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Balance of Payments and Macroeconomic Policies

An Historical Overview and Implications for Agricultural Trade

Mark Denbaly

BALANCE OF PAYMENTS AND MACROECONOMIC POLICIES: AN HISTORICAL OVERVIEW AND IMPLICATIONS FOR AGRICULTURAL TRADE. By Mark Denbaly, Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture. ERS Staff Report No. AGES880815.

ABSTRACT

Misunderstanding the predominant forces that determine the balance of payments (BOP) has resulted in the recommendation that restrictive trade policies be used to solve the current U.S. BOP "problems." This paper reviews the BOP relationships, accounting concept, theory, and history (1975-86). It shows how various account balances respond simultaneously to international macroeconomic developments and that movements in agricultural trade have mirrored the movements in nonagricultural trade. Imbalances are caused by the same forces and should not be viewed as problems in and of themselves. Therefore, macroeconomic, not commodity-specific, policies are more likely to alleviate imbalances.

Keywords: balance of payments, macroeconomic policies, commodity and capital markets, prices, exchange and interest rates

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Washington, DC 20005-4788

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SUMMARY

Confusion about the meaning and relevance of balance-of-payments developments often produces narrow policy prescriptions. Recent restrictive trade policy recommendations intended to correct the current U.S. trade deficit exemplify the point. This bulletin defines the U.S. balance of payments, describes the primary underlying forces and adjustment mechanism, analyzes the link between balance-of-payments problems in 1975-86 and macroeconomic developments, and examines the implications for agricultural trade. This review suggests the following:

1. The property that current and private capital account balances must be equal under the freely floating exchange rates is nothing more than an accounting identity. There is no economic reason why the two balances at any point in time must sum up to zero, nor is there any reason why an individual account must balance.

2. There is a strong and growing connection between international financial and commodity transactions through exchange and interest rates. Therefore, analyses of movements in the current account should consider the developments in capital markets.

3. Prices and quantities in commodity and financial markets respond simultaneously to macroeconomic developments, particularly to macroeconomic policies. The international effects of these responses are ultimately measured by changes in various BOP account balances. Put differently, the simultaneous behavior of trade volumes, employment, production, prices, interest rates, and the exchange rate determine the balances of various accounts, not the other way around.

4. Theory predicts certain concomitant responses of various account balances to changes in macroeconomic policies. Further, the historically observed pattern of BOP statistics demonstrates that various account balances have responded in harmonious and theoretically consistent ways to changes in the underlying macroeconomic policy forces. Thus, variations in the current and the capital account balances as well as the movement in exchange rates should not be viewed as problems in and of themselves.

5. Agriculture alone cannot turn the U.S. trade deficit situation around. First, the movement of agricultural trade mirrors the movement in nonagricultural trade. The underlying forces of macroeconomic policies affect agriculture in much the same way as manufacturing or mining. Second, services and nonagricultural merchandise trade shares have grown while the agricultural share has declined.

6. Agriculture has little influence on capital flows and cannot offset international banking and security activities. But, developments in capital markets can significantly affect agriculture.

7. As long as macroeconomic policies promote relatively higher U.S. real interest rates and income, and a high real value of the dollar, not only will the internationally owned net U.S. debt continue to rise, but trade balances of agricultural and nonagricultural commodities as well as services will deteriorate.

Balance of Payments and Macroeconomic Policies

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INTRODUCTION

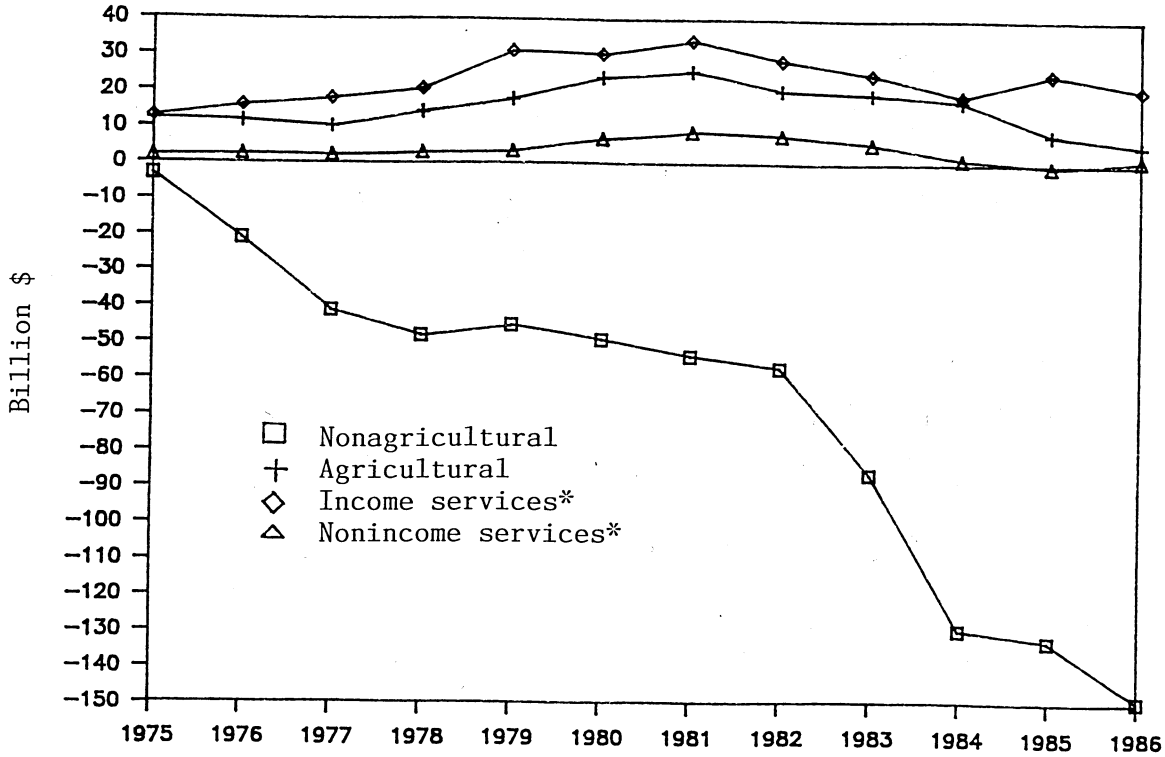
The United States last ran a merchandise trade surplus in 1975. At that time, agriculture had a $12-billion surplus, which more than offset the $3-billion nonagricultural trade deficit (16).1/ The agricultural trade balance has remained in surplus every year since; but, after increasing to $26 billion in 1981, it fell sharply to less than $5 billion in 1986. However, the nonagricultural merchandise trade deficit has almost continually worsened since 1975 and stood at $139 billion in 1986 (fig. 1). The U.S. agricultural trade surplus is now dwarfed by the nonagricultural deficit.

Misunderstanding the forces that give rise to balance of payments (BOP) deficits or surpluses and the exchange rate fluctuations has resulted in various proposals for restrictive trade policies as solutions to the deteriorating farm and nonfarm trade balances. Such remedies are rather narrow in focus. Adjustments in merchandise trade cannot occur independently from trade in international financial assets. Because of closer integration of capital markets (fig. 2), liberalization of world financial centers, and the internationalization of the U.S. economy (fig. 3), the connection between commodity trade and financial asset trade has become more intertwined than ever. Further, the historically observed pattern of BOP statistics demonstrates that various account balances have responded in harmonious and theoretically consistent ways to changes in the underlying macroeconomic policy forces (12, 15). Year-to-year changes of commodity trade balances, of both farm and nonfarm sectors, have moved in the same way as the services trade balance, suggesting the overwhelming effects of changes in the underlying forces. If foreign trade restrictions are the primary cause of the worsening agricultural trade balance, then the unanswered question is "why has the services account balance, for example, behaved in much the same way as the agricultural trade balance?" Proper policy solutions, therefore, hinge upon understanding the connections that exist between the various components of the BOP and the pervasive effects of changes in the macroeconomic environment.2/

1/ Underscored numerals in parentheses refer to items in References.

2/ Although other exogenous factors, such as commodity trade policies and productivity changes, affect the merchandise trade balance, macroeconomic policies are shown to explain most of its year-to-year movements. In the case of U.S.-Japan trade, for example, Reinhart (14) concludes that "our analysis

Figure 1. Merchandise and service account balance, 1975-86



*For definitions see page 4.

WHAT IS A BALANCE OF PAYMENTS?

A balance of payments is a summary of all foreign transactions by the U.S. Government and private entities over a specified period of time (2, 6, 15). Reports of the BOP statistics group the data according to the nature of the transactions in three main components: current account, private capital account, and official settlements account. Each account contains transactions that are affected similarly by economic forces.3/ Double-entry accounting is used to record each transaction. The principles of this accounting system require that all payments to foreigners exactly equal all payments received from them. While the overall BOP always balances in an accounting sense, there is no requirement that an arbitrarily selected number of accounts (such as the merchandise or current account) should balance.

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suggests that the bulk [actually four-fifths] of U.S.-Japan trade imbalances [from 1980 to 1985] reflects macroeconomic factors. It would seem more appropriate, therefore, to look for macroeconomic solutions to narrow the trade imbalance between the two countries."

3/ Many analysts argue that the usefulness of the way BOP statistics are currently grouped for presentation has diminished since the shift from fixed to flexible exchange rates in 1973 (9, 13). The shift and the accompanying institutional changes, they argue, have considerably altered the set of forces which give rise to particular transactions represented by the three BOP accounts. Consequently, it is argued that the present system of summarizing and reporting the BOP statistics contributes to the confusion surrounding the causes and effects of movements in the overall BOP and exchange rate.

Figure 2. International integration of U.S. capital markets, 1975-86
(absolute sum of U.S. inflows and outflows)

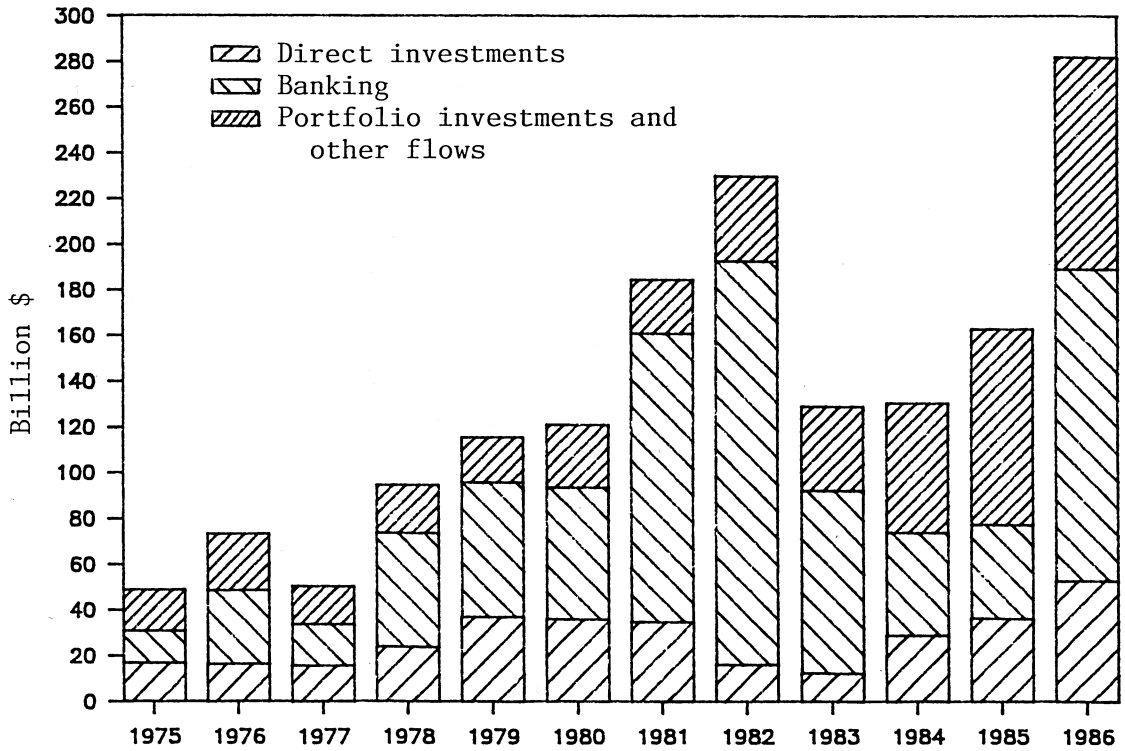
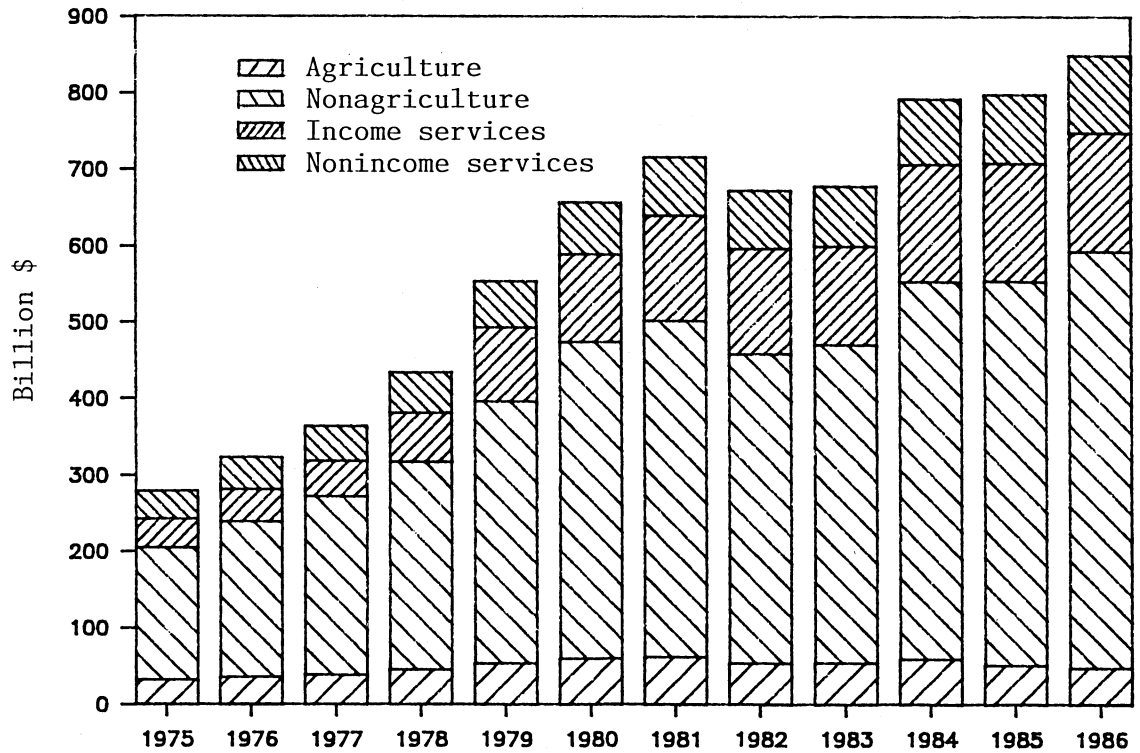


Figure 3. Globalization of U.S. goods and service markets, 1975-86
(absolute sum of U.S. exports and imports)



Current Account

The current account records transactions that deal with trade in goods, services, and transfer payments (private gifts and similar payments by the U.S. Government). Because the current account is mostly made up of trade in merchandise, its movements are determined largely by changes in the relative foreign-to-U.S. levels of income and prices as well as exchange rates. The current account balance measures the foreign contribution to domestic aggregate demand, which in turn affects overall employment and output of the economy. For this reason, the current account balance is watched closely by analysts and policymakers.

The service account records transactions dealing with income from international capital investments, tourism, transportation, and trade in other services. The preponderance of all service-account transactions is the income generated from investments in international real and financial assets (61 percent in 1986). As such, the service account links the movements in the current and the private capital account. For example, current interest income from a previously purchased foreign security is recorded as a service export, while current interest income payments to foreign holders of U.S. securities are counted as service imports. As foreign purchases of securities and physical assets (capital inflow) increase, so will income and interest paid to foreigners. Because the service income and interest payments are most directly associated with outstanding stocks of financial holdings, the service account balance reflects past as well as current international investments. More specifically, as exchange rates and the spread between foreign and domestic interest rates fluctuate, the desired and actual levels of international investments respond, affecting the current account balance through changes in income-service account transactions (11).

Private Capital Account

The private capital account summarizes private transactions that involve international investments in real and financial assets as well as international activities of U.S. private banking institutions. The account also includes government-to-government long-term loans for developmental purposes. Capital flows associated with purchases of business enterprises and production facilities are called direct investments. For example, U.S. purchases of foreign crop production facilities or automobile plants are recorded as an outflow of dollars. Direct investments are flows of long-term capital which respond to expectations about economic activity in the country experiencing the inflow. While direct investments are recorded in the capital account, the actual income derived from them is recorded in the current account as trade in services. For example, income from U.S. direct investments abroad is recorded as service exports in the U.S. current account.

Portfolio investments record the flow of funds used for purchases of private and public securities. Like commodity-export revenues, funds used by foreigners to purchase U.S. financial assets are considered as dollar inflows and can be thought of as exports. Adjustments in portfolio investments are a function of changes in exchange rates, relative interest rates, and price expectations (1, 7).

Bank-related transactions reflect the international borrowing and lending activities of U.S. banking institutions. Part of these funds, called nonliquid capital, represent trade financing and cash items in the process of collection

with maturity of less than 3 months. The rest, referred to as liquid capital, are U.S. banks' short-term liabilities to (borrowing from) and claims on (lending to) foreigners. Although nonliquid capital is not as readily transferable as liquid capital, changes in relative interest rates play an important role in determining the banking related international capital flows as a whole.

With freely floating exchange rates, the current account balance must, as we shall see later, equal the private capital account balance. Based on this equality, many analysts misleadingly refer to current account balances as "surpluses" or "deficits" of the overall BOP, and prescribe commodity-specific policy recommendations that are made in isolation from the developments in the capital markets. As Kvasnicka (10) explains, the equality between current and capital account balances

> ...is nothing more than an ex-post accounting identity. The desired, or ex-ante, capital flows may exceed the inflows needed to finance the [current account] deficit over any particular period. Under such circumstances, the demand for dollars to purchase the dollar-denominated assets exceeds the supply generated by the current account deficit, and the 'price' of the dollar (i.e., its exchange rate in terms of other currencies) has to rise. The appreciation of the dollar will encourage imports and discourage exports of goods and services, thereby increasing the deficit of the current account until the ex-post deficit equals ex-ante capital inflows, achieving ex-post equality in the BOP accounts in the accounting sense. In the meantime, however, the ex-ante capital flows are also being influenced by the growing deficit, and from the derived expectations of a potential depreciation of the dollar.

Furthermore, the connection between international financial and commodity markets through the exchange and interest rates has been strengthening. This is because closer integration of the world financial centers and the growing liberalization of financial systems have resulted in capital markets which react more quickly and dramatically to changes in macroeconomic policies, exerting more pressure than before on the commodity trade (3, 5). For two primary reasons, therefore, analyses of movements in the current account balance should consider the developments in the capital markets: (1) capital account transactions affect the current account balance directly through services and (2) capital account transactions influence the current account balance through their effect on interest and exchange rates.

Official Settlements Account

The remaining BOP transactions are categorized into the official settlements account, which represents the net changes in official holdings of international reserve assets (foreign currencies, International Monetary Fund reserve position, Special Drawing Rights, and gold). Because the official settlements balance must equal the balance on all other transactions, it is sometimes thought to measure the pressure that private international transactions put on exchange rates. Whether this is true largely depends on whether exchange rates are allowed to fluctuate freely or are fixed by government fiat.

With fixed exchange rates, official authorities are obligated to intervene in the currency markets to offset the pressure that changes in the underlying forces exert on exchange rates to deviate from a specified level. The settlements account balance, therefore, reflects the action that monetary authorities have taken over a period to support a fixed level of the exchange rate. Because

changes in the stock of international reserve assets enter directly into the basic money supply (that is, international reserves plus domestic credit), official support of a currency influences the economy by changing the supply of money in the same way that monetary policy affects the economy: that is, by changing the domestic credit component.4/

With flexible exchange rates, authorities are no longer obligated to prevent movements in exchange rates through changes in reserve asset holdings. The official account balance no longer represents the exchange rate pressure. Under freely floating exchange rates, therefore, the official settlements account balance remains unchanged, because changes in the balance of private international transactions are allowed to directly affect the exchange rate. Consequently, the current account balance must, in an accounting sense, equal the private capital account balance.

Even under fixed exchange rates, not all changes in the settlements account balance reflected official exchange market intervention, and the usefulness of this balance as a measure of the official support of the dollar rests on distinguishing the motives behind official capital transactions. For example, the accumulation of reserves by Organization of Petroleum Exporting Countries (OPEC) governments is included in the official settlements account. Changes in these reserves largely reflect the investment decisions by OPEC officials which are based on income, liquidity, and risk considerations and are not aimed at stabilizing exchange rates.

Finally, the present exchange rate system is not a pure floating-rate system. Officials regularly intervene in the currency markets. Under the current "managed float," changes in the underlying forces are reflected in the movements of both exchange rates and the official settlements account balance.

Whatever the exchange rate system, prices and quantities in commodity and financial markets respond simultaneously to changes in underlying economic forces. The international effects of these responses are ultimately measured by changes in various BOP account balances. Put differently, the simultaneous behavior of trade volumes, employment, production, prices, interest rates, and the exchange rate determine the balances of various accounts and not the other way around. Therefore, the proper policy focus to correct BOP imbalances belongs on the underlying economic forces.

WHAT ARE THE UNDERLYING FORCES?

A theory of international finance provides a popular framework, the monetary approach, for BOP analysis. It indicates that BOP deficits and surpluses, and exchange rate movements are the consequences of changes in the supply of and the demand for money (4, 12). The precise path to equilibrium in money markets depends on the cause of the disparity. While the money supply is controlled by the monetary authorities, money demand is influenced by both monetary and fiscal policies. Both policies affect the money demand through their influence on interest rates and real income. In general, however, the theory holds that when there is excess demand (supply) for a currency, all economic agents adjust their

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4/ The money-supply effect of a change in the stock of international reserves depends on whether monetary authorities adjust the domestic credit to control the money supply or not.

money balances upward (downward) through sales (purchases) of domestic and foreign commodity and financial assets to force the money market toward equilibrium.

With fixed exchange rates, money supplies and demands are equated by exporting (or importing) the excess money stock. This takes place through changes in the official capital account balance. For example, if there is an excess demand for dollars to support current and capital account transactions, official reserve assets will flow to the United States. Under a system of freely floating exchange rates, however, the adjustment is accomplished through changes in domestic prices and exchange rates, and the official settlements account balance remains unchanged. For example, an increase in the quantity of money in the United States will first increase the domestic demand for goods, services, and securities, which results in a tendency for prices of domestic real and financial assets to rise. Domestic consumers and producers will consequently buy foreign rather than domestic goods. At the same time, foreigners will reduce their purchases of U.S. goods, services, and real and financial assets. Increased import demand and decreased export demand for commodities and financial assets occur concomitantly with the appreciation of the foreign currency.

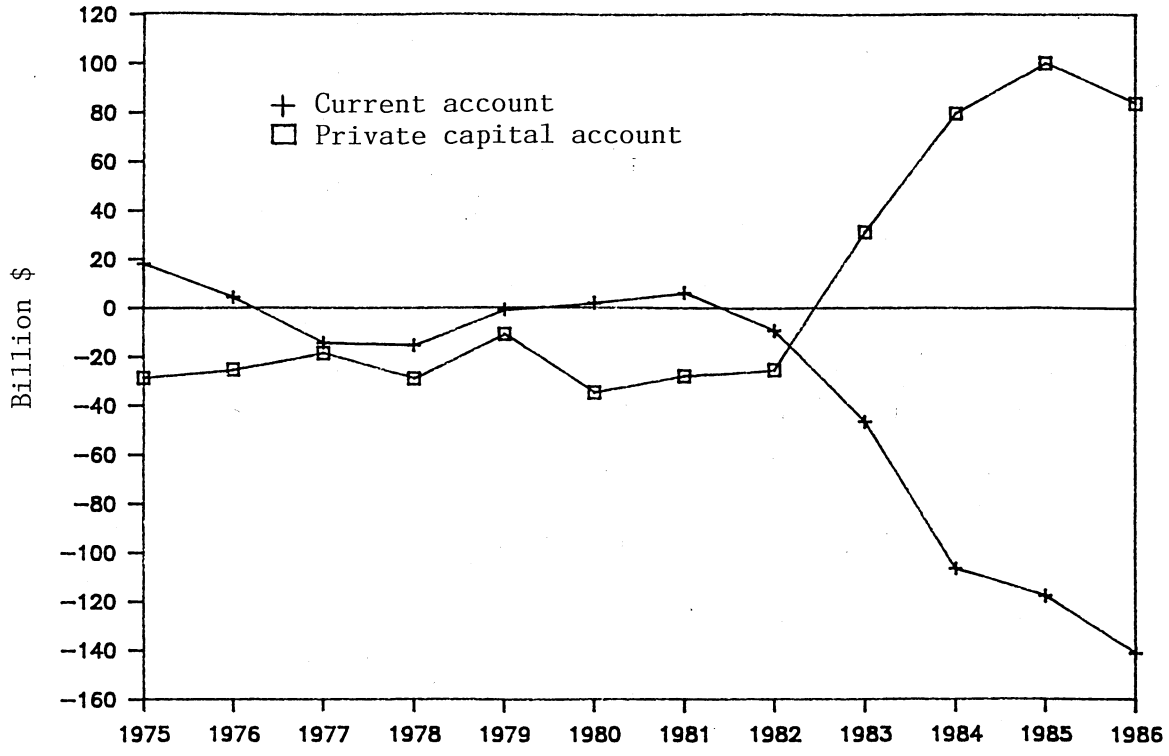
In assessing the impact of changes in international trade and capital transactions on the domestic economy, one should not view as a problem the variations in the current and the capital account balances as well as the movement in exchange rates. Depreciation of a nation's currency, for example, is not the cause of higher domestic inflation; the depreciation is the result of inflationary pressure which is brought about by an expansionary (or an anticipation of an easy) monetary policy. Changes in the current and capital account surpluses and deficits as well as exchange rate movements should be viewed as market responses to disparities in the money market that are caused by changes in monetary and fiscal policies. Finally, in this context, the worsening merchandise trade balance over the past 12 years is a symptom of changes in the underlying macroeconomic forces. Its deterioration and the corresponding movements in the other BOP account balances are caused by the underlying macroeconomic developments.

HISTORY OF U.S. BOP: 1975-86

Examining the U.S. BOP reveals the predominant influence of macroeconomic policy. The U.S. current account surplus, standing at $18 billion in 1975, fell by $33 billion through 1977 and by 1978 stood at a $15 billion deficit (fig. 4). The accounting reason given for this decline is the improvement in the private capital account balance. The net outflow of private U.S. capital decreased by $11 billion between 1975 and 1977, implying that it financed the worsening current account deficit. Once again, the fact that these balances moved in opposite directions shows nothing more than the identity required by the double-entry bookkeeping nature of the BOP accounting system.

The economic impetus for these developments was the macroeconomic policies pursued at the time. In late 1975, to stimulate the U.S. economy out of recession, Federal Government spending was increased while tax rates were reduced. This expansionary fiscal policy lasted through 1977, while the money supply (M1) grew at a moderate rate of 5 percent a year. The IMF (8) reports that fiscal policies in other industrialized nations during that period were contractionary and that their money supplies grew faster than the U.S. money

Figure 4. Current and private capital account balances, 1975-86



supply.5/ The combination of these international monetary and fiscal policies increased the U.S. real GNP growth rate from -0.9 percent in 1975 to 5.3 and 5.5 percent in 1976 and 1977, compared with the lower rates of 3.6 percent and 4.4 percent in the other industrialized nations. As a result, the real value of the dollar appreciated by 5 percent from the end of 1975 to the end of 1977.

Faster real income growth in the United States and a higher value of the dollar encouraged imports while discouraging exports of agricultural and nonagricultural commodities. From 1975 to 1977, nonagricultural imports increased from $88 billion to $138 billion and agricultural imports increased from $10 billion to $14 billion. At the same time, the annual growth rate of nonagricultural exports declined from 19.3 percent (1970-75) to 6.7 percent during 1975-77, while the annual growth rate of agricultural exports dropped from 24 to 4.5 percent (table 1). As a result, the nonagricultural trade deficit grew by $38 billion while the agricultural trade surplus fell by $2 billion. Thus, the merchandise trade balance fell by $40 billion from 1975 to 1977.

The service account surplus improved from 1975 to 1977, offsetting the growth in the merchandise trade deficit. The balance on nonincome service transactions remained around $2.5 billion (fig. 1). But, U.S. net income and interest on international investments--$13 billion in 1975--improved by $5 billion through 1977. The stock of U.S.-owned foreign assets exceeded the stock of foreign-owned U.S. assets in 1975. Further, U.S. residents increased their net claims on foreigners (though at a declining rate): net outflow of capital (capital account

5/ Canada, France, Germany, Italy, Japan, and the United Kingdom.

deficit) grew by $25 billion in 1976 and $18 billion in 1977, thereby increasing the U.S. net income and interest on its international investments (fig. 5).

The shrinking net outflow of U.S. capital in 1976-77 was also the result of the macroeconomic policies of the time. As the U.S. economy grew faster than the economies of other industrialized nations and real U.S. interest rates began to rise, U.S. direct investment abroad fell from $14 billion in 1975 to $12 billion in 1977 (fig. 5). At the same time, foreign direct investment in the United States rose from $3 billion in 1975 to $4 billion in 1977. The net outflow of U.S. direct investment abroad consequently fell from $12 billion in 1975 to about $8 billion in 1977. Similarly, the net outflow of capital due to international lending and borrowing activities of U.S. banks responded to higher domestic demand for funds and lower cost of borrowing abroad; its balance, $13 billion of outflow in 1975, dropped by $9 billion through 1977.

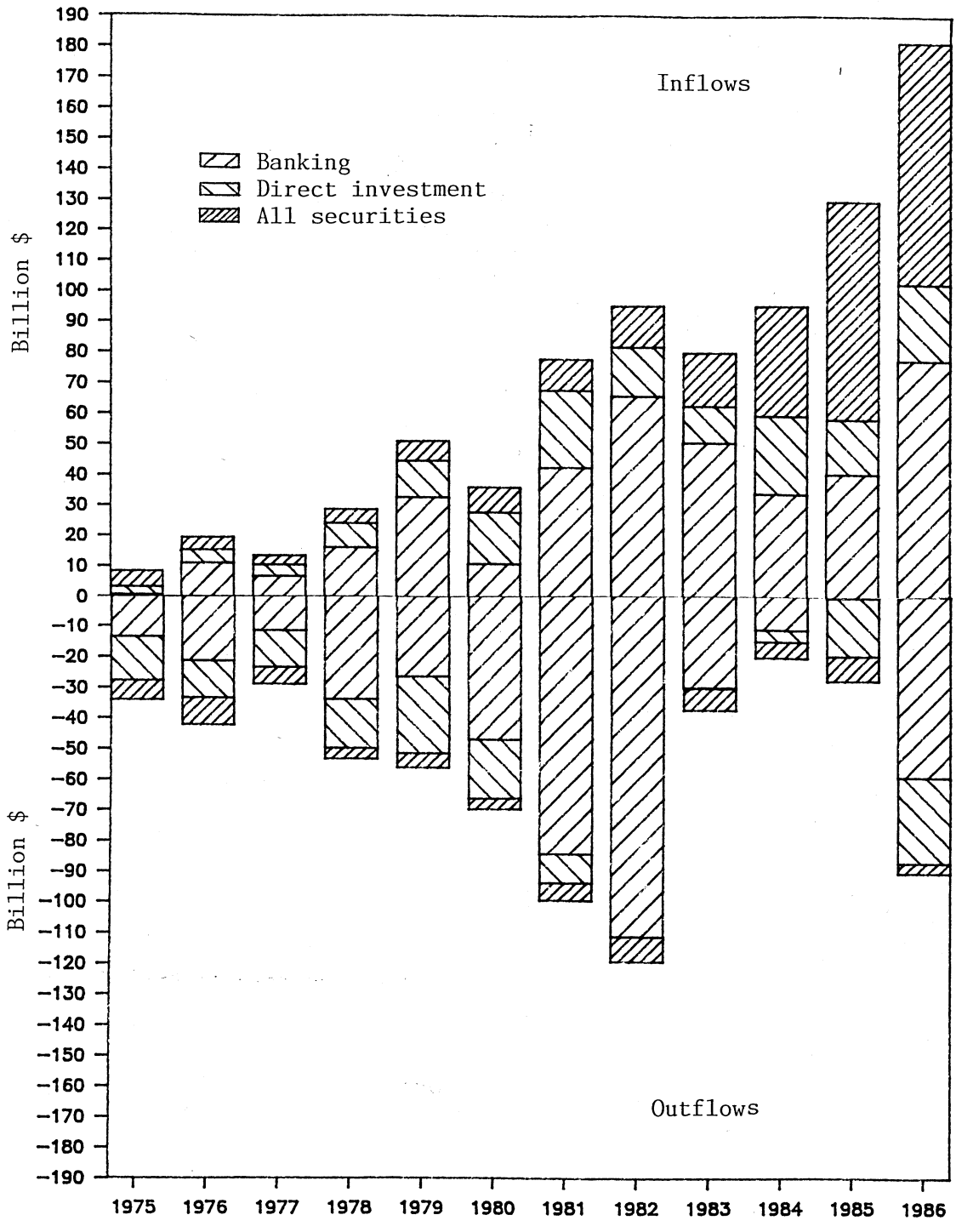
The total reductions in net capital outflow ($10 billion from 1975 to 1977) were not sufficient to turn the capital account balance into an inflow. In fact, the current and capital account balances were both in deficit in 1977. U.S. private residents supplied $11 billion more in their purchases of foreign commodities and assets than U.S. goods, services, and assets purchased by foreigners. Under freely floating exchange rates, this excess supply of dollars would have resulted in a real depreciation of the dollar and, thus, would have depressed the U.S. demand for foreign commodities and assets, correcting the BOP deficit. However, to support the high value of the dollar and, thus, to maintain the U.S. demand for foreign commodities and assets, foreign officials intervened by buying up the excess supply of dollars. The dollar-denominated foreign official reserves, which grew by $6 billion (capital inflow) in 1975, jumped by $48 billion through 1977, while the U.S. international reserve assets rose by $4 billion during the same period.

The economic growth of 1975-77 reduced the Federal deficit, while the Federal Reserve adopted an expansionary monetary policy in 1978. The December-to-December money (M1) growth rate increased from 5 percent in 1975 to 8 percent in 1979. The resulting 13-percent fall in the real value of the dollar from the end of 1977 to the end of 1979 drove up exports of U.S. goods (table 1). During 1978-81, nonagricultural exports grew 18.9 percent per year, while agricultural exports rose 16 percent each year. The lower value of the dollar discouraged U.S. imports. Compared with the 25-percent growth in the 1975-77 period, the

Table 1--Annual compounded growth rate of commodity trade

Sector	1970-74	1975-77	1978-81	1982-86
		Percent		
Agriculture:				
Exports	24.0	4.5	16.0	-9.3
Imports	10.0	17.9	6.8	2.8
Nonagriculture:				
Exports	19.3	6.7	18.9	.5
Imports	21.3	25.1	15.7	7.1

Figure 5. Private capital account transactions, 1975-86



annual growth rate for nonagricultural imports slipped to 15.7 percent. Agricultural imports grew 6.8 percent per year. Because U.S. agricultural exports exceeded imports, faster export growth in combination with slower import growth increased the agricultural trade surplus every year for that period (fig. 1). On the other hand, after worsening in 1978, the nonagricultural deficit improved in 1979. As a result, the rapidly deteriorating merchandise trade deficit of 1976-77 slowed in 1978 and even improved by $6 billion in 1979.

Macroeconomic policies began to change in 1980. Monetary policy tightened and Federal spending increased. The tight monetary and expansionary fiscal policies pushed real interest and exchange rates up. The result was the worldwide recession of 1980-82 and the less-developed countries' international debt repayment problems which depressed commodity trade. Both nonagricultural and agricultural exports and imports fell. But, the 40-percent real appreciation of the dollar from the first quarter of 1980 to the end of 1982 and the worldwide recessions of 1980 and 1982 reduced exports more than imports. As a result, the nonagricultural trade deficit grew while the agricultural trade surplus fell, worsening the U.S. merchandise trade deficit by $8 billion from 1981 to 1982.

The macroeconomic policy mix changed again in 1982. U.S. monetary policy loosened and taxes were cut. The U.S. economy consequently began to surge in 1983. Other industrial nations maintained a relatively tight monetary policy and, thus, their real income growth lagged behind the U.S. economic expansion. At the same time, the rising Federal debt increased the demand for available funds, keeping real interest rates relatively high.

Also in 1983, to encourage foreigners to finance the increasing U.S. budget deficit, special tax-exempt Government securities were offered by the Treasury to foreign investors. The demand for the U.S. dollar increased, pushing up the real value of the dollar by 31 percent from the first quarter of 1983 to the first quarter of 1985. Stagnating foreign income and the higher value of the dollar slowed the annual growth rate of U.S. exports for 1982-86. Nonagricultural exports grew 0.5 percent while agricultural exports dropped on average by 9.3 percent each year (table 1). U.S. imports, on the other hand, grew much faster: 7.1 and 2.8 percent for the nonagricultural and agricultural sectors. The result was a dramatic deterioration of all commodity trade balances, which worsened the merchandise trade deficit by $112 billion from 1982 to 1986.

Like the merchandise trade balance, the service account balance has responded to changes in macroeconomic policy. The service account surplus grew at the rapid rate of 45 percent per year from 1977 to 1981 and has slowed since then. The balance on income-related service transactions has historically dominated the service account balance, and its variation reflects the developments in the capital account. Because, prior to 1983, the stock of U.S.-owned assets significantly exceeded the stock of foreign-owned U.S. assets, the generated income considerably increased the service account surplus. In 1983, net capital outflow turned into an inflow and has continued since then. The service account surplus has consequently been dwindling, providing a diminishing offset to an increasing merchandise trade deficit (figs. 1 and 2). What is extraordinary is that beginning in 1983 the current account deficits, which were financed by a net inflow of official funds prior to 1983, have been financed almost entirely by an inflow of private capital. Consequently, not only did the surplus in the income-related service transactions decline, but the composition of income services changed.

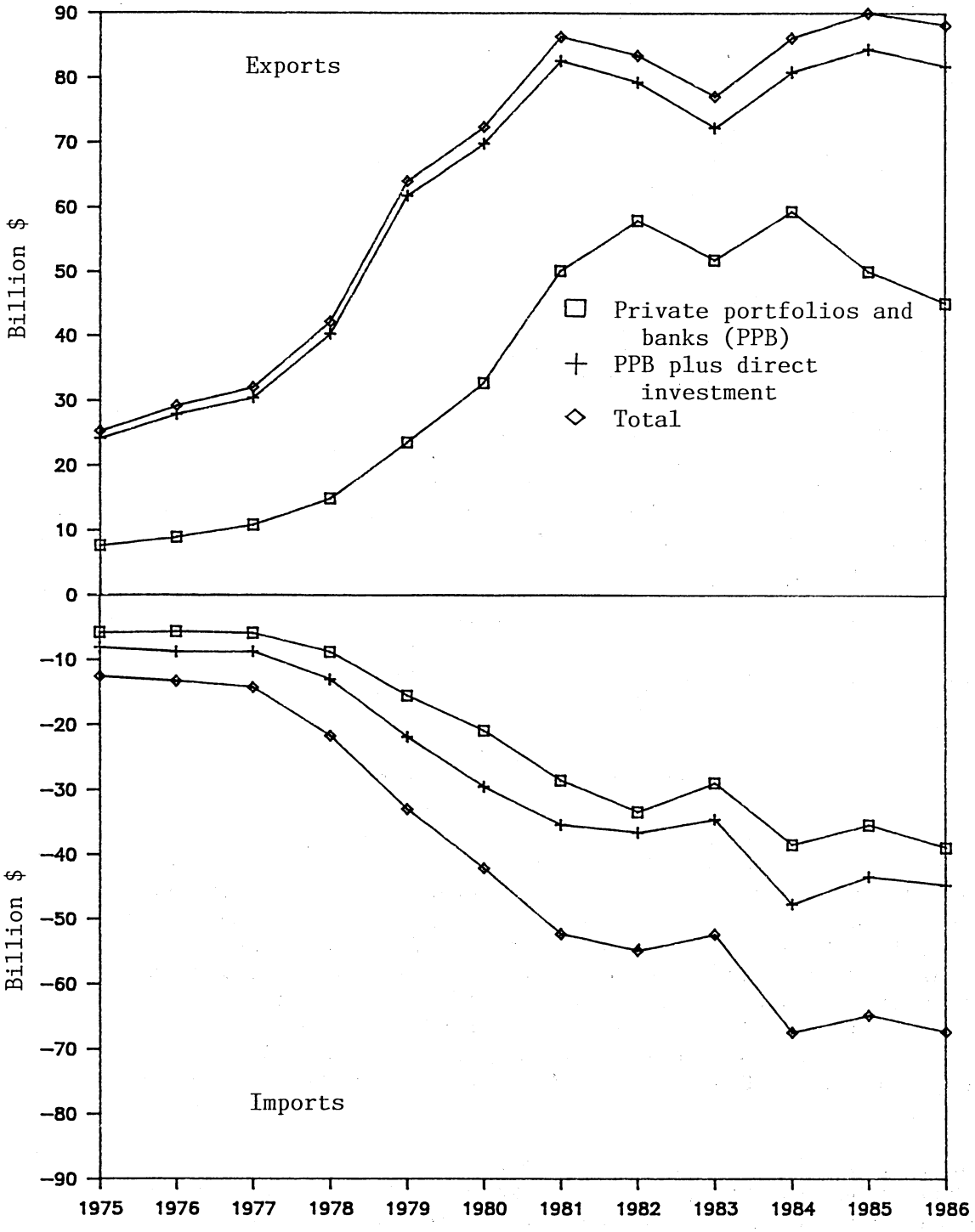
During the late 1970's, expansionary U.S. monetary and fiscal policies, the need for "recycling" OPEC petro-dollars, and the growing world economy facilitated a period of phenomenal growth for international banks. The capital outflow through U.S. bank lending activities increased with low costs of funds in the United States and higher demand for development projects in less-developed countries. However, several factors, which began gathering force in 1979, reduced U.S. bank lending during 1983-85. First, the adoption of variable interest rates on international loans made borrowers vulnerable to interest rate fluctuations. Second, lower oil demand by industrial nations (in response to higher oil prices of 1979) sent the less-developed countries' trade deficit (in goods, services, and financial assets) soaring. U.S. banks had responded by increasing the loans to the less-developed countries from $30 billion in 1980 to $40 billion in 1981. Third, the 1980-82 recession in the industrial nations, fueled by U.S. macroeconomic policy, had reduced the export earning power of the less-developed countries. The final elements setting the stage for dramatic reductions in U.S. bank loans were the onset of rapid U.S. economic expansion in 1983 and the heavy borrowing by the U.S. Government, resulting in a strong demand for funds.

The economic conditions of the 1970's, explained above, encouraged U.S. direct investment abroad (fig. 5). However, that trend began to change in 1980. The two recessions and the international debt repayment problems of the less-developed countries during 1980-82, and the faster growing U.S. economy since 1983 encouraged domestic and foreign investors to expand their investment in the United States relative to that abroad during 1980-86. After falling for 2 years (1980-81), the historically positive U.S. direct investment shifted to an inflow in 1982, adding to the capital inflow of foreign direct investment in the United States. Since 1983, U.S. direct investment abroad has picked up again. However, except in 1984, the United States has disinvested in foreign agriculture by $11 million, $290 million, and $90 million in 1983, 1985, and 1986.

Receipts from U.S. investments abroad grew continually from $25 billion in 1975 to $91 billion in 1986, as the stock of U.S. private holdings of foreign assets increased. During the second half of the 1970's, when U.S. direct investment increased and foreign economies continued to grow, such receipts were dominated by income and dividends derived from U.S. direct investment (fig. 6). Since 1980, however, falling U.S. direct investment and higher interest rates on bank loans changed the composition of income derived from U.S. holdings of foreign assets. As U.S. direct investment abroad began to grow in 1983, the associated income began to rise again. However, income from nondirect investment assets has continued to exceed that derived from direct investment since 1983 (fig. 6).

Total foreign inflows to the United States increased every year but 3 in the last 12 years (1977, 1980, and 1983). U.S. bank borrowing abroad and all foreign investments rose from $8 billion in 1975 to $183 billion in 1986 (fig. 5). Since 1980, capital inflow increases have been particularly large because of the adopted mix of macroeconomic policies. The composition has also responded dramatically to the macroeconomic policies since then. The most volatile component of capital inflows has been the U.S. bank borrowings abroad. During 1980-82, when tight U.S. monetary policy coincided with increased government spending, U.S. real interest rates rose sharply. Therefore, U.S. bank borrowings abroad, which dominated the other inflows, increased from $10 billion in 1980 to $65 billion in 1982. During 1983-84, however, several factors caused U.S. bank borrowings to shrink and foreign security investments to rise at the same time. First, U.S. monetary policy became expansionary, which lowered U.S. real interest rates slightly and fueled the economic expansion. Second, the depressed oil market reduced OPEC's deposits in U.S. banks. Finally, returns on portfolio

Figure 6. Income service transactions, 1975-86



investments were higher in the United States than abroad. These factors decreased U.S. bank borrowings from $65 billion in 1982 to $34 billion in 1984 and increased foreign security investments in the United States from $13 billion to $36 billion over the same period. Since 1984, three major considerations have encouraged foreigners not only to invest more but also to increase the portion of the capital devoted to U.S. securities: continued U.S. economic growth, the new security (explained above) issued by the Treasury to encourage foreigners in financing the Federal deficits, and increasing stock prices. Foreign security investments in the United States increased steadily from $5 billion in 1975 to over $80 billion in 1986, improving the net inflow of security investments by $76 billion from 1975 to 1986.

High real U.S. interest rates and exchange rates during 1982-83 dramatically reduced foreign direct investments in the United States. Since 1983, however, the expectations of rising U.S. economic activity and relatively lower real interest and exchange rates have caused foreign direct investments to rise again. The BOP data indicate that foreign direct investment inflows in U.S. crops and livestock production facilities have been small. Such investments fell continually from $183 million of inflow in 1980 to $4 million of outflow in 1985. Since then, the prospect of rising U.S. agricultural exports, caused by the falling real value of the dollar and interest rates, has increased foreign direct investment inflow in U.S. crop and livestock production facilities, which stood at $45 million in 1986.

The changing composition of U.S. capital inflows is reflected in the import side of the service account (fig. 6). The income and interest payments on bank loans and security investments dominated other service import components and rose steadily from $13 billion in 1975 to $68 billion in 1986.

IMPLICATIONS OF BOP DEVELOPMENTS

Most analyses of the BOP focus only on individual components, especially merchandise trade. A byproduct of the string of merchandise trade deficits has been the call to protect the sectors most affected by competing imports. If protectionist legislation is enacted, one very likely consequence is foreign retaliation, eliminating the free-trade benefits of goods of greater variety and quality at lower prices. The trade deficit has caused some benefits as well as pain in reallocating resources toward a more efficient economy: (1) inflation has moderated with relatively inexpensive foreign goods available to meet domestic demand; (2) in the long run, increased foreign competition will improve U.S. productivity; and (3) the U.S. trade deficit has fueled the world economy over the past 5 years.

The net flow of capital into the United States has kept interest rates lower than they would have otherwise been, helping to maintain the current recovery. It is also argued that such large inflows have had their negative impact as well. By draining the global pool of savings to finance U.S. expansion, the inflows have reduced the available funds abroad, retarding investment and economic growth. In the long run, the continued net inflow of foreign capital will alter the net U.S. international investment position. The United States had been a net creditor. Recently, however, stock of U.S. liabilities to foreigners exceeded total U.S. international assets, making the United States a net debtor country.

Year-to-year movements in various BOP accounts are greatly influenced by macroeconomic policy's effects on economic activity, international trade in real

and financial assets, and the domestic and international competitiveness of U.S. goods through interest rates, prices, and exchange rates. It seems more appropriate, therefore, to look for macroeconomic policy solutions to correct the merchandise trade balance. Commodity-specific policies do not address the imbalances of the other BOP accounts and cannot entirely offset the opposing forces of the macroeconomic policies. Quick-fix options, such as restrictive trade legislation, are distortions that introduce new dislocational problems.

Agriculture alone cannot turn the U.S. trade deficit situation around. Although U.S. agriculture has specific problems in terms of various protectionist barriers, the movement of agricultural trade mirrors the movement in nonagricultural trade. The same underlying forces of world macroeconomic policies and the resulting debt repayment problems of less-developed countries affect agriculture in much the same way as manufacturing or mining. Recent high exchange and interest rates, and low growth rates for less-developed countries have hampered all major trade-oriented sectors, including agriculture. Even from the overly narrow perspective of the current account balance, services and nonagricultural merchandise trade shares have grown while the agricultural share has declined.

Similarly, agriculture has little influence on capital flows and cannot possibly offset international banking and security activities. U.S. agricultural trade as a percentage of overall U.S. capital flow fell from 66 percent in 1975 to 17 percent in 1986. Conversely, developments in capital markets can significantly affect agriculture, particularly if restrictive trade policies are imposed. Recent history suggests that agriculture is ripe for immediate retaliation against nonagricultural U.S. trade restrictions. And, foreign responses may well come through capital markets. Foreign citizens facing lower export earnings will be less able to provide the huge inflow of funds which they have recently provided. Foreign governments may retaliate against U.S. trade barriers by capital controls and lower foreign government purchases of U.S. Treasury securities. The loss of foreign capital inflows could lead to very high U.S. interest rates. A high interest rate environment would cause a severe financial adjustment in capital intensive industries, especially agriculture.

Agriculture comprises a small portion of the U.S. balance of payments. However, for many U.S. trading partners, especially less-developed countries with debt repayment problems, agricultural imports from the United States and their exports to the rest of the world constitute a major part of trade. The effects of U.S. macroeconomic policy on world trade in agricultural products are probably more apparent in our trading partners' BOP than in our own. For example, tight money and large U.S. budget deficits resulted in high real interest rates in the United States and increased capital outflow and debt-service payments in many less-developed countries. Consequently, the less-developed countries cut back on major imports, including U.S. agricultural commodities, during 1982-86.

The United States is now a net debtor country and is presently selling more of its assets than it is accumulating abroad. As long as macroeconomic policies promote relatively higher U.S. real interest rates and income, and a high real value of the dollar, not only will the internationally owned net U.S. debt continue to rise, but trade balances of agricultural and nonagricultural commodities as well as services will deteriorate.

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APPENDIX--U.S. BOP IN 1986

Accounts	Debit (-)/Credit (+)	Balance
	Billion dollars	
1. Agricultural trade account: (1a)+(1b)		5
1a) Agricultural exports	26	
1b) Agricultural imports	-21	
2. Nonagricultural trade account: (2a)+(2b)		-149
2a) Nonagricultural exports	199	
2b) Nonagricultural imports	-348	
3. Merchandise trade account: (1)+(2)		-144
4. Income service account: (4a)+(4b)		21
4a) U.S. income from investments abroad	88	
4b) Foreign income from investments in the U.S.	-67	
5. Nonincome service account: (5a)+(5b)		1
5a) U.S. income from tourism, transportation, etc.	51	
5b) Foreign income from tourism, trans., etc.	-50	
6. Trade account: (3)+(4)+(5)		-122
7. Unilateral transfers (including military), net		-19
8. Current account: (6)+(7)		-141
9. Banking activity account: (9a)+(9b)		18
9a) Borrowing from abroad (inflow(+)), net	77	
9b) Lending abroad (outflow (-)), net	-59	
10. Direct agricultural investment account: (10a)+(10b)		0
10a) Foreign dir. inv. in the U.S. (inflow(+)), net	0.05	
10b) U.S. dir. inv. abroad (outflow(-)), net	0.1	
11. Direct nonagricultural investment account: (11a)+(11b)		-3
11a) Foreign dir. inv. in the U.S. (inflow(+)), net	25	
11b) U.S. dir. inv. abroad (outflow(-)), net	-28	
12. Portfolio investment account: (11a)+(11b)		76
11a) Foreign security investments in the U.S. (inflow(+)), net	79	
11b) U.S. security investments abroad (outflow(-)), net	-3	
13. Other private capital flows: (12a)+(12b)+(12c)+(12d)		-10
12a) Foreign gov't with U.S. private agencies, net	2	
12b) U.S. gov't with foreign private agencies, net	-3	
12c) Nonbank U.S. liabilities to unaffiliated foreigners	-4	
12d) Nonbank U.S. claims on unaffiliated foreigners	-5	
14. Private capital account: (9)+(10)+(11)+(12)+(13)		81
15. Official settlements account: (14a)+(14b)		36
14a) Increase (inflow(+)) in foreign official assets in the U.S., net	33	
14b) Increase (outflow(-)) in U.S. official reserve assets, net	3	
16. Statistical discrepancy	24	
17. Overall balance of payments: (8)+(14)+(15)+(16)		0

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