTIONS ON U.S. AGRICULTURE

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U.S. AGRICULTURAL IMPORTS

U.S. agricultural imports in calendar year 1968 amounted to $5 billion, having grown at a rate of 2.8 percent over the decade of the 1960's. This total represents between 12 and 14 percent of domestic utilization of farm products—a relationship that has been rather stable over time (Table 1).

Somewhat less than half of total imports are products that cannot ordinarily be grown in the United States and are therefore classified as complementary to U.S. agriculture, although all products compete to some degree either within or without the agricultural sector. The remaining and larger portion of imports are supplementary and compete more or less directly with domestic output. Furthermore, supplementary imports have grown 41 percent over the last ten years compared to 16 percent for complementary imports. Within supplementary imports, dairy products and meat and meat products have grown particularly fast and have more than doubled in the decade.

Even with the relatively rapid increase in imports of dairy and livestock products, some surprising facts may be noted. Dairy imports in 1968 still represented only 1.2 percent of domestic utilization, although as recently as 1965 they were only 0.6 percent. U.S. exports of dairy products absorbed 2.4 percent of domestic supplies in 1968, down from 4.0 percent in 1965. Thus, on balance, the United States was still a net exporter of dairy products in 1968 despite the increase in imports and decline in exports of recent years.

The other agricultural sector evidencing rapid import growth, meat and meat products, presents a somewhat different picture but one not totally dissimilar. In 1968, all livestock product imports amounted to 5.1 percent of domestic utilization, up from 4.3 percent in 1965. Within this broad category, the most significant rise has been in beef and veal imports, which increased from 4.3 percent of domestic utilization in 1965 to 6.2 percent in 1968. Even this amount is not a major share of the market, but it is significant.

To evaluate the real impact on American agriculture, one has to take a closer look at the products involved. The primary category of import

TABLE 1. U.S. EXPORTS AND IMPORTS OF FARM AND FISHERY PRODUCTS IN RELATION TO DOMESTIC SUPPLY AND UTILIZATION, BY MAJOR COMMODITIES, CALENDAR YEARS 1965-68[1]

Commodity Group	Exports as a Percentage of Domestic Supply				Imports as a Percentage of Domestic Utilization			
	1965	1966	1967	1968[2]	1965	1966	1967	1968[2]
				Percent				
Livestock and products								
Cattle and calves	3.5	3.2	3.2	3.2	4.3	5.1	5.5	6.2
Hogs	2.2	2.1	2.0	2.2	2.7	3.1	2.9	2.9
Lamb and mutton	2.1	2.6	3.4	4.0	21.8	25.1	21.6	28.6
Wool and mohair	21.4	20.2	18.3	25.5	82.3	80.9	75.3	83.2
Dairy products	4.0	2.1	2.0	2.4	0.6	1.7	1.9	1.2
Poultry products	2.0	1.7	1.7	1.6	[3]	0.1	[3]	[3]
Other livestock	4.7	4.8	5.3	2.7	4.7	4.8	7.7	7.7
All livestock products	3.2	2.5	2.5	2.6	4.3	5.0	4.6	5.1
Fishery products	7.8	9.0	9.4	8.6	44.9	51.9	49.9	55.2
Crop products								
Fruit, total	9.7	10.7	10.0	8.8	18.7	19.5	19.2	20.5
Bananas	0.0	0.0	0.0	0.0	99.8	99.6	100.0	100.0
Other	9.7	10.7	10.0	8.8	3.6	3.6	3.7	4.9
Treenuts, total	10.1	9.8	9.2	10.1	22.5	27.0	25.2	35.9
Domestic crops	10.1	9.8	9.2	10.1	[3]	3.3	4.0	6.9
Cashews, other treenuts	0.0	0.0	0.0	0.0	100.0	100.0	100.0	102.0
Vegetables and potatoes	3.4	3.6	3.4	3.5	1.9	2.0	2.4	2.4
Food grains	51.1	56.1	52.3	49.8	0.7	0.7	0.5	0.4
Feed grains	15.8	15.5	13.4	13.1	0.2	0.2	0.2	0.2
Food oils and oilseeds, total	37.1	35.2	35.8	37.8	10.3	10.5	9.3	10.8
Domestic crops	37.1	35.2	35.8	37.8	0.3	0.3	0.7	0.4
Copra, other oils and oilseeds	...	...	...	...	102.7	93.2	92.4	113.7
Sugars and sirups	1.4	1.2	1.2	1.3	46.0	48.2	50.1	50.2
Coffee, tea, cocoa	...	...	...	...	99.4	102.1	97.6	108.1
Nonfood crops	18.0	18.0	19.0	19.0	6.6	7.3	8.1	8.3
All crop products	21.4	22.1	20.8	20.7	15.3	15.2	15.4	16.7
Net total commodities	16.0	16.8	15.3	15.3	13.0	13.9	13.4	14.7

[1]Domestic products are weighted using 1957-59 average farm and wharf prices; nondomestic, dockside prices. Domestic supply equals production plus stock changes (total utilization minus imports); domestic utilization equals total utilization minus exports. On 50-state basis.

[2]Preliminary.

[3]Less than 0.05 percent.

SOURCE: U.S. Department of Agriculture.

growth has been lower quality chilled beef. This meat has typically been mixed with higher quality domestic meat for use in hamburger and processed meat products. The increase in supplies available at the lower end of the quality scale has depressed cow prices—the most directly competitive domestic substitute—and thereby tended to reduce slaughtering and to increase beef herds.

The net result of the increase of imports might have been an oversupply of high quality beef or an unsustainably high level of beef herds, but this has not been the case. American beef production has hardly been able to keep pace with domestic demand as evidenced by the fact that beef and cattle prices have risen more than practically any other farm product group. While these prices would no doubt have risen more without the growth of imports, beef raisers clearly have not suffered relative to other agricultural producers or relative to other broad sectors of the population. The growth of low quality beef imports has merely been a reaction to the substantial increase in consumer demand for hamburger and processed meats, which American producers have been unable or unwilling to meet.

Two other categories of imports need to be examined because they are rather large in terms of domestic consumption. Lamb and mutton imports have provided between 25 and 28 percent of domestic utilization and are thus of great significance. While large in absolute terms, the growth of imports has been quite moderate. For some time, consumer taste in this country has been shifting away from lamb and mutton. Although some American sheep raisers still find this enterprise profitable, others have found it more profitable to shift away from this line of activity into more rapidly expanding products. The result has been that the U.S. market has been increasingly served by foreign producers. Rather than a disruptive element, imports appear to have been an important ingredient in a normal market adjustment to changing domestic demand and supply conditions.

Finally, sugar imports are worth some attention. Clearly domestic sugar production would be severely hindered if it were not for our trade restrictions. Sugar imports now provide 50 percent of domestic utilization, and they could become greater as climatic conditions favor many other countries over the United States in this product with current technology. But rather than a situation of imports causing problems for domestic producers, it is really the other way around. American producers are now supplying a larger share of domestic utilization than previously through favorable developments in American legislation and not through greater competitiveness in the market place. If the American market for sugar has been disrupted, it is the result of the U.S. government and not foreign producers.

After this brief examination of U.S. agricultural imports we can reach some tentative conclusions. With little surprise we found that imports were not a major factor determining the health of American agriculture; indeed remarkably little disruption has resulted from import growth. Imports have, however, provided important benefits to American consumers through meeting supply deficiencies and moderating price increases. Imports may also have provided some beneficial stimulation to American producers to become more efficient, but probably less in agriculture than in industry. We should note that this situation is not a result of American trade barriers, although we maintain some restrictive devices as noted above. To determine what "free trade" agriculture would mean, both imports and exports would have to be liberalized and by world standards, the United States is a model of liberalism. But our analysis cannot end here for U.S. agriculture is not free of problems, and the problems that do exist are related in part to international trade.

THE ECONOMICS OF AGRICULTURE IN BRIEF REVIEW

A somewhat broader perspective is required to gain some insight into the state of American agriculture. Looking first to the demand side of the market, we find not unexpectedly that per capita demand for agricultural products has grown less than proportionally to income. This hypothesis, enumerated as Engel's law, has been well documented by studies of aggregate behavior and by budget studies of families. Of course, demand responds to population growth, but without much boost from rising incomes, demand in the aggregate has not risen very spectacularly. Some individual products have responded to income growth, but at the expense of other agricultural products. Fortunately, dairy and meat products are among the high income elasticity products, which helps explain the U.S. import–domestic utilization phenomenon. Reaction of demand to variations in prices follows this same general pattern; not very responsive as a whole, but noticeable reactions between individual agricultural products. Taken together this suggests that domestic demand for agricultural products in the aggregate has been and will continue to be rather stable and sluggish compared to demand for nonagricultural products.

This is not to suggest that we can forecast perfectly demand for agricultural products in the aggregate or particularly for individual products. But as compared to some magnitudes of interest to economists, demand for agricultural products behaves quite predictably.

The supply side of the market, however, does not mirror such regularity. The supply of agricultural products in general is characterized by a discontinuous production function, by marked variations in inputs into production (considering climatic conditions as an input) and by

rapid internal technological developments and external shocks. These combine to cause substantial variance in output in the short run and also over longer periods. Because crop production is by nature discrete in time, supply cannot respond to variations in all market prices. Indeed, in the absence of agricultural programs, the price that influences output decisions is an expected price, which may never rule in the spot market. Now add in the ingredients of climate irregularities, technological advance in pesticides, herbicides, seed selection, machinery, and fertilizers, and other advances in science, and substantial output uncertainties result. This condition is somewhat aggravated by developments in the non-agricultural section.

The combination of a rather stable, inelastic demand, with unstable shifts of a short-run inelastic supply curve leads to the possibility of extreme price variations in a free market. These conditions have long been recognized and have been used to justify much governmental interference in the market. But the basic economic condition that caused price instability cannot be wished away or legislated away. Something must clear the market of excess demand or supply, or the price must change. There has never been a successful demonstration against the laws of supply and demand.

But there is a side of the fundamental economics of agriculture that could add stability to the market. Weather conditions tend to be random events when the world as a whole is considered as the appropriate market. Good crops in one area are more or less balanced by poor crops elsewhere. This suggests that international trade could act as a stabilizing influence in the short run for agricultural products. Also, the fundamental factors of agricultural production indicate that heavy involvement in international trade is quite natural. First, the seasons complement each other as between Northern and Southern Hemispheres. Second, the earth zones complement each other as between temperate and tropical areas. Third, the technological developments in agriculture have tended to increase the economies of scale in all dimensions, suggesting that specialization and exchange are necessary. Finally, some technological developments in transportation and food handling and preparation methods have made international trade feasible over a larger area.

Since agriculture has more than its share of natural difficulties to contend with in terms of domestic demand and supply conditions, international trade in agricultural products, which could provide flexibility, would seem to be mutually beneficial. The true tragedy of agriculture is that country upon country has imposed myriads of restrictions to keep international trade from performing its desirable function. There is probably no other product group where greater resource savings can be made through international trade than in agriculture, yet agricultural trade is

the most encumbered. The irrationality of this situation is so great that it is truly appalling.

BACKGROUND OF AGRICULTURAL PROTECTIONISM

To investigate the origins of barriers to international trade of agricultural products, a great deal of history would have to be reviewed; indeed the old British corn laws were synonymous with protectionism. Probably not much could be learned by such a review other than to prove that every barrier to trade used today was discovered a long time ago. It is probably more instructive to examine the current situation to see why agricultural protectionism persists in the face of liberalization elsewhere.

Governments have erected barriers to international trade because they were trying to solve real problems of their farmers. Governments are not to be faulted because they are trying to help farmers—but they are subject to criticism because they do it so poorly, and particularly because they fail to view agricultural problems in anything but a very narrow domestic context.

The agricultural conditions receiving most attention are the interrelated problems of price instability to farmers and the low incomes of some segments of the farm population relative to the rest of the economy. The instability problem theoretically calls for some sort of insurance program, while the income problem calls for a welfare program. Unfortunately, governments generally mix the two together and get the wrong result. Rather than trying to offset price instability, prices are held rigid so they no longer can perform their allocative function. Furthermore, they are raised above their equilibrium values—to serve the welfare function—to which farmers respond by producing more than is demanded at the support price, but without a notable increase in profit. What results is high production, high cost agriculture.

Once the price mechanism is undermined, of course, governments cannot let international trade follow its natural course. High domestic prices have to be protected from cheaper foreign sources of supply, which sometimes are cheaper only because of foreign government subsidies needed to get rid of unwanted surpluses. The irony of the situation is that governments are afraid of true market agriculture, but they have little way of knowing what they are afraid of since the price mechanism is distorted from all sides.

U.S. AGRICULTURE AND INTERNATIONAL TRADE

Care should be taken not to overemphasize the barriers to international trade of agricultural products. As we noted previously, U.S. agricultural

imports have increased and so have our exports. American agriculture has historically exported a major share of its output. Indeed, for the decade through 1966, U.S. exports were growing at better than a 5 percent annual rate.

There were numerous reasons why U.S. exports did so well in this period. First, American agricultural producers expanded output at competitive prices of the products for which demand was increasing such as feed grains and oilseeds. Second, the U.S. government was willing to sell a number of products to less developed countries at concessional rates. Finally, U.S. agriculture benefited from a bit of luck as climatic conditions in Europe led to a string of rather poor harvests. But our luck ran out. The combination of very stimulative price supports within the European Economic Community (EEC) plus a return of more normal weather led to a tremendous growth of agricultural output and a resulting loss of U.S. exports to that area. Furthermore, there has been remarkable growth of wheat and rice production in certain less developed countries that has also resulted in lower U.S. exports. Thus, since 1966, U.S. exports have not increased and in fact have declined somewhat.

Unfortunately, the prospects for the immediate future do not indicate a return of rapid U.S. export growth. European agricultural protectionism continues to increase. Despite an uncomfortable rise in agricultural surpluses and the ever increasing cost of maintaining unrealistic price levels, the EEC is not yet willing to moderate its policies as the market would demand. Furthermore, the prospect of further dissemination of the "green revolution" to other less developed countries suggests that even the concessional market will be limited. At best the United States can look forward to only very slow growth of agricultural exports.

Over the longer run, the prospects are better for a market determined pattern of agricultural production and trade. Even with extremely high price supports, the number of farmers and farms in both Europe and Japan has been declining. These trends are likely to continue and two developments should follow from them. First, agricultural production should become increasingly commercialized and product specialization should result. For Europe as well as Japan, this would suggest greater emphasis on meat raising and less emphasis on production of crops such as wheat and feed grains. In Europe in particular, specialization in grassland meat raising combined with imported feed grains would seem to make the most economic sense. Second, governments should have less fear of the market price mechanism as the proportion of farmers in the population is reduced and as corporate rather than family farms begin to predominate. Thus in the longer run, the U.S. comparative advantage in products requiring intensive use of land and capital should be strength-

ened and U.S. exports should be permitted to reflect this. But this desirable outcome might be quite some time in coming.

CONCLUSION

The natural question arises concerning what strategy the United States should follow now with respect to our agricultural policy. With agricultural imports rising and exports falling due to protectionism abroad, we might be tempted to raise our own barriers to trade. This temptation should be strongly resisted. Little comfort can be provided to American farmers by limiting the flow of competitive imports, but American consumers would suffer substantial losses. Agricultural producers would soon share in the general loss through the political feedback mechanism and through the further rigidification of agricultural prices at home and abroad.

This is not to suggest that the United States should permit European governments to dump unwanted surpluses in our markets at distress prices. The United States has an obligation to its own farmers to prevent European policy mistakes from disorganizing our commercial markets. Furthermore, Europeans need to be made aware of the folly of the course they have chosen, and the United States is the best teacher, having investigated this same course in some detail. It is only when the full cost is brought home to European taxpayers that a policy reversal will become possible. This suggests that the United States should meet European subsidies with those of our own in order to maintain our natural export markets. But care should be taken to be sure only to "meet" European subsidies and not to overwhelm them.

Even while meeting the market challenge of the EEC agricultural policy with short-run expedients, the major thrust of our policy should be aimed at encouraging market price determination everywhere in the world. At home this means continued moderation of those price support programs that are still above equilibrium levels. Welfare problems should be treated with welfare tools, not by price distortions. This same philosophy must carry over to our international commercial policy. We should avoid entering such commodity agreements as the Kennedy Round Wheat Agreement. World-wide price distortions work even less well and are more destructive than the domestic varieties. They have proven to be inimical to U.S. short-run interests and their longer-run implications are even worse. We must also take a strong stand aganst further intensification of European agricultural protectionism. In the extreme we might ask GATT to condemn the entire common agricultural policy of the EEC, although less drastic action should be attempted first. Specifically, the United States should not consider any further liberalization of nonagricul-

tural trade with Europe until a workable freeing of agricultural trade has been agreed upon.

It is obvious that standing on free trade principles alone can be fairly uncomfortable if the rest of the world is moving in the other direction. The comfort can come from knowing it is the right stand. It can also be rewarding if domestic agricultural policy follows similar principles. Europeans are still seeking U.S. initiative in commercial policy matters. I suggest we lead them to freer trade in agriculture.