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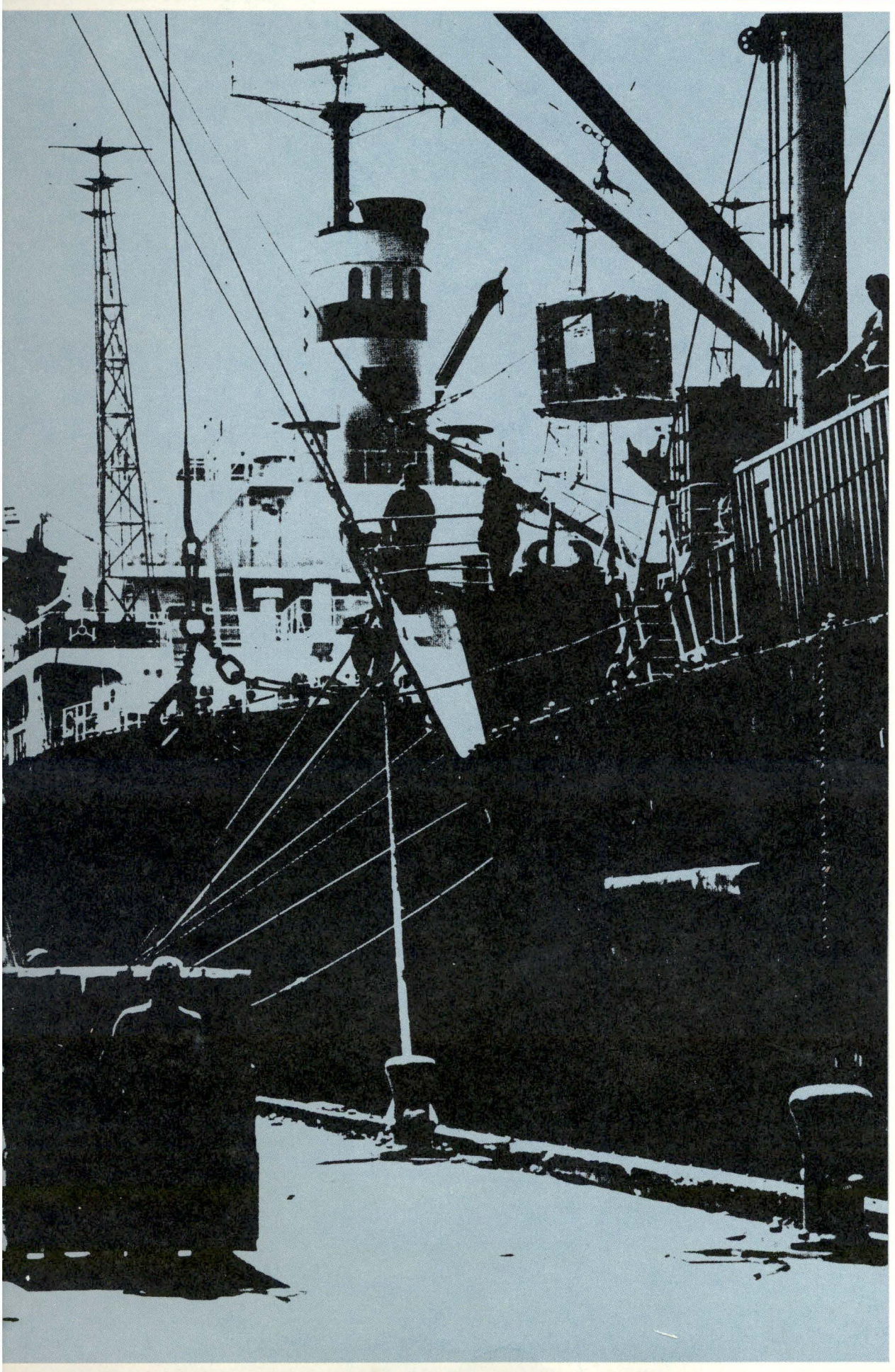
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SPEAKING OF TRADE

# Key Issues for Agriculture





# 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 <sup>1</sup> . . . . .	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 <sup>2</sup> . . . . .	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
<b>Net foreign wealth (including official gold holdings) of the United States . . . . .</b>	<b>58.6</b>	<b>37.1</b>	<b>58.8</b>	<b>74.6</b>	<b>82.5</b>

<sup>1</sup> Includes Treasury and agency issues of securities.

<sup>2</sup> 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.



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#### Reference Handbook Available:

*Speaking of Trade: Its Effect on Agriculture*, National Public Policy Education Committee Publication Number 6, may be obtained from your state Cooperative Extension Service. Single copies are available for \$1.50 per copy and may be ordered from the Agricultural Extension Service, University of Minnesota, Room 3 Coffey Hall, 1420 Eckles Avenue, St. Paul, Minnesota 55108. Order Special Report No. 72. Prices for quantity orders are available upon request.

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