The Balance of Payments

Bob F. Jones and Martin K. Christiansen

The value of the dollar declined yesterday in Tokyo. Further weakening of the dollar against the yen will likely lead to restriction by the U.S. against Japanese imports. The value of the German mark continues to rise relative to the dollar. The U.S. balance of payments is currently running a deficit of $25 billion per year.

These statements confuse many Americans who have been accustomed to hearing about U.S. export surpluses and the leading role of the dollar in international trade. Evidently, world trade is changing and the U.S. role in international transactions has changed. The purpose of this publication is to help people understand the monetary side of international trade including international capital flows. This requires (1) understanding the balance of payments, (2) understanding the functioning of the foreign exchange rate, (3) discussing policy alternatives available for influencing the international payments system, and (4) discussing some additional key issues.

BALANCE OF PAYMENTS ACCOUNTING

The balance of payments is a statistical record of all international transactions, both private and governmental, between the U.S. and all other nations. As an accounting device it shows our transactions with all other nations during a given time period as a result of foreign trade and international capital flows. In addition to its function as an accounting tool, the balance of payments is useful in helping people understand economic trends. By studying changes in the balance of payments, people can observe and evaluate the changing economic position of the U.S. compared to other nations.

The basic idea of the balance of payments is simple. The accounting and economic consequences of relationships in the statement are similar to those in a family's household accounting. When a family spends more than it earns during a given time period, the family can either go into debt, accept welfare, or live on savings. When a country runs a deficit in its balance of payments because of importing more than it exports, the country can accumulate debt in various forms, accept grants, use savings such as monetary reserves, or sell assets (another form of using savings) to pay current bills. Another example of using savings is calling in loans to foreigners by the U.S. government or private banks and spending the proceeds. When a country accumulates debt, it eventually must export goods or services or sell assets to repay the debt, or throw itself on the mercy of its creditors. Generally,

SPEAKING OF TRADE

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a country goes to great lengths to protect its credit standings with other nations and tries to avoid placing itself at the mercy of its creditors.

Interpreting an official balance of payments statement is not as simple as interpreting family accounting because the balance of payments statement includes unfamiliar terms and entries both from a conventional income and expense statement and from the balance sheet. General accounting practice is to keep income and expense statement and balance sheet accounts separate.

Merchandise exports (including commodities) and imports are the principal components of the international transactions or balance of payments statement. This part of the statement is easy to understand. In 1977 U.S. exports were $120.5 billion (table 1). Nonagricultural products, such as airplanes, computers, heavy machinery, arms, and other products requiring a high level of technology, accounted for 80 percent of all U.S. merchandise exports. Exports of all agricultural products, such as wheat, corn, soybeans, cotton, livestock products, fruits, vegetables, and others, accounted for 20 percent of U.S. merchandise exports.

Merchandise imports (line 2) were $151.7 billion, of which 91 percent were nonagricultural products and 9 percent were agricultural products.

With imports of $151.7 billion and exports of $120.5 billion, the U.S. incurred a merchandise trade deficit (line 3) of $31.2 billion in 1977. The surplus of $10.1 billion in the agricultural accounts, although not shown separately in the table, kept the deficit from being more than it was. Certain military transactions (line 4) also helped offset the deficit. The positive balance in the military component came with the sale of arms and reimbursement by foreign countries of an increased part of the cost of maintaining U.S. military forces abroad. The military component showed a surplus for the first time in 1977.

Table 1. U.S. International transactions, 1977

(line)	Item	Annual total (Billion dollars)
1	Merchandise exports	120.5
2	Merchandise imports	-151.7
3	Merchandise trade balance	-31.2
4	Military transactions, net	1.4
5	Investment income, net	11.9
6	Other service transactions, net	2.5
7	BALANCE ON GOODS AND SERVICES	-15.4
8	Remittances, pensions, other transfers	-2.0
9	U.S. Government grants	-2.8
10	BALANCE ON CURRENT ACCOUNT	-20.2
11	Increase in U.S. assets abroad, net*	-26.1
12	Increase in foreign assets in the U.S., net	49.3
13	Discrepancy	-3.0

*At first glance it would appear that an increase in U.S. assets abroad should be reported as a plus item rather than a minus. But this is not the case. Increasing U.S. assets abroad requires spending of foreign currency just as does importing of goods and services and therefore is shown as a negative item in the statement.

Source: Federal Reserve Bulletin, May 1978, p. A54

Income on capital investments (line 5) representing an annual flow of income from accumulated capital investments abroad reduced the deficit by $11.9 billion.

Other service transactions (line 6), such as travel on U.S. airlines by foreigners and banking and insurance service provided by U.S. firms to foreigners, contributed a net of $2.5 billion in 1977. The contribution is "net" in that the value of services provided by the U.S. to others exceeded the value of services provided to the U.S. by foreigners.

After considering the contributions made by the service and investment income accounts, a deficit of $15.4 billion remained in the goods and services account (line 7). Remittances (payments by individuals to persons in the "home" country), pensions, and transfers (line 8) to others along with U.S. government grants (line 9) added another $4.8 billion to the deficit. These further adjustments left a deficit balance on current account (line 10) of $20.2 billion for 1977. The balance shown by the current account is the figure often cited as *the* amount of the balance of payments deficit for 1977. It is an indication of whether a country is living within its current export income or is having to dip into savings or incur debt to pay for its imports.

Two of the final three items in table 1 are normally included in a balance sheet statement. They are short-term and long-term assets. The item "Increase in U.S. assets abroad, net" (line 11) includes U.S. official reserves, other government reserves, and U.S. private investments. The composition of short-term or monetary reserves will be discussed in a later section. An example of long-term or physical assets is U.S. ownership of a plant in West Germany. An increase in U.S. assets abroad shows up in the statement with a minus sign because acquisitions of assets abroad contribute to the deficit when they are made. We have imported title to foreign assets which has the same effect on our international payments as do our imports of goods and services. Of course foreign assets are purchased in anticipation that they will generate a flow of investment income in the future. This investment income, when received in the U.S., will reduce our payments deficit allowing us to import more goods than would otherwise have been possible.

The other major entry in this section is "Increase in foreign assets in the U.S., net" (line 12). It includes interest-bearing U.S. government securities, bank deposits, portfolio investments, as well as direct investment in physical assets such as land and buildings acquired by foreigners during the year. Table 1 (line 12) shows that a large part of foreign earnings, $49.3 billion, was converted into foreign assets (U.S. assets held by foreigners) in the U.S. in 1977.

The final item in table 1, "Discrepancy" (line 13), is a bookkeeping device made necessary by a requirement that the statement must balance. The problem arises because it is physically impossible to keep track of all the transactions made between U.S. citizens outside of the country when official reporting of many transactions is not required. In an accounting sense,

Table 2. International investment position of the United States at year-end, 1970-76

Type of investment	1970	1972	1974	1975	1976
	(Billions of dollars)				
U.S. assets abroad	165.5	199.0	256.2	295.6	347.4
U.S. Government assets	46.6	49.3	54.2	58.0	64.7
Special drawing rights (SDR)	.9	2.0	2.4	2.3	2.4
Reserve position in the International Monetary Fund (IMF)	1.9	.5	1.9	2.2	4.4
Foreign currency reserves	.6	.2	.0	.1	.3
Gold	11.1	10.5	11.7	11.6	11.6
U.S. loans and other long-term assets	29.7	34.1	36.3	39.8	44.1
U.S. short-term assets other than reserves	2.5	2.0	2.1	2.0	1.9
U.S. private assets	118.8	149.7	202.0	237.6	282.6
Direct investments abroad (book value)	75.5	89.9	110.2	124.2	137.2
Foreign securities	21.0	27.6	28.6	35.2	44.6
Claims on foreigners reported by U.S. banks	13.8	20.7	46.2	59.8	80.7
Claims on unaffiliated foreigners reported by U.S. nonbanks	8.5	11.4	17.0	18.4	20.1
Foreign assets in the United States	106.8	161.8	197.4	221.0	264.8
Foreign official assets	26.1	63.2	80.3	87.5	106.3
U.S. Government securities[1]	17.7	52.9	57.7	63.3	73.6
Other U.S. Government liabilities	1.7	1.6	3.5	5.2	10.1
Liabilities reported by U.S. banks	6.7	8.5	18.4	16.3	17.2
Other official assets	.0	.2	.6	2.7	5.5
Other foreign assets	80.7	98.7	117.1	133.6	158.5
Direct investments in the United States (book value)	13.3	14.9	25.1	27.7	30.2
Liabilities reported by U.S. banks	22.7	21.2	41.8	42.5	53.5
U.S. Treasury securities[2]	1.2	1.2	1.7	4.2	7.0
Other U.S. securities	34.7	50.7	34.9	45.3	54.8
Liabilities to unaffiliated foreigners reported by U.S. nonbanks	8.8	10.7	13.6	13.8	13.0
Net foreign wealth (including official gold holdings) of the United States	58.6	37.1	58.8	74.6	82.5

[1] Includes Treasury and agency issues of securities.
[2] Corporate and other bonds and corporate stocks.

Note — Gold is valued at SDR35 per ounce, throughout. The SDR value is converted to dollars at $1/SDR before December 1971, at $1.08571/SDR from December 1971 through January 1973, at $1.20635/SDR from February 1973 through June 1974, and as measured by the basket valuation of the SDR beginning July 1974.

Source: Department of Commerce, Bureau of Economic Analysis.

the overall balance in the account for 1977 is calculated by adding the deficit balance on current account, the change in U.S. assets abroad, and the discrepancy (-20.2 - 26.1 - 3.0 = -49.3). This is offset by the change in foreign-owned assets in the U.S. of $49.3 billion.

The composition of U.S. and foreign assets for 1970 through 1976 is shown in table 2. U.S. government monetary assets are held in various forms including Special Drawing Rights (SDR) with the International Monetary Fund (IMF), reserve position in the IMF, foreign currency reserves, and gold.

The International Monetary Fund

A brief explanation of the IMF will facilitate understanding of the reserves accounts and the meaning of various kinds of drawing rights. The Bretton Woods Conference created the IMF in 1944. One function of the IMF was to provide a means for member countries to finance short-term deficits in their balance of payments within a system of established fixed exchange rates. Member countries each were assigned a quota that they were required to deposit with the IMF. Table 2 shows the U.S. reserve position in the IMF at $4.4 billion in 1976. Initially the quota consisted of 25 percent gold with the balance made up of the member's own currency. Members could draw from the Fund or pool of reserves to finance deficits by depositing an additional amount of their currency up to 200 percent of their quotas. These general drawing rights were extended more or less automatically to member countries. As world trade expanded and more international funds were needed to finance the trade, the IMF issued additional drawing rights to its members in proportion to their initial contribution of gold and other reserves to the system. These Special Drawing Rights (SDR) initially represented a form of "paper gold" and were issued to provide the additional liquidity for the system inasmuch as the world's gold supply was not expanding as rapidly as the volume of international trade. In reality the SDR's were a "creation" of additional reserves by the IMF.

From the initial issue until December 1971, SDR's were valued at $1 each. Since July 1974, the value of an SDR has been determined by the so-called "basket valuation" method. With this method, the change in value of a specified "basket" of 16 currencies as measured by an index is used to determine the "market" or official value of an SDR. The U.S. dollar accounts for about one-third the value of the entire basket.

Foreign Ownership of U.S. Government Securities

One other item in table 2 is of interest because of its policy implications, discussed in a later section. Since 1970, foreigners have chosen to keep a large share of their assets in the U.S. in U.S. government securities and U.S. bank accounts (73.6 + $17.2 billion at the end of 1976). Assets held in these forms are highly liquid which allows for rapid shifting by foreigners to other forms of assets. Large amounts of assets held in these forms can lead to exchange rate instability and resulting loss of confidence in the international monetary system or a particular currency.

Implications of a Persistent U.S. Balance of Trade Deficits

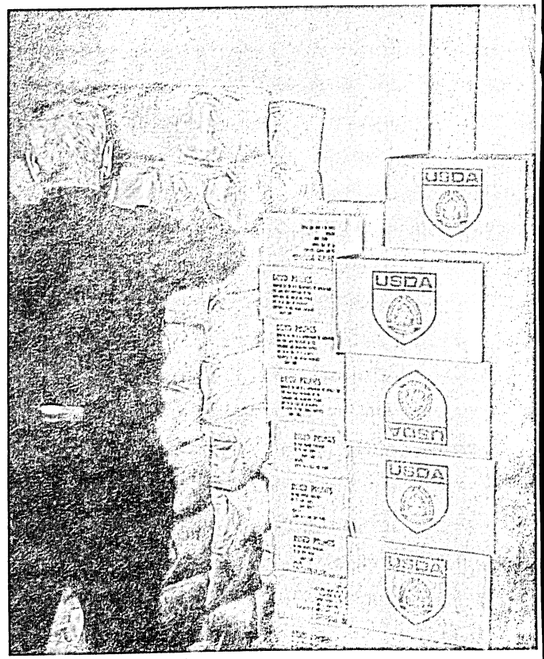
Confidence in the international monetary system is a key element to long-run growth in the volume of international trade and the level of economic activity. When the U.S. runs a persistent deficit in its balance of payments, confidence in the U.S. role in international trade is decreased. Persistent deficits require adjustments in the exchange rate mechanisms used by major trading partners and/or in the trade and national economic policies followed in each country. Persistent U.S. deficits imply persistent surpluses of some other trading partners.

EXCHANGE RATES

From the time of the Bretton Woods Conference in 1944 to 1973, the International Monetary Fund maintained a system of fixed exchange rates. Rates could be changed by specified amounts and only in consultation with the IMF administrative body. As mentioned above, each member was required to contribute an allotment of gold and national currency to the Fund. Fixed exchange rates were established between each currency and the U.S. dollar. Member countries could buy up their currency to keep exchange rates from increasing. The IMF itself could act to stabilize exchange rates. Member countries could borrow from the fund, in proportion to their contributions, to finance trade deficits. On the other hand, member countries could build up surplus reserves in the fund.

As mentioned above, the system needed additional reserves as international trade expanded. For a time, the creation of SDR's enabled the IMF to provide the additional liquidity needed by the system.

Exchange rates which were assumed to represent equilibrium rates when they were established diverged farther and farther from equilibrium with passage of time. Some rates became overvalued, i.e., buyers of a given currency did not consider the currency to be "worth" as much as the official price for it. Others became undervalued. In this case buyers considered the currency to be "worth" more than the official price. Countries with overvalued rates experienced balance-of-payments deficits. Exports did not expand, and imports grew. Countries with undervalued rates had balance-of-payments surpluses. Exports grew, but imports grew less rapidly. It became



ever more difficult for members of the IMF to maintain established exchange rates.

The Development of Euro-Dollars

Continued U.S. deficits coupled with willingness of Europeans (central banks, commercial banks, and individuals) to hold large quantities of dollars led to large dollar balances held outside the U.S. This willingness of European banks to accept deposits denominated in U.S. dollars rather than require conversion of deposits to their own domestic currency led to "Euro-dollars" and the "Euro-dollar market." These dollar deposits allowed European banks to make loans denominated in dollars and thereby enabled the European banking system to "create" dollar demand deposits just as the U.S. banking system does.

The size of the Euro-dollar market is very large, but no one knows how large it is because no national government can require complete reporting on the amount of Euro-dollars in existence. Estimates are that $400 to $500 billion Euro-dollars exist. Because M-1 balances (a measure of the U.S. money supply which includes currency plus private demand deposits) in the U.S. are only about $350 billion, the size of Euro-dollar balances are (a) destabilizing to world finance, (b) very inflationary, and (c) particularly important for the U.S. because they are called dollars.

The Shift to Floating Exchange Rates

In March 1973 the system of fixed exchange rate was abandoned following two devaluations by the U.S. in a 13-month period. A system of floating or market-

determined exchange rates replaced the fixed exchange rates. In this system the dollar is not priced in terms of gold nor is it related to other currencies on a fixed basis. Rather, the foreign exchange market is allowed to determine the purchasing power of one currency in terms of another on a day-to-day or minute-by-minute basis. This action represented a move one step further away from an international monetary system based on gold. The move away from gold was continued when the Second Amendment to the International Monetary Fund's Articles of Agreement went into effect April 1, 1978. In that action, members of the IMF became free to apply the exchange arrangements of their choice except that they are not to maintain a value of their currencies in terms of gold.

As a result of these actions and subsequent sale of official gold holdings by the IMF and the U.S., gold has come to be treated more like any other commodity.

The Role of Floating Exchange Rates in Balancing Trade

In principle, a system of floating exchange rates, if permitted to function, should allow the U.S. to secure balance between its exports and imports. If other things are equal, a new equilibrium between exports and imports comes about in the following manner. A deficit in the U.S. current account causes other countries to be less willing to hold dollars. Market-determined exchange rates increase, that is the value of the dollar declines relative to other currencies. This makes U.S. exports cheaper in terms of the other country's currency. U.S. exports tend to expand. On the other hand, imports become more expensive in terms of U.S. currency. Imports tend to decrease, and balance is reached between the value of exports and imports.

However, there are several reasons why the U.S. continues to run deficits despite the solution offered by floating exchange rates. A principal reason is that major trading partners continue to try to influence exchange rates in the foreign exchange markets. It is not a "clean" float but a "dirty" float in which rates are not allowed to float freely. Countries such as Japan and West Germany that depend heavily on exports to maintain their economies do not want their currencies to appreciate sufficiently in value to reduce exports significantly. Another reason is that adjustment occurs with a lag effect. Economic conditions keep changing sufficiently to prevent attainment of equilibrium. It is similar to chasing a moving target. A third reason is that several major trading countries allow their currencies to float jointly and then only within a controlled range. When the range of fluctuation is controlled within a narrow band, the term "snake" has been used to describe the path of exchange rate fluctuation over time. Intervention occurs when rates approach limits of the range (another version of the "dirty" float). Yet another reason is that net capital flows in the short-run may be an equilibrium solution.

When the U.S. moved from fixed rates to floating rates in 1973, the value of the dollar declined significantly relative to several major currencies. One effect was that it made U.S. exports cheaper to Western European countries and Japan. It has been argued that the prior system had overvalued U.S. currency to the extent that it significantly restricted all U.S. exports including agricultural products. The move to floating rates then was a significant factor in the expansion of agricultural exports after 1973. An undesirable effect of floating rates under certain conditions is that they contribute to inflation in the U.S. in at least two ways. Imported goods cost more, and competition from abroad is reduced thereby allowing domestic producers to raise their prices.

As the value of the dollar declines relative to other currencies, internal prices of agricultural export products tend to increase. When the supply of the product in the U.S. is relatively fixed (inelastic), as it is in the short-run for most agricultural products, an increase in demand results in higher prices for the product in the U.S.

POLICY ALTERNATIVES

Other policy alternatives exist in addition to reliance on a floating exchange rate policy. More direct controls such as licensing that would restrict imports can be and are applied. Less developed countries frequently rely on such controls. The U.S. has considered import duties on crude oil as a means of restricting oil imports, a major contributor to balance of payments deficits. In 1977, at a time when the deficit on current account was $20.2 billion, oil imports amounted to $41.5 billion.

Expansion of exports by using subsidized credit or conducting successful market development activities could contribute to reduction of the deficit. More funds could be devoted to promotion and development of foreign markets for agricultural products.

Domestic monetary and fiscal policies are used extensively by the U.S. to affect the general level of economic activity. Increased economic activity in terms of a rapid rate of economic growth relative to other countries tends to cause imports to rise more rapidly than exports. Although reliance on a floating exchange rate system allows greater internal freedom for operation of domestic monetary and fiscal policies, the freedom does not seem to be unlimited. As noted, reliance on floating exchange rates contributes to inflation which must be dealt with by domestic monetary policy.

KEY ISSUES

Whether to continue using the floating exchange rate system or return to a fixed exchange rate system needs continued evaluation. Experience since 1973 suggests that the market system has much greater flexibility for adjusting to changing economic conditions than does the fixed system. The drastic predictions about problems in financing the high oil prices brought about by the Organization of Petroleum Export Countries (OPEC) did not materialize. The floating exchange rate system can be credited for facilitating the adjustment. However, questions of confidence and stability in the world monetary system need continual evaluation by monetary authorities, government officials, and economists.

Capital flows required to finance deficits on current account will likely continue to be a problem. Short-run capital flows typically consist of acquisition of stocks, bonds, savings, and checking accounts. They present potential problems when large balances are accumulated in liquid form and can be moved rapidly from country to country or currency to currency. The problem is particularly acute for liquid balances held by OPEC nations. A major reason for accumulation of large liquid balances is the somewhat limited ability of Middle East Oil Countries to absorb larger quantities of imported goods and services or to acquire larger quantities of capital assets in the U.S. or other industrial countries.

Long-run capital flows present a different kind of problem. For several decades the U.S. made large investments in other countries. The U.S. did not always understand the kinds of opposition this generated in certain countries. Now that large investments are being made in the U.S., similar kinds of objections are being raised by some U.S. citizens. Both advantages and disadvantages are seen for increased foreign investments in U.S. industrial plants, urban shopping centers, and apartments. Foreign investment in U.S. farmland generates nationalistic feelings and has caused the U.S. to take a new look at land ownership policy. Emotions are high over such issues.

Some other countries criticize the U.S. for the heavy demands that it makes on the world's resources. To the extent that the U.S. continues to import large quantities of petroleum and pay for them by running up short-run capital deficits, increased efforts will be made to shift those funds into more permanent forms of capital that will retain their value as inflation erodes the value of monetary assets.

In conclusion, the world monetary system has experienced dramatic changes since 1973. Large balance-of-payments deficits and surpluses with exchange rates far out of equilibrium necessitated a change in the system. The quadrupling of oil prices as a result of OPEC actions presented what appeared to be an insurmountable problem for international finance. However, the move to market-determined rates made it possible to make the adjustment without economic catastrophe.

The current trend in exchange rates favors increased agricultural exports. The system of market rates should enable U.S. producers to more fully exploit the comparative advantage they have in producing the major agricultural products.

The U.S. dollar continues to have a key role in international finance both as a medium of exchange and as a store of value. As other economies, particularly West Germany and Japan, grow in importance, the relative role of the dollar diminishes. Large dollar balances held by foreigners and assets denominated in dollar terms held by foreigners tend to limit the degree to which the U.S. is able to adjust its domestic and trade policies to meet domestic objectives.

Why Trade?

J.B. Wyckoff and Harold D. Guither

INTRODUCTION

With the output from one-third of the harvested acres in the United States moving into international trade, the growing balance of trade deficits, and the positive nature of our agricultural trade, international trade in agricultural products has assumed a major importance not only within agriculture but also within the total U.S. economy. Yet the characteristics, basis, and importance of U.S. agricultural trade are not well known either by agricultural producers or the general public. These six publications are designed to help people understand the following topics:

1. Why Trade?
2. Protection or Free Trade
3. Balance of Payments
4. Commodity Marketing and World Trade
5. International Marketing Alternatives
6. Expanding Trade

This publication introduces the series by explaining the importance of agricultural trade to farmers and people in other segments of the economy. It also briefly introduces the topics to be covered in the other five publications.

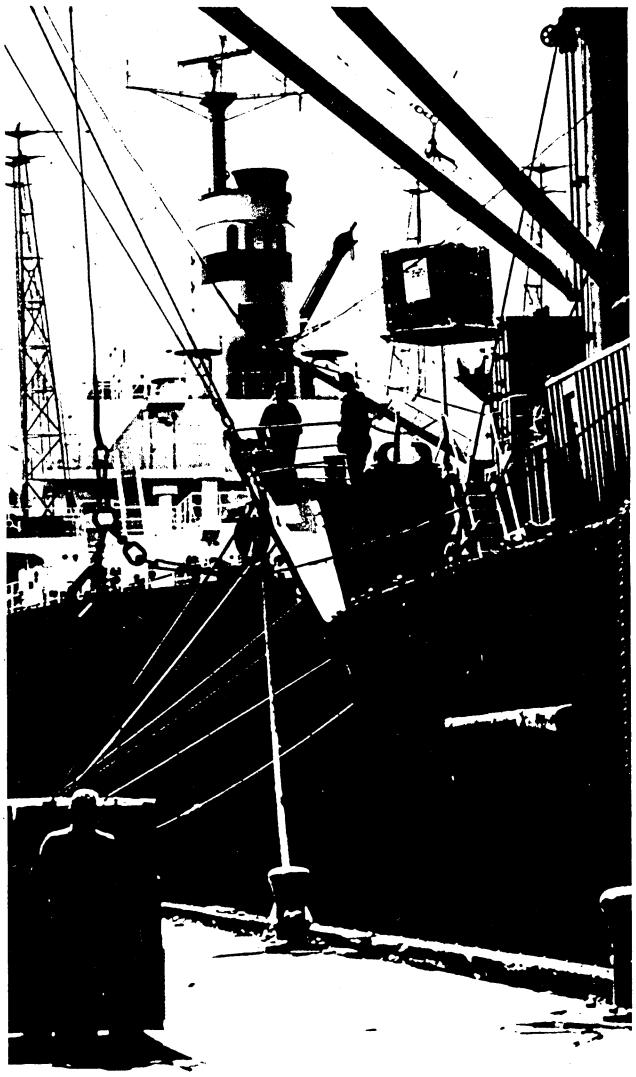
CHARACTERISTICS OF U.S. AGRICULTURE

U.S. agriculture has the built-in ability to produce enough for the domestic market plus substantial quantities for foreign buyers. While the quantity of total crop land has remained almost constant over time, farmers have increased investments in the land resource in irrigation, drainage, and soil, water, and watershed conservation (figure 1). Farmers also have doubled the per acre quantities of fertilizer nutrients and pesticides used in the last 15 years. Power and machinery use has been increasing while labor has been decreasing (table 1). Because of these shifts in production technology, farm fuel use has increased about 40 percent in the last 10 years and the output per man hour more than 60 percent. Output per acre has been increasing steadily at a rate of about 1.4 percent per year in recent years, and total output

Table 1. Use of selected farm inputs

	1975	1976	1977	1978[1]
	Percent of 1967			
Total inputs	100	102	103	102
Labor	76	73	71	71
Farm real estate	96	94	97	97
Mechanical power and machinery	113	115	116	117
Agricultural chemicals	127	145	151	150
All other inputs	101	106	107	108

[1] Preliminary.



SPEAKING OF TRADE

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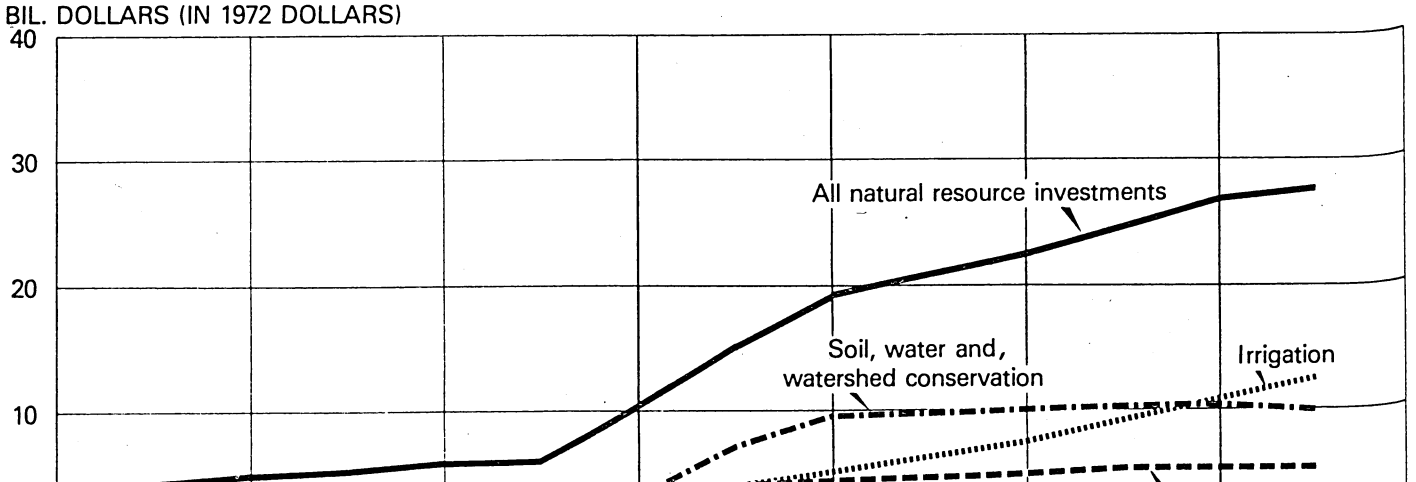
Figure 1. Capital Investment in Natural Resources in U.S. Agriculture*



* INCLUDES BOTH PUBLIC AND PRIVATE INVESTMENTS. INVESTMENTS ARE ON A NET OR DEPRECIATING BASIS AS OF THE YEAR SHOWN.
DATA PLOTTED ON A 5-YEAR BASIS.

per unit of input has been increasing approximately 1.7 percent per year (figure 2).

Supply Response to Price Changes

Usually total U.S. agricultural production changes slowly in response to price changes. A primary reason for this is the high percentage of fixed inputs in the production process, such as land, the farmer's labor, specialized machinery, and buildings, compared to variable inputs such as hired labor, fuel, and fertilizer. An estimated 50 to 80 percent of the total cost of production in agriculture is made up of these fixed elements. Because farmers have very limited opportunity to use the land, labor, and capital for other purposes, the percentage change in the quantity produced is less than the percentage change in the price. Economists call this relationship an "inelastic" supply response. Also, farmers usually increase output faster when prices rise than they cut output when prices fall. When prices rise, farmers respond by making the necessary investments and production changes for increasing output. However, when prices decline, their production capacity is established, and they are reluctant to make adjustments to decrease production. Because of the high ratio of fixed to variable costs, prices can decline dramatically before farmers reduce production, resulting in the high levels of price instability characteristic of many agricultural commodities.

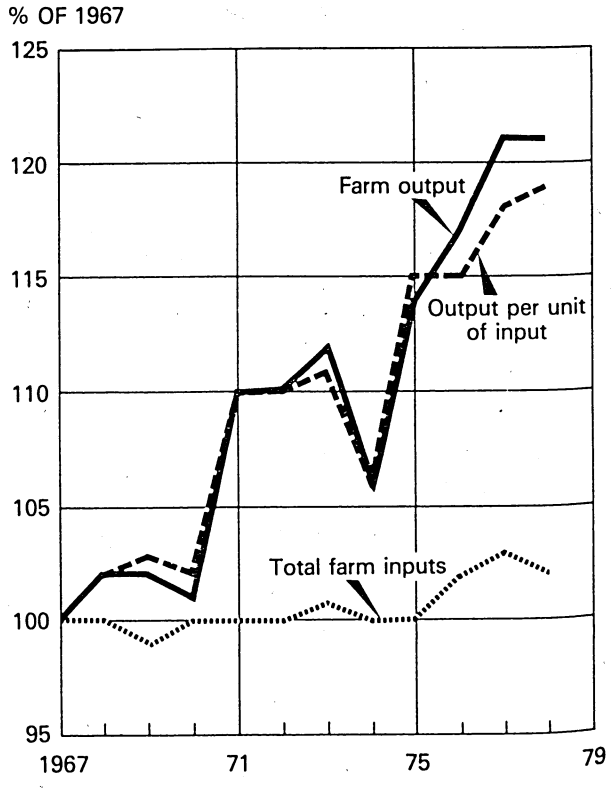
Demand Response to Price Changes

The agricultural products that a farmer sells also have an inelastic demand particularly in the domestic market. As quantities available increase, prices decline relatively more, decreasing the total amount of revenue flowing into the agricultural sector. Similarly, when supplies are short, prices rise relatively more, and total revenue increases rapidly. The interaction of these demand characteristics with the supply characteristics discussed earlier results in periodic cash income problems for farmers when output increases or markets contract.

Demand Response to Changes in Income

The demand for agricultural products also shows an inelastic response to changes in income which dif-

Figure 2. Farm Productivity



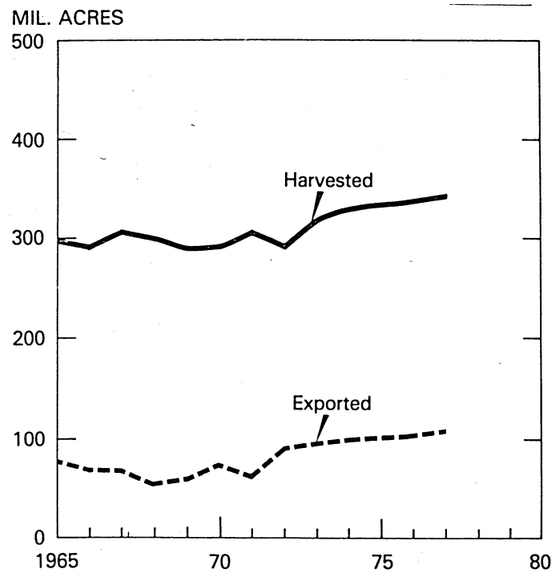
1978 preliminary.

fers by country and by income level within countries. In developed economies usually a 10 percent increase in a consumer's income will result in less than a 2 percent increase in the amount spent for food products. Developing countries generally have a higher elasticity of demand for food, and their consumers may spend more than half of their increased income for food products. This makes them good prospective customers as their economies develop and their incomes increase.

Importance of Exporting Agricultural Products

Rising incomes in both developed and developing countries have helped U.S. farmers sell more of their production in overseas markets. At the present time, the production from about 1 of every 3 acres is exported (figure 3) and generates about 25 percent of the gross sales presently earned by American farmers. U.S. agriculture has been able to compete in foreign markets because of its high level of production efficiency. This has been attained because of an abundant quantity of top quality land, the availability of industrial inputs (such as machines, power, fertilizer, and chemicals), and the technologically advanced production and management practices developed and extended through agricultural research and education. American farmers have been aggressive in finding ways to combine these assets into lower "real" production costs per unit of output. This has provided the basis for their strong, competitive position in world grain, oilseed, cotton, and other agricultural product markets.

Figure 3. U.S. Exports from Harvested Acres



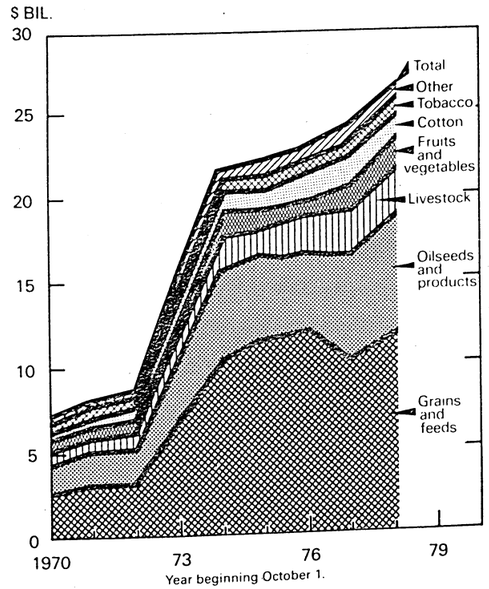
Exported includes feed required to produce livestock products exported.

U.S. AGRICULTURAL TRADE IN PERSPECTIVE

The United States has played a growing and leading role in agricultural trade since World War II. The U.S. annual share of world agricultural exports rose from about 12 percent in 1951-55 to more than 16 percent in 1971-75. The most significant increase in market share occurred in grains with an increase from 31 percent in 1950-54 to 49 percent of all grain in world trade in 1971-75.

U.S. agricultural exports have risen to higher levels in both quantity and value since 1970. Dollar values rose from $6.9 billion in the year ending September 1970 to $27.3 billion in the year ending September 1978, an increase of almost four times. During the same period, quantities of selected agricultural commodities exported rose from 61.6 million to 127.4 million tons, an increase of more than two times.

Figure 4. U.S. Agricultural Exports by Principal Commodity Groups



1977/78 Partially estimated.

U.S. Agricultural Exports by Principal Commodity Groups[1]

	1975	1976	1977[2]	1978[3]
	Million dollars			
Total exports	21,854	22,760	24,013	26,600
Grains and feeds	11,561	11,920	9,895	11,400
Oilseeds and products	4,753	4,692	6,404	7,300
Livestock and products	1,666	2,207	2,645	2,800
Fruits, nuts, and vegetables	1,373	1,532	1,742	1,800
Cotton and linters	1,055	919	1,538	1,600
Tobacco, unmanufactured	897	929	1,085	1,100
Other	549	561	537	600

[1] October-September years. [2] Preliminary. [3] Partially estimated.

The most significant upward shifts in agricultural exports occurred in the 1973 and 1974 fiscal years. Values rose from $8.2 billion in 1972 to $21.6 billion in 1974. Since that time, the value has edged up more slowly, rising to about $27 billion in the year ending September 1978 (figure 4).

Grains, feeds, and oilseeds and products make up more than 70 percent of the value of all U.S. agricultural exports. However, livestock and products, cotton, tobacco, and fruits, nuts, and vegetables are also major export commodities with exports averaging from $1 billion to more than $2.5 billion annually in recent years.

The value of agricultural exports has risen faster than the total cash receipts from farming. From about 10 percent in 1950, agricultural exports were equal to about 24 percent of cash receipts in 1975 and 1976 and 25 percent in 1977 and 1978.

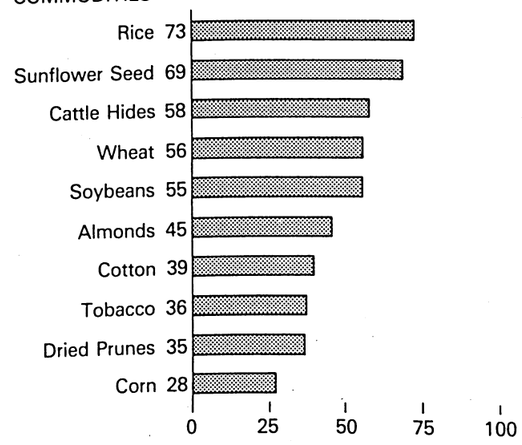
In the year ending September 30, 1978, about 55 percent of the soybeans, 58 percent of the cattle hides, 45 percent of the almonds, 73 percent of the rice, 39 percent of the cotton, 56 percent of the wheat, 39 percent of the tobacco, and 28 percent of the corn produced in this country were exported (figure 5).

Consequently, export demand is a major factor in the level of market prices and the prices received by farmers for the major crops moving into the export market. Reports of drought in major importing countries, crop failures in other major exporting countries, and increased purchases to improve level of diets all affect market prices and the incomes of U.S. producers.

AGRICULTURAL TRADE BALANCES

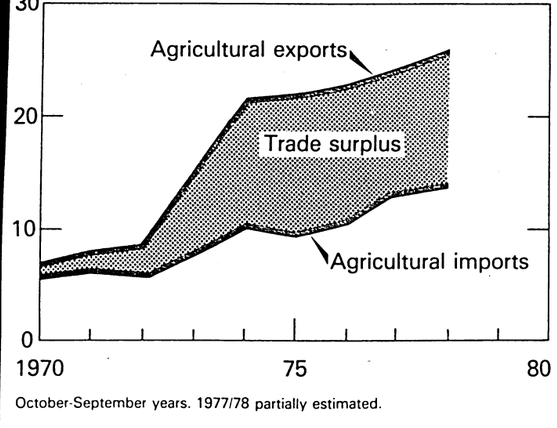
Since 1960, total agricultural exports have exceeded total agricultural imports. The net agricultural trade balance has made a sizable contribution to improving the U.S. balance of trade since 1972. (The

Figure 5. Percent of U.S. Farm Production Exported



Year ending September 30, 1978. partially estimated. Soybeans include bean equivalent of meal and oil.

Figure 6. U.S. Agricultural Trade Balance



October-September years. 1977/78 partially estimated.

U.S. has had a negative trade balance for nonagricultural goods.) Because of a positive agricultural trade balance, the total U.S. trade balance was positive in the fiscal years ending June 30, 1974 through 1976. Although the net agricultural trade balance declined to about $10.6 billion in 1976-77, it is estimated to be about $13.4 billion in the 1977-78 fiscal year (figure 6).

The overall U.S. negative trade balances of 1977 and 1978 have contributed to the declining value of the dollar and rising prices for U.S. imports, both agricultural and nonagricultural. Consequently, a more positive trade balance, made possible by large agricultural exports, could contribute to stability of the dollar and prices of all imported products.

EFFECTS ON EMPLOYMENT

Agricultural trade affects domestic employment in at least two ways. First, production of agricultural commodities for export requires employment of farm workers directly on farms and ranches, in agribusiness firms that supply various production inputs to farms, and in marketing firms that handle the commodities from the farm to the point of shipment to the foreign countries.

Second, income earned by workers engaged in agricultural production and marketing generates purchasing power that provides employment for those who supply goods and services to these workers.

Employment generators estimated from 1974 USDA employment coefficients, adjusted to 1977 at 1.7 percent annual increase in productivity, indicated that each $1 billion of 1977 agricultural exports added:

Total employment	**51,700 jobs**
Farm employment	21,500 jobs
Off-farm employment	30,200 jobs

Thus, the $27.3 billion of 1978 agricultural exports provided employment for almost 1.4 million U.S. workers.

Public Costs of Not Trading

Both public and private costs of not trading can be identified, although some measurement problems may be encountered. Public costs involve government expenditures that result when agricultural trade is discontinued or sharply reduced.

Without exports, markets for U.S. agricultural products would shrink and prices fall. Under present farm legislation, government programs to pay farmers to hold land out of production and to store grain could balloon. Costs to taxpayers would soar. On the other hand, if foreign markets are expanded, these costs would diminish.

A growing economy, supported by purchasing power generated in producing and marketing for export, would reduce unemployment and expenditures for public employment programs. Additional Gross National Product generated through foreign trade would result in additional tax revenues that would contribute to a balance of public expenditures with tax revenues. Not understanding the interaction of trade, employment, the balance of payments, the value of the dollar against foreign currencies, and other related issues can lead to poor public decisions. The publications in this series provide the background for improved understanding.

ISSUES TO BE EXAMINED

Protection or Free Trade?

In theory, gains from trade emerge from two sources — specialization in production among nations and access to more favorable world prices for both buyers and sellers. However, these potential gains are not distributed smoothly and some people, industries, and communities may actually suffer reduced income and economic opportunity because of increased trade.

Actually, completely free trade does not exist, because some government intervention is always involved as long as nations have different political philosophies, economic and social objectives, and international problems.

Agriculture and other exporting industries are likely to favor freer trade. Industries that produce goods that are also imported are likely to seek protection to insulate their markets and jobs from international competition. So in formulating international trade policy, how can these forces be balanced with each other and with the broad interests of the general public?

Balance of Payments

The balance of payments is a statistical record of all the international transactions, both private and governmental, between the United States and all other nations. Merchandise exports and imports are the principal components of the balance of payments statement. Services, remittances, grants, and capital investments make up the remainder.

When the United States runs a persistent deficit in its balance of payments, confidence in the United States' role in international trade decreases. Persistent deficits require adjustments in the exchange rate or in the trade and national economic policies followed in each country. What policies should the U.S. pursue to achieve a stable dollar?

Since 1973, the United States and other industrial countries that are members of the International Monetary Fund have used a system of floating or market-determined exchange rates. Theoretically, the system of floating exchange rates should permit the United States to secure balance between its exports and imports. But actually the United States has continued to run a deficit trade balance. How can this deficit be managed?

The move to floating exchange rates has been a significant factor in the expansion of agricultural exports since 1973. An undesirable effect is that it has contributed to inflation in the United States. Imported goods cost more, and competition from abroad is reduced thereby allowing domestic producers to raise their prices. Whether to continue using the floating exchange rates system or return to a fixed exchange system needs continued evaluation.

Capital flows required to finance deficits on the current trade account likely will continue. These large foreign investments in stocks, bonds, savings accounts, real estate, industrial plants, and farm land help offset U.S. trade deficits. Should this foreign investment in farm land and other U.S. assets be encouraged or discouraged?

Commodity Marketing and World Trade

Agricultural trade requires a complex system of communication and market services to transfer commodities from a U.S. farm to foreign buyers. This system involves people, institutions, and facilities which assemble, transport, and distribute the commodities traded.

Financing and credit arrangements facilitate trade. Both private and government credit are involved. More liberal credit terms can lead to expanded foreign sales. Is this necessary? Who should do it?

Many complex factors in addition to basic supply and demand forces affect the price of commodities in world trade. Some of these include the structure of markets in both exporting and importing countries, as well as their agricultural policies. What is the relationship between these complex areas? What is the role of international exchange rates? What changes might be made to influence prices and quantities traded?

International Marketing Alternatives

The goals of international marketing include demand expansion, market assurance, raising and stabilizing producer prices, and rationing supplies in periods of shortage. Methods for achieving these goals include the current U.S. system of competitive free enterprise with little centralized control, long-term trade agreements between two traders or governments, international commodity agreements between exporters and importers, international cartels, marketing boards and orders, barter, and export cooperatives.

Which method will best serve the interests of U.S. producers, consumers, businesses, and government? Producers are interested in effects on prices and exports sales. Consumers are interested in food and fiber prices that might result from specific market policies. Businesses are interested in expanding sales and preventing encroachment by government. Government wants to assure supplies, improve the balance of payments, control inflation, and control cost of domestic programs.

The marketing alternatives cover a spectrum from only facilitative government action to considerably more government involvement than currently takes place in U.S. agricultural production and international trade. Two fundamental issues are: (1) how much authority will the public grant agricultural producers to control their export marketing activities and (2) will farmers be willing to transfer individual control over many of their marketing decisions to a group of their representatives?

Expanding Trade

The U.S. farmer has enjoyed a high degree of success in exporting agricultural products in the past, but this does not assure success in the future. Market development programs, guided and partly funded by the Foreign Agricultural Service, have involved a wide range of marketing and promotional activities aimed at potential customers in many foreign countries. Should these efforts be continued, expanded, or reduced?

Bilateral and multilateral trade negotiations make it possible to reduce trade barriers and expand trade. Reciprocal trade agreements and the General Agreements on Tariffs and Trade have helped expand U.S. agricultural trade. However, many tariff and nontariff barriers still exist. Should such barriers be removed?

Subsidized food aid and concessionary exports have been carried out under Public Law 480. In the past some countries that have received P.L. 480 assistance have become commercial export customers. Should such a program be continued?

Protection or Free Trade

James P. Houck and B.H. Robinson

"Free trade, they concede, is very well as a principle, but it is never quite time for its adoption."
Ralph Waldo Emerson

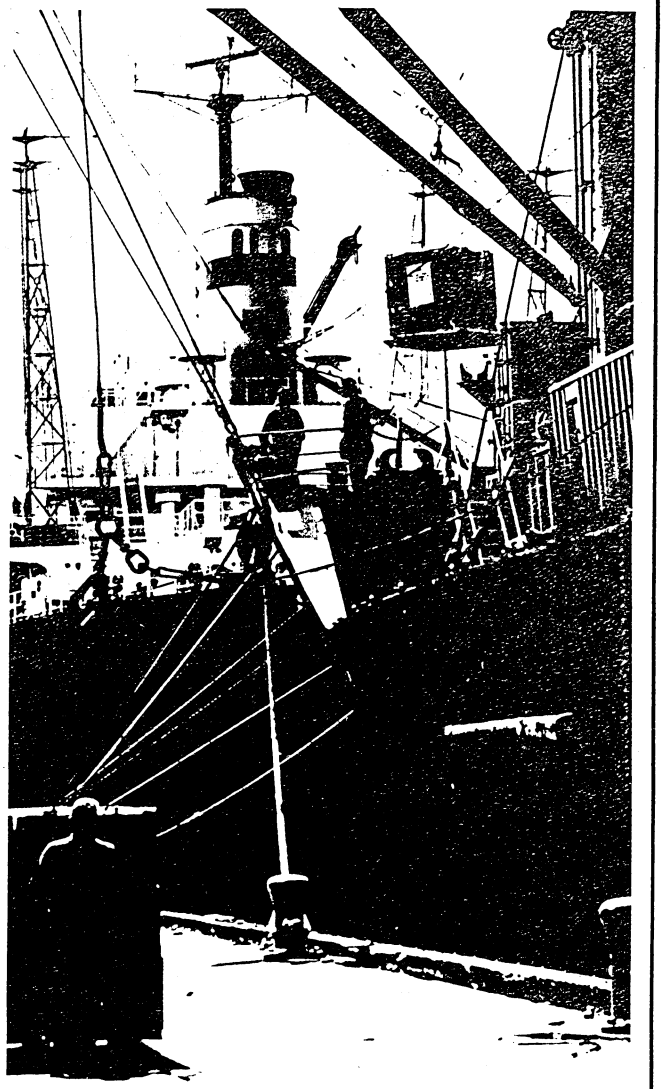
In the idealized world of international trade theory, nations always can capture general economic gains by eliminating tariffs, import quotas, export taxes, and other such trade impediments. These gains emerge from two sources: (1) specialization in production among nations and (2) access to more favorable world prices for both buyers and sellers. But these potential gains from free trade are not distributed smoothly among or within nations. In fact, some people, some industries, and some communities actually may suffer reduced incomes and economic opportunities because of increased trade. That, in a nutshell, is why the long-standing debate between "free trade" and "protectionism" goes on and on.

Completely free trade does not exist anywhere in today's world and probably never has. Some government intervention always is involved and will continue as long as nations with different political philosophies, economic and social objectives, and internal problems continue to exist. Even so, countries continue to trade with each other, some rather freely and some under very strict, central controls.

In this publication, we will look briefly at the essentials of this debate. We will focus particular attention on why nations erect trade barriers for protection against outside economic forces. Then we will consider the resulting gains and losses.

Let the term "free trade" refer to the international commerce that would occur naturally without direct government intervention in pricing or exchange, except for minimum regulations needed to facilitate buying and selling. On the other hand, "protection" occurs when, through economic policies, any group of producers or consumers is insulated deliberately from the full force of international competition.

Trade protectionism usually enables some group to protect or expand its market. Import restrictions and export subsidies most often are used to achieve this goal. Recently a new protectionism involving export controls on behalf of domestic consumers and users of export goods has emerged. Each of these devices is important for one or another U.S. agricultural product. For example, import restrictions exist in several forms for meat, dairy products, and sugar to help protect domestic producers and processors. Wheat export subsidies were used before 1973 to assist U.S. wheat producers in holding or expanding their overseas markets. Soybean export embargoes were employed in 1973 to protect domestic consumers and users from high prices generated by eager foreign buyers.



SPEAKING OF TRADE

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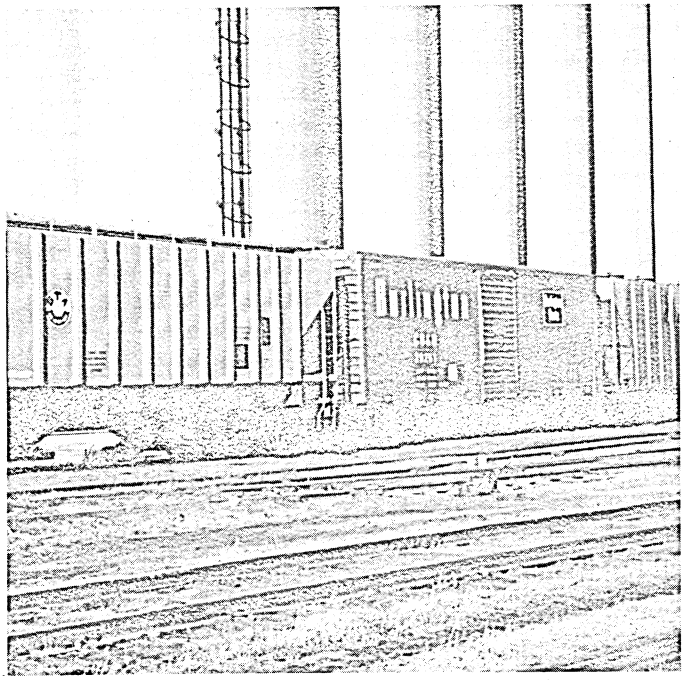
Despite these and other protectionist measures, the United States has encouraged freer trade among nations in various international negotiations. Our overall record, while mixed, is generally consistent with this free trade philosophy. Yet, as with all trading nations, protectionist pressures continually crop up. Today the pressures are coming frequently and insistently.



WHY IMPORT PROTECTIONISM OCCURS

The classic method of import protection is a tariff, sometimes called an import duty. It is either a fixed charge per imported unit or a fixed percentage of each shipment's value. Nontariff protection devices include import quotas (direct quantity controls), mixing regulations, complex packing and labeling requirements, health and sanitary regulations, foreign exchange restrictions, and minimum import prices sustained by variable import duties. All of these devices make it more difficult (sometimes impossible) for foreign sellers to compete with domestic sellers. All nations use at least some of these measures.

Historically, tariffs have been a major source of government revenue for many trading nations including the United States. The famous tea import tariffs had no protective value for anyone in the 13 original American colonies. They were simply a tax on colonial tea consumers, with the revenues going to the British government.

Tariffs can be attractive as a revenue source because of their ease of collection. This is especially true for some developing countries where income or profits taxes are difficult to collect. On the other hand, most developed countries levy tariffs mainly to protect domestic industries. United States tariff revenues in 1977 generated only about 1.4 percent of all government receipts.

Protect a New Industry?

Tariffs and quotas may be used to protect new industries. For example, suppose that nation A does not produce cotton, but buys it from nation B. Cost studies might show that if A tried to produce its own cotton, the cost would be higher than B's cotton price. However, the studies also might show that A's cost disadvantage is only a short-term problem. If A somehow could begin cotton production, it might in time be just as efficient as B. But time and money may be required to construct efficient irrigation facilities, train producers, and obtain specialized equipment. To enable A to get into cotton production, a tariff might be added to the price of cotton imports from B so that A's producers could begin to compete in the local market. Through the tariff, the consumers in nation A would pay a subsidy to their cotton producers hoping that someday the new industry would be efficient. This is called the "infant industry" argument.

If a young industry has the political power to obtain a protective tariff, it may have power to continue it. If this occurs, the infant may never grow up, and consumers may find themselves permanently protecting jobs and incomes in the favored but inefficient industry.

Protect National Security and Health?

With trade, specialization in production tends to occur among nations. This tendency might cause a particular domestic industry to shrink below the size considered prudent in case of emergency. In times of international upheaval or actual war, trade may shrink or stop entirely. If nation A were dependent upon nation B for the weapons of war, then A would be particularly vulnerable, especially if B were its enemy. Thus, many nations maintain industries to produce the essentials of war — food and weapons — even though the principles of free trade dictate otherwise. Maintaining industries that are not economically efficient keeps a nation's level of living from reaching its potential. However, if that nation might cease to exist by losing a war, then its citizens might be willing to lower their living standards to protect industries essential to national defense. These industries include agriculture, oil, steel, aircraft, and electronics.

The free trade of goods between nations may be restricted for health reasons. For instance, the United States prohibits the importation of fresh or frozen beef from countries that have a history of foot-and-mouth disease. Likewise, some nations restrict imports of U.S. frozen poultry, fearing infection of their flocks with Newcastle disease. In some countries, including the United States, some metropolitan areas do not permit fluid milk to be sold freely within their jurisdictions unless the dairy farms, domestic or foreign, have been approved by their own inspectors.

Offset "Unfair" Foreign Trade Policy?

Most trading nations try to restrict imports of competitive goods when they think exporters are