ESSAYS IN INTERNATIONAL FINANCE

No. 28, May 1957

THE INTERNATIONAL STATUS OF THE DOLLAR

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INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS AND SOCIOLOGY

PRINCETON UNIVERSITY

Princeton, New Jersey

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International Finance Section

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I. INTRODUCTION

A PROFOUND change has occurred in recent years in the international status of the dollar—a change of considerable significance for the international financial mechanism and of wide implications for the foreign financial relations of the United States.

Foreign short-term dollar assets* have surged from less than $5 billion at the end of 1947 to an all-time peak of $13.4 billion at the end of 1956 and, as Chart I shows, are now close to the amount of foreign gold reserves. Approximately $8 billion of the total foreign short-term holdings were in the accounts of central banks and other monetary authorities abroad at the 1956 year end; $3.4 billion were held by commercial and other foreign banks; and about $2 billion were owned by private foreign interests. The striking increase and the unprecedented level of foreign short-term dollar assets reflects, of course, the continuous cash surpluses during recent years in the balance of payments of the rest of the world vis-à-vis the United States. But foreign dollar gains—to the extent that they accrue to monetary authorities—may generally be employed for acquiring gold from the United States Treasury. Yet actually they were so used only in the very modest amount of $1.2 billion net during the 1948-1956 period. Foreign central banks and other monetary authorities as a whole have preferred to add the great bulk of their net dollar acquisitions to their dollar reserves. The in-

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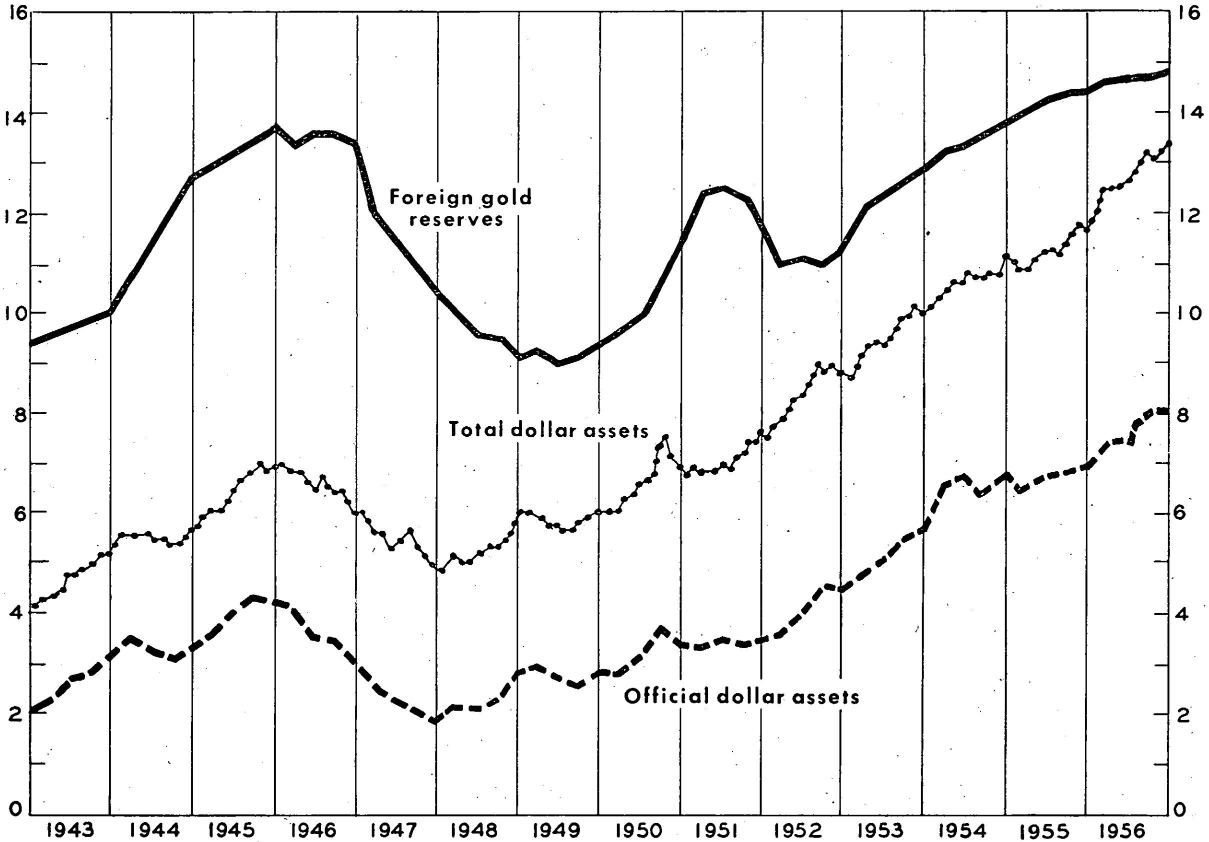
* The term "foreign short-term dollar assets" will be used throughout this essay to comprise demand and time deposits, United States Treasury bills and certificates of indebtedness, and other assets having an original maturity of less than one year such as acceptances, commercial paper, etc., held by foreigners in United States banking institutions. *These totals do not include the dollar assets of international institutions*, except those of the Bank for International Settlements. All statistics in this essay relating to these assets are taken from the United States *Treasury Bulletin*.

In addition to short-term dollar assets as here defined, foreign monetary authorities and other foreign entities, primarily insurance companies, held on December 31, 1956 approximately $1.1 billion worth of United States Treasury notes and bonds, a substantial proportion of which was maturing within relatively short periods and was therefore almost as liquid as assets defined here as short-term.

Chart I

FOREIGN GOLD RESERVES AND SHORT TERM DOLLAR ASSETS

Excluding international organizations



crease in foreign short-term dollar assets thus affords clear evidence of the fact that numerous central banks are finding dollar assets increasingly attractive relative to gold as an *international store of value.* Several such banks now keep their international monetary reserves largely—and in a few cases almost entirely—in the form of dollar assets rather than in the form of gold. At the same time, the rise in holdings of central banks, and perhaps to an even greater degree those of foreign commercial banks and other private owners, may be attributed to the increasing use of the dollar as a *means of international settlement,* a function in which the dollar has become increasingly important not only relative to gold, but also relative to sterling to some extent. In short, a large number of countries are now on what may be called the dollar exchange standard.

Much of the significance for the international financial mechanism of the $6.2 billion rise of foreign official dollar assets during the 1948-1956 period derives from the fact that it has augmented materially the world's monetary reserves. Had foreign countries not made use of dollar assets as an international store of value on such a large scale, we might now be witnessing a general shortage of monetary reserves relative to the rapidly growing need for them resulting from the very sizable expansion in world trade and payments. One way of assessing the important contribution of the dollar exchange standard as an economizer of gold, is to visualize the impact on the United States gold stock, and on international monetary reserves as a whole, had foreign central banks as a group chosen to utilize *all* their net dollar acquisitions since 1948 for purchasing gold from the United States Treasury. In that case, our own gold reserve would have fallen considerably and the increase in aggregate monetary reserves of the world would have been substantially less. It is conceivable, moreover, that such a loss in our own reserves might have led to revisions in our international economic policies of a sort designed to cut down the size of our cash balance-of-payments deficit with foreign countries.

While the impressive rise in foreign official dollar holdings has thus served to add substantially to the aggregate of international monetary reserves, it has also meant an equivalent increase in the potential claims on the United States gold stock. It is this aspect of the dollar exchange standard in particular that has attracted lately a great deal of attention and comment. Much has been made of the fact that our so-called "free" gold reserve—that is, our total gold stock less the amount of gold certificates required as "cover" for Federal Reserve note and deposit liabilities—has since 1953 been below our aggregate short-term dollar liabilities. But our *total* gold stock has remained far in excess of these latter liabilities, and our "free" gold is substantially above dollar assets immediately convertible into United States Treasury gold, i.e., short-term dollar assets held by foreign monetary authorities. It is one of the contentions of this essay that the marked decline, relative to foreign short-term dollar holdings, of our total gold and of our "free" gold gives no cause for alarm, considering the exceedingly strong international economic position and the basic financial strength of this country. There does not appear to be any good reason at this time to doubt the ability of the United States to meet all possible claims on its gold.

The existence of a big and continuously growing mass of foreign-held dollar assets also has fairly important implications for our money market. Foreign central banks now hold a very sizable proportion of the total amount of Treasury bills outstanding and, together with private foreign banks, dominate the market for acceptances. In fact, the aggregate of foreign dollar assets is now so large that major shifts in the investment preferences of foreign banks, or shifts of deposits between the Federal Reserve Banks and the commercial banks, or conversions of foreign balances into gold and vice versa could cause large-scale disturbances in particular sectors of our money market. It is quite possible that at times the investment operations of foreign central banks may, unless offset, have effects quite contrary to our own monetary policy objectives, thereby complicating the task of domestic credit administration. The emergence of the dollar exchange standard thus raises important questions of how to reconcile the responsibilities of the United States as a pivot of the world's financial system with the requirements of domestic money market policies.

It is the purpose of this essay very briefly to review the changing international status of the dollar from the post-World War I days of the gold exchange standard through the period of the hot money movements of the 'thirties to the successive liquidation and accumulation of dollar assets since World War II; to survey the changing rôle of dollar assets in international monetary reserves relative to gold; to emphasize the basic facts regarding the current size, distribution, and categories of foreign short-term assets; and, finally, to draw attention to some of the emerging policy problems associated with the accumulation of foreign short-term dollar assets.

No attempt will be made here to explore some of the longer range issues that may affect the functioning of the dollar exchange standard in the years ahead. These fundamental questions relate to the problem of the international distribution of monetary reserves and the possible emergence of new reserve centers, as well as to the need for formulating "rules of the game" to assure the proper and smooth operation of the international monetary system. Some of these questions involve controversial problems that have not by any means been resolved from the standpoint of United States official policy. It is the hope of the author that this essay will facilitate and encourage further detailed analysis and discussion of these important policy matters.

II. THE INTERNATIONAL POSITION OF THE DOLLAR 1921-1947

Spectacular increases in foreign dollar holdings are by no means without historical precedent, though earlier foreign dollar accumulations, while sizable, were on a far smaller scale than those of recent years and occurred, moreover, largely in private rather than official accounts. Foreign dollar holdings rose rapidly in the early 'twenties when political disturbances and anticipated currency and exchange disorders made the United States an attractive haven for European flight capital. Heavy stock market speculation in the closing years of the decade brought large additional amounts of private funds to the United States. The so-called backwash of our heavy foreign lending in the 1920's also contributed to the holding of foreign dollars here as loan proceeds piled up pending their utilization.

To a considerable extent, however, the $2.5 billion increase in foreign balances during the period 1921-1929 reflected, not unlike the upsurge in more recent years, the emergence of the dollar as a major international reserve medium. In the 'twenties, a large number of countries shifted from the gold to the gold exchange standard, under which foreign central banks were permitted to include foreign exchange holdings in their currency cover. This tendency was encouraged by the then prevailing fear of a gold shortage. The monetary experts who met in Genoa in 1922 felt that the stabilization of currencies during the early postwar years on a gold basis would lead to a struggle for limited amounts of gold. The Genoa conference, therefore, put its official stamp of approval on the inclusion of foreign exchange in the monetary reserves of central banks.

Upon receiving official sanction for this practice, many central banks, especially those in Europe, invested an increasingly large proportion of their international monetary reserves in foreign money markets. As holders of foreign exchange and as investors in interest-earning assets abroad, central banks soon became alive to developments affecting the value and yield of their holdings, such as prospective changes in foreign exchange rates and changes in relative interest rate levels. It was, therefore, only natural that they were prone to switch their balances from one money market center to another in response to financial and political disturbances and shifts in interest rate differentials. The resulting erratic movements of official funds introduced an element of instability into the international monetary situation of the 'twenties and detracted a great deal from the usefulness of the gold exchange standard.

Another weakness of the gold exchange standard was attributed to the fact that the investment of international monetary reserves in foreign money markets often left the central banks in the recipient countries in the dark as to the actual magnitude of foreign funds in their markets and as to the terms and conditions on which these funds were held. Lack of knowledge of such holdings deprived these banks of information they needed for making proper monetary policy decisions. Some central banks remained unaware of the threat to their own reserves implied in the presence of these volatile funds in their market and of the need to take precautionary measures in anticipation of their withdrawal.

Much of the criticism of the gold exchange standard as practiced in the 'twenties focused on the alleged fact that it was a prime factor in producing inflationary phenomena.* In this connection it was argued that movements of gold, unless offset by changes in domestic assets of central banks, tended to have reciprocal effects, since monetary expansion in the country acquiring gold was counterbalanced by a more or less simultaneous contraction in the country losing it. On the other hand, under the gold exchange standard, unless foreign exchange was held in the form of deposits with a central bank, this reciprocal effect was lost; consequently, so the argument ran, the gold exchange standard permitted the building of a superstructure of credit in several countries based upon the same gold reserve. The question of whether the present dollar standard is in any respect superior to the gold exchange standard will be considered later in this essay.

The depreciation of sterling in 1931 and the subsequent devaluation of other major European currencies, as well as the devaluation of the dollar in 1934, dealt the gold exchange standard a heavy blow. The severe losses of some central banks, primarily on their sterling holdings, produced an atmosphere inhospitable to foreign exchange as a medium in which to hold the reserves of monetary authorities. Nearly all central banks shifted almost entirely to gold. In any case, surplus funds available for dollar investments by central banks were shrinking rapidly in the early 'thirties, first because of the deterioration in the balance of payments of the rest of the world vis-à-vis the United States following the onset of the world economic depression in 1930, and then because of speculative pressures in anticipation of a depreciation

* For comments on this argument see League of Nations, *International Currency Experience*, Princeton 1944, pp. 44 ff.

of the dollar. From the end of 1929 to the end of 1933, foreign dollar balances were drawn down sharply by $2.5 billion, approximately the same amount by which they had been increased during the preceding decade. By the end of 1933, aggregate foreign dollar balances had declined to about $500 million, or to minimum working levels.

Following the stabilization of the dollar in terms of gold in January 1934, a heavy and rapid rebuilding of dollar assets set in. In the period 1934-1940 inclusive, foreign dollar assets rose by no less than $3.4 billion. But this increase was of an entirely different nature from that of the more recent period, since it reflected essentially "autonomous" private transfers of "hot money" from Europe and was accompanied, and in fact made possible, by large gold exports to this country. During the past decade on the other hand, the build-up was largely of the "accommodating" variety. It reflected for the most part transfers out of domestic to foreign dollar accounts as a result of the large cash deficits in our balances of payments.

In the 'forties, the dollar fortunes of foreign monetary authorities improved and deteriorated successively, depending on whether or not their dollar earnings together with dollar aid receipts exceeded or lagged behind their purchases of munitions and foodstuffs in the war years, and of raw materials and foodstuffs in the early postwar years. In 1941 foreign monetary authorities were compelled to sell large amounts of gold to the United States Treasury, but beginning in 1942 Lend Lease aid more than sufficed to cover the dollar deficits of foreign countries, and foreign monetary authorities were able to add substantially to their dollar holdings which they then invested to a considerable extent in United States Treasury bills. With the sudden termination of Lend Lease after the war, and as a result of heavy dollar requirements of foreign countries, dollar balances of foreign monetary authorities in 1946 and 1947 had to be drawn down considerably, and heavy gold sales to the United States Treasury became necessary. The year 1947 saw foreign short-term dollar holdings reaching their postwar low of $4.8 billion; since then there has occurred an unprecedentedly large rise, carrying these assets to $8.9 billion by the end of 1952 and to more than $13 billion at the end of 1956.

III. THE RECENT INCREASE IN FOREIGN SHORT-TERM DOLLAR ASSETS

Official versus Private Holdings

The bulk of the dramatic rise of foreign short-term dollar assets between the beginning of 1948 and the end of 1956 was in the holdings of central banks and such other monetary authorities as stabilization funds and foreign exchange offices. Their holdings rose by \$6.2 billion, whereas those of commercial banks and other private parties increased by only \$2.4 billion. Year-by-year details of the rise are shown in Table I. It is well to note that in some years the changes in short-term holdings of official institutions have been affected by their gold transactions with the United States Treasury and their purchases and sales of United States Treasury notes and bonds, which are not included in the table.

TABLE I

Foreign Short-term Dollar Assets in United States Banks
1948-1956
(In millions of dollars)

End of year	*Official*	*Nonofficial*			*Grand total (excluding international holdings)*
		Commercial banks	*Others*	*Total nonofficial*	
1947	1,832.1			2,972.7	4,804.8
1948	2,836.3			2,947.0	5,783.3
1949	2,908.1			3,001.0	5,909.1
1950	3,620.3	2,058.2	1,393.5	3,451.7	7,072.0
1951	3,547.6	2,528.2	1,513.0	4,041.2	7,588.8
1952	4,654.2	2,575.3	1,670.3	4,245.6	8,899.8
1953	5,666.9	2,527.1	1,781.3	4,308.4	9,975.3
1954	6,774.0	2,536.0	1,799.4	4,335.4	11,109.4
1955	6,956.3	2,954.8	1,770.3	4,725.1	11,681.4
1956	8,031.9	3,419.3	1,980.5	5,399.8	13,431.7

Source: *United States Treasury Bulletin*, May 1951 through 1954, February 1955 through March 1957.

The much slower rate of growth of private holdings than of official balances is primarily due to the fact that commercial banks and other private holders commonly prefer, or are required, to sell their net dollar acquisitions to their central banks once their holdings reach the minimum magnitudes considered necessary for their current operations in the dollar area. Under the circumstances prevailing in the early postwar period, foreign exchange control authorities forced banks and other private holders to sell the major part of their dollar acquisitions to central banks, and this of course was an important factor in slowing down the growth of private holdings during that period. As the dollar position of foreign monetary authorities became more comfortable, private interests were increasingly permitted to add to their holdings in this country, if they cared to do so. But even today, a substantial part of bank and other private holdings remains subject to official control and disposition and is in a sense really part of official holdings. Official holdings might thus be considered to be larger than those shown in this table.

Some of the non-official holdings represent funds that are left in the United States for safekeeping purposes, but the bulk consists of operating balances or of assets that have to be held here to cover liabilities to American residents, such as reserves of insurance companies. Requirements of banks and business firms for working balances have greatly increased in recent years: United States foreign trade now plays a more dominant role in world trade than it had before the war; prices for many commodities are at record levels; businessmen and banks in many countries insist on being paid in dollars rather than in other currencies; and innumerable individual trade debts are settled through accounts in the United States, even though the underlying transactions themselves may never directly involve the United States.

To some extent the rise in foreign official dollar assets also is attributable to larger needs for operating balances and for meeting possible drains on dollar reserves. The European Payments Union defines its units of account in terms of dollars, and until recently at least the monthly EPU settlements were consummated through dollar accounts in New York. Under many payments agreements, credit and debit balances in excess of swing ceilings must be settled in United States dollars. And there is a natural tendency for foreign monetary authorities to build up dollar balances to meet dollar obligations to the International Monetary Fund and the International Bank, to United States Government agencies, and to United States private banking institutions.

Still and all, foreign monetary authorities do not require $8 billion or more for operating purposes. The major part of foreign official dollar assets clearly represents reserves of international purchasing power. Foreign central banks now regard the bulk of their dollar holdings in the same manner as their gold reserves; both are considered international stores of value. The rise of official and private dollar holdings thus reflects the fact that dollars now play for many foreign countries a dual role: the currency with which to make a large share of their international payments and the currency in which to hold a large, if not major, part of their monetary reserves.

Foreign Official Dollar Assets and Gold Holdings

The rapid increase in foreign official dollar holdings has been accompanied by a marked rise in the ratio of such holdings to foreign official gold reserves. As indicated in Table II, the ratio rose from a mere 17.7 per cent at the end of 1947 to more than 30 per cent three years later. It then increased further to more than 50 per cent at the end of 1956.

TABLE II

Foreign Official Gold and Short-term Dollar Holdings
(In millions of dollars)

Year end of	*Gold*[a]	*Short-term dollar assets*	*Dollar assets as percentage of gold*
1938	11,358	474	4.2
1947	10,326	1,832	17.7
1950	11,496	3,620	31.5
1953	12,887	5,667	44.0
1954	13,807	6,774	49.1
1955	14,439	6,956	48.2
1956	14,750	8,032	54.4

[a] Excluding holdings of Soviet Russia.
Sources: *International Financial Statistics*, International Monetary Fund, December 1954; *Federal Reserve Bulletin*, December 1951 and March 1957; *United States Treasury Bulletin*, March 1957.

Table II also shows that the rise in the ratio was the result of a more rapid increase in official dollar assets than of gold holdings, rather than of a decline in foreign gold holdings. Foreign countries as a group hold today more gold than they ever did and are still adding to their holdings. What we have been witnessing, then, is a relative, but not an absolute, decline in the attractiveness of gold to foreign monetary authorities.

The bulk of the increase in foreign official gold reserves has come from foreign gold production. In general, the proportion of newly-mined gold sold in recent years to private hoarders has declined and an increasing share of total gold production has accrued to official reserves. In fact, there is evidence that private holders have dishoarded some gold. Western European gold reserves have also been augmented slightly from sales of gold by Soviet Russia. Approximately $1.2 billion, or 27 per cent, of the rise in foreign gold reserves since the end of 1947 represents gold acquired from the United States Treasury. Foreign gold purchases from the Treasury were sizable in the early 'fifties, but since then have been relatively small. Modest purchases in 1956 were more than offset by foreign gold sales to the Treasury.

Inasmuch as foreign monetary authorities may generally convert their dollar holdings into gold by purchase from the United States Treasury (and, conversely, may convert their gold into dollars by sale to the

Treasury), the sharp rise since 1947 in the ratio of foreign official dollar to gold holdings is clear evidence of the growing attractiveness of dollars relative to gold in foreign official reserves. A major factor bringing about this marked shift in preference has been that the aggregate volume of foreign monetary reserves has increased so substantially in absolute terms that foreign central banks have found it increasingly desirable to invest a rising proportion of the rising total in the form of dollar earning-assets. This desire to earn a return on new dollar acquisitions has also been strengthened by the generally higher levels of short-term interest rates in recent years as compared with the earlier period. Moreover, several central banks, to be self-supporting, badly needed earnings from their international reserves and simply could not afford to hold any substantial amount of gold. This is especially true of the central banks in those countries where monetary reforms wiped out much of their major interest-earning assets, usually government securities. Similarly, central banks in several underdeveloped countries whose money supply is primarily the counterpart of international assets need a return on their reserve holdings in order to cover their operating costs. The faith in the strength of the dollar and the widespread conviction that the monetary authorities of the United States are determined to maintain the par value of the dollar at $35 per ounce of gold has also contributed, at least indirectly, to the increase in the ratio of dollars to gold. The increased ratio is also suggestive of some decline in the strength of foreign adherence to the "gold tradition"—and of the absence of a "gold tradition" on the part of many of the newer central banks which have been big dollar earners.

Dollar versus Gold Preferences in Various Countries

The preference for dollar assets relative to gold has by no means been shared by all those monetary authorities that since the late 'forties have been able to add heavily to their international reserves. In fact, the bulk of the remarkable increase in official short-term dollar assets has been concentrated in the hands of a relatively small number of central banks and governments. There are no complete or fully comparable data published as to the geographical distribution of foreign official accounts. It is, therefore, not possible to show the exact amounts of dollar assets acquired by individual monetary authorities during the last decade. From statistics issued by several governments, however, it appears that the central banks and official institutions of three countries—Germany, Japan, and Canada—have been responsible for almost 50 per cent of the increase in foreign official dollar assets during the period beginning in January 1948 and ending in December 1956. Increases in the dollar assets of the central banks and official institutions of a few other countries are known to account for another substantial part of the total. It is well to remember that the advance of the dollar exchange standard in the last decade owes much to the decision of a relatively small number of monetary authorities to invest all or a large part of their dollar acquisitions in the United States money market rather than to convert them into gold.

An indication of the divergent preferences for gold and dollar assets among different countries, as evidenced both by their acquisitions of these two types of international reserves and their actual gold and dollar holdings at the end of December 1956, is given in Table III. It should be noted, however, that, because of statistical limitations, the gold and dollar figures are not entirely symmetrical. The gold figures refer only to official holdings, while the statistics on dollar assets represent the total of official and private dollar holdings and gains. In the case of several countries listed in the table, a sizable portion of the dollar assets is held by commercial banks and other private parties, including individuals; the dollar figures, therefore, do not permit definite conclusions about the relative preferences of the monetary authorities of these countries. Moreover, the dollar figures relate only to short-term holdings, that is, to assets with an original maturity of less than twelve months. Several countries, notably the United Kingdom, Canada, Cuba and Switzerland, also hold substantial amounts of United States Treasury notes and bonds; although some of these have early maturity dates, they are not included in these data. Finally, it should be noted that the preferences of some monetary authorities, especially those of Germany, The Netherlands, Venezuela, and Canada, have shifted considerably over time. Consequently the position as of December 31, 1956 as shown in the table is not always indicative of the relative preference of individual central banks in earlier years.

Qualified in this way, the evidence presented in the table shows that relatively few countries have shown a very definite preference for either gold or dollars. Only the monetary authorities of Belgium, The Netherlands and Portugal have remained quite faithful to the gold tradition. The gold holdings of the United Kingdom and Switzerland also far outweigh their dollar holdings, but both countries have added substantially to their dollar assets.

At the other end of the scale are the monetary authorities of Japan, the Philippines and Greece, all of which have shown little or no interest in adding to their gold holdings. The international reserves of these countries now consist almost entirely of dollar balances. The dollar holdings of Austria, Italy, and Mexico are also very substantially in

TABLE III

Foreign Official Gold Holdings and Total Foreign Short-term Dollar Assets

(In millions of dollars)

	Official Gold Holdings (December 31, 1956)	*Total dollar holdings* (December 31, 1956)	*Increases between Dec. 1947 and Dec. 1956* Gold	*Increases between Dec. 1947 and Dec. 1956* Dollars
Argentina	214	146	–108	–90
Austria	67	296	59	291[a]
Belgium	928	113	331	–12
Canada	1,113	1,502	819	1,096
Cuba	136	211	–143	–24
France[b]	861	626	313	459
Germany	1,494	1,833	1,494	1,744
Greece	11	176	–3	141
Italy	362	928	304	775
Japan	128	1,039	126	1,008
Mexico	167	433	67	294
Netherlands	844	134	613	–9
Philippines	22	272	21	–217
Portugal	448	137	138	90
Spain	117	43	5	30
Sweden	266	217	161	159
Switzerland	1,676	836	320	391
Thailand	112	143	78	129[a]
United Kingdom	1,800[c]	983	–220	690
Venezuela	603	455	388	377
All others	3,381	2,909	–339	1,305
Total	14,750	13,432	4,424	8,627

[a] Increase since September 30, 1947.
[b] Excludes gold holdings of the French Exchange Stabilization Fund.
[c] United Kingdom figure estimated.

Sources: *United States Treasury Bulletin,* May 1948 and February 1957; *Federal Reserve Bulletin,* December 1953 and March 1957; and *International Financial Statistics,* International Monetary Fund, December 1951 and April 1957.

excess of their gold reserves, even though their monetary authorities have added considerable amounts of gold to their international reserves during the past decade.

Between these two groups of countries are many different patterns, reflecting less decisive preferences. Canada's holdings and acquisitions of gold and dollars, for example, show no pronounced pattern of preference. The same appears to be true of Sweden. The gold reserves of France as of December 1956, even excluding the holdings of the Exchange Stabilization Fund, exceeded aggregate French dollar holdings, but the dollar portion of the country's reserves appears to have increased much more rapidly than its gold.

Germany's case is an interesting one. Judged by its holdings and acquisitions indicated in Table III, it would appear to have shown somewhat of a preference for dollars. Actually, the preference for dollar assets was very pronounced in the early 'fifties but gradually weakened thereafter, and gold came to play an increasingly important role in total German reserves. Yet, Germany's central bank, the Bank deutscher Laender, reported that it held at the end of December 1956 as much as $1,766 million in United States and Canadian dollars; it may thus be assumed to be the largest foreign holder of short-term dollar assets in the world.

IV. THE ASSET COMPOSITION OF FOREIGN DOLLAR HOLDINGS

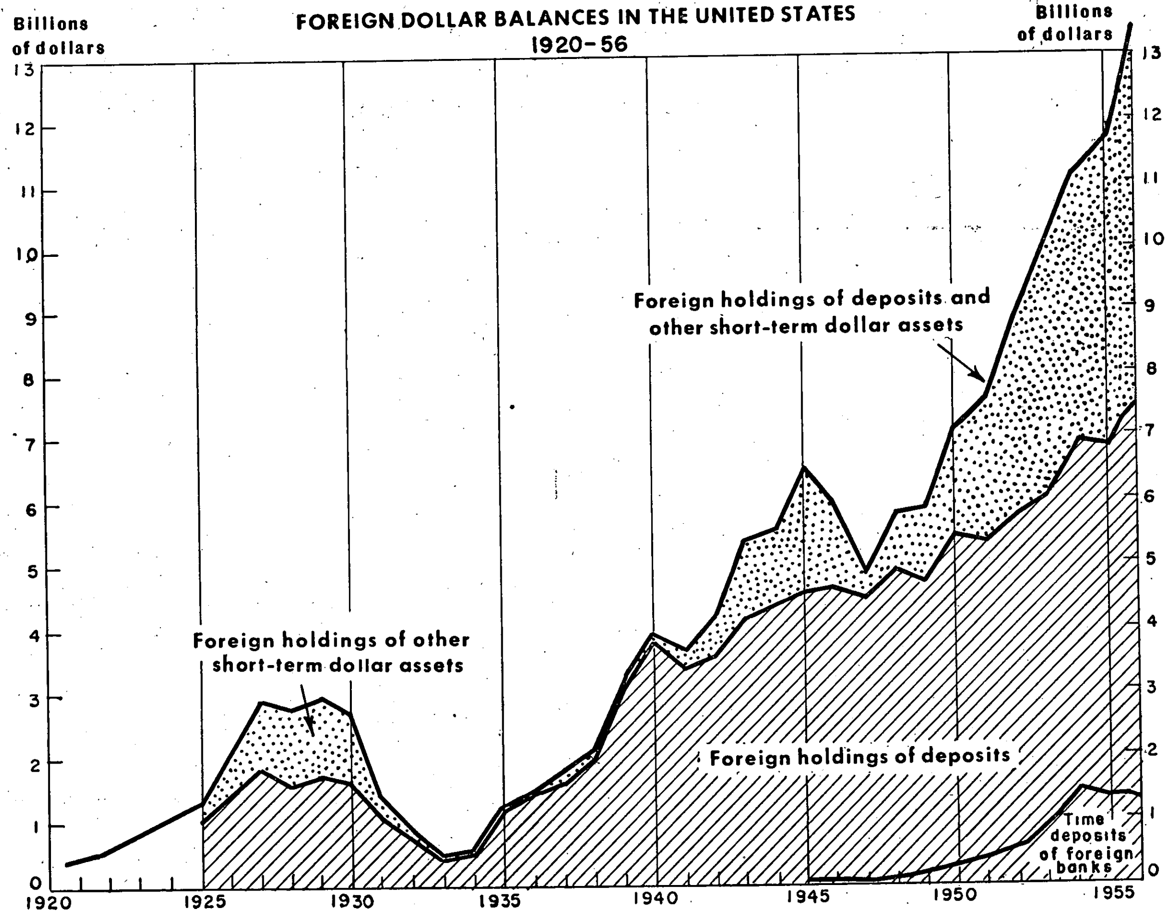
Of the $13.4 billion of foreign short-term assets at the end of 1956, approximately 36 per cent was held in the form of Treasury bills and certificates; 8 per cent in acceptances, commercial paper, and similar assets; about 10 per cent in time deposits; and the remainder (46 per cent) in demand deposits. The proportions of interest-earning assets have changed substantially during the last thirty-five years, largely reflecting both the changing asset structure of the New York money market itself and the absolute rise of foreign dollar holdings. The changing asset composition, over the period of 1920-1956 as a whole, is depicted in Chart II.

By far the greatest part of the interest-earning dollar assets are held by foreign central banks. Foreign commercial banks rarely seek a return on their dollar holdings; these are almost entirely held for operating purposes and therefore ordinarily are retained in demand deposits. This is true also of other private parties whose investments in short-term Treasury securities were only $232 million at the end of 1956, compared with total private (nonbank) holdings of $2 billion. Individuals and other private interests, if they wish to invest their dollar holdings, usually put them into corporate stocks and bonds and other long-term assets, the foreign holdings of which are not discussed in this essay. Private parties, notably foreign insurance companies, also hold an indeterminate part of the $1.1 billion worth of Treasury notes and bonds in foreign accounts. Table IV which, because of statistical

Chart II

FOREIGN DOLLAR BALANCES IN THE UNITED STATES

1920-56



limitations, combines dollar holdings of monetary authorities and other foreign official institutions with those of commercial and other private banks, gives a picture of the asset distribution of foreign dollar holdings as of the end of 1956.

TABLE IV

Distribution of Foreign Short-term Assets, December 31, 1956

(In billions of dollars)

	Official institutions and all banks	*Other foreigners*	*Total*
Demand deposits	4.6	1.7	6.3
Time deposits[a]	1.3		1.3
Treasury bills and certificates[b]	4.6	.2	4.8
Acceptances and others	.9	.1	1.0
Total	11.4	2.0	13.4

[a] Time deposit figures are based on the *Member Bank Call Report* of the Board of Governors of the Federal Reserve System. There is no breakdown of time deposits holdings according to type of holders available, but holdings of "other foreigners" are assumed to be negligible.

[b] Treasury certificates of indebtedness are fixed-interest obligations, issued at par with an original maturity of no more than one year.

Sources: *United States Treasury Bulletin,* February 1957; *Member Bank Call Report,* December 31, 1956, Board of Governors, Federal Reserve System.

As the dollar holdings of foreign monetary authorities increased, a much smaller portion came to be held as operating balances and a correspondingly larger part as medium and long-term reserves. This change in the nature of their dollar holdings permitted these authorities to invest a larger proportion of their total holdings. At the same time, foreign central banks and other monetary authorities have tended to keep their investment portfolio highly liquid. Their reluctance to purchase anything but money market assets is understandable in view of the long-established practice of central banks of investing solely in what may be considered "near money" and their unwillingness to incur the risk of price fluctuations and potential losses in the event that liquidation of longer-term investments becomes necessary. Indeed, most foreign central banks are not permitted, or cannot be expected, to invest in assets that are subject to price fluctuations. In brief, foreign monetary authorities have preferred short maturities because of legal restrictions, the nature of their liabilities, their responsibilities as guardians of their nations' liquid reserves, and their traditional attitude toward liquidity.

The factors governing the investment preferences of foreign monetary authorities as between United States Treasury bills, bankers' acceptances, and time deposits also merit brief consideration. It should be noted first that the income earned by *all* foreign residents from time deposits and acceptances is exempt from the Federal income tax, but that there is no over-all exemption covering income earned on Treasury bills. Income from Treasury bills (and other United States government securities) accruing to certain government-owned foreign central banks may be—and in a large number of instances has been—declared tax exempt under specific rulings by the United States Treasury; certain other central banks are also fully or partly tax exempt on their income from Treasury bill holdings under tax conventions. Although the number of foreign central banks granted tax-exempt status has risen steadily in recent years, a large number of such banks remain outside this category. The tax status of particular monetary authorities is, of course, of major importance in determining the net yields available to them on alternative investments.

For institutions having a tax-exempt status, differences in the yields on Treasury bills and bankers' acceptances have tended to be quite narrow, favoring at times the one and at other times the other. For taxable banks, however, there has been a consistent net yield favoring acceptances. The fact that acceptances play a relatively small role in the total assets held by foreign monetary authorities may be explained by the relative scarcity of acceptances in the market. The larger amount of acceptances held by foreign central banks since 1949 is primarily a reflection of the fact that the total supply of acceptances in the market has risen since then.

Insofar as liquidity is concerned, acceptances enjoy almost the same status as Treasury bills. Time deposits, on the other hand, are less liquid than either of the other two. In recent years, time deposits nevertheless have become an increasingly popular investment medium for foreign central banks. Such deposits are attractive as a tax-free, income-earning investment for that part of their funds which central banks do not expect to make use of in the immediate future. For some central banks time deposits also serve as a desirable means of diversifying their portfolios of dollar assets. Commercial banks in the United States, of course, have welcomed foreign time deposits, especially in periods of tight money when these funds with their relatively low reserve ratio can be profitably employed. Aggregate dollar holdings of several central banks have increased so substantially that considerations of liquidity have become considerably less significant. Given a favorable net yield on time deposits relative to Treasury bills and the limited availability of bankers' acceptances, central banks have been willing to sacrifice some liquidity in the interest of larger earnings on their dollar balances. Statistics on funds invested by foreign banks in time deposits with member banks of the Federal Reserve System strongly suggest that the changes in volume of time deposits since 1953 have reflected primarily comparative net yields available on such deposits as opposed to Treasury bills.

Thus in January 1953, when taxable central banks could obtain a yield premium of only 0.20 per cent by investing in time deposits, such deposits in member banks of the Federal Reserve System amounted to no more than $600 million. During the first half of 1954, however, the yield premium for taxable banks ranged from 0.75 to nearly 1.0 per cent. This rise in the premium seems to have been largely responsible for the increase in time deposits during the first half of 1954 to over $1.4 billion. In the autumn of 1955, yields on Treasury bills began to exceed the 2 per cent maximum rate set by the regulations of the Board of Governors of the Federal Reserve System for time deposits with maturities between 90 and 179 days after the date of deposit. As Treasury bill yields continued to rise during 1956, tax-exempt banks met with a gradually increasing incentive to switch from time deposits to Treasury bills. At the same time there was an almost continuous decline in the incentive for taxable banks to invest in time deposits. As a result of these developments, foreign time deposits fell to less than $1.2 billion in the spring of 1956. Such data indicate that relative net yields play a substantial role in determining the volume of time deposits. Nevertheless other factors may also be of considerable importance. For example, even though the net yield incentive for taxable banks to invest in time deposits declined sharply in 1956 and a slight premium in favor of Treasury bills developed in September 1956, foreign time deposits rose above their earlier level late in 1956. Such developments show the importance of other determinants, such as the distribution of net dollar acquisitions as between banks that habitually invest in time deposits and those that are more susceptible to yield incentives.

It is thus evident that the asset distribution of foreign balances is influenced by a variety of factors. Actually it is not possible to establish a close correlation between changes in relative yields, on the one hand, and aggregate holdings by foreign central banks of Treasury bills, time deposits, and acceptances on the other. But there is sufficient evidence to indicate that foreign monetary authorities as a group have shown considerable sensitivity to net yield differentials in deciding upon the composition of their short-term dollar reserves.

V. SOME IMPLICATIONS OF THE CHANGED INTERNATIONAL STATUS OF THE DOLLAR

The Impact on the International Financial Position of the United States

The sharp rise in foreign dollar assets and their increasingly important role in the monetary reserves of the world outside the United States have contributed materially to the great improvement in the international economic climate. This rise has been accompanied by, and indeed made possible, a substantial degree of liberalization in trade and payments abroad. The growth of foreign dollar holdings has thus been of great help in bringing foreign currencies closer to the full convertibility which has long been one of the cardinal objectives of the foreign economic policy of the United States.

For American financial institutions engaged in foreign and international banking, the growing use of dollars for international reserve and settlement purposes has been of considerable benefit. Such banks have derived substantial advantages from foreign deposits of about $7 billion, from keeping in custody several billions worth of additional foreign short-term assets, and from rendering a large variety of services associated with the dollar's performing the function of an international means of settlement. Substantial subsidiary benefits have accrued to insurance, shipping, and other service industries. The upsurge in foreign dollar holdings reflects the emergence of the United States as the principal financial center of the world and has strengthened the capacity and the desire of United States banks to perform international banking functions. As their dollar holdings for foreign accounts have increased, United States banks have shown growing interest in financing international trade transactions and have been willing to provide larger credit lines and other financial services to foreign countries. There is thus a close relationship between the holding and investment of foreign balances here and the greater participation of United States banks in foreign and international banking.

It is true that the investment of monetary reserves in United States Treasury securities, time deposits, and acceptances has added materially to interest payments to foreigners as recorded in our balance of payments. But these interest costs to the American economy, amounting to an estimated $160 million in 1956, are reasonable in the light of the benefits noted above that the United States derives from these funds. Incidentally, these payments are substantially below the interest receipts of the United States on long-term credits extended to foreign countries.

At the same time, it must be emphasized that the presence in our money market of these huge foreign holdings, and the possibility of further increases, have far-reaching implications—actual and potential—for our financial mechanism and monetary system and have created problems that cannot be lightly dismissed.

The aspect of the dollar exchange standard that has been foremost in the minds of various observers abroad and in this country concerns the potential threat of a possible conversion of foreign short-term dollar assets into gold and the alleged dangers of such a conversion to the international reserves of the United States and therefore to the stability of the dollar. As pointed out previously, these observers make much of the fact that foreign short-term dollar assets now exceed our "free gold reserve," that is, the gold held by the United States Treasury in excess of that representing gold certificates held as minimum legal cover against Federal Reserve liabilities.

A judicious appraisal of all the factors involved indicates that at this time there is no justification for any alarmist concern over the adequacy of the United States gold stock and that there is little practical significance in an arithmetical comparison between our gold reserves (as of the end of 1956) of $22 billion, the legal cover requirements which were then close to $12 billion, and our foreign short-term dollar liabilities of $13.4 billion. In any calculation of the gold conversion potential, holdings by other than foreign monetary institutions can be safely deducted from the dollar assets that may be employed for acquiring United States gold, inasmuch as private foreign banks and other private parties cannot directly convert dollar balances into gold under our present gold regulations. Of course, they may sell their liquid dollar assets to their central banks for local currencies, and these banks may then dispose of additional dollar resources for conversion into gold. But private holders, and to a lesser extent foreign monetary authorities, cannot afford to discard all their dollar assets in this country. A substantial, though indeterminable, amount of foreign dollar assets is required for operating purposes and must be retained irrespective of any desire of the holders to withdraw such balances from the United States.

It is also well to keep in mind that a nation's gold stock is somewhat analogous to a bank's liquid assets which will not be withdrawn to any considerable extent in the form of bank notes, so long as the bank conducts its operations soundly. In other words, so long as the United States continues to pursue policies that tend to maintain the value of the dollar relative to other major international currencies and to gold, its monetary authorities have no reason to anticipate any desire on the part of foreigners to withdraw any large part of their holdings from the United States banking system. Moreover, the international economic and financial position of the United States remains exceedingly strong. It is true that at the end of 1956 our short-term banking claims on foreigners of $1.8 billion were only a small fraction of our short-term banking liabilities to foreigners and that the United States had at that time an adverse balance of indebtedness in excess of $14 billion on its international short-term account. But on long-term account, quite apart from gold holdings of $22 billion, the United States net creditor position at the end of last year was in excess of $30 billion. United States long-term government loans alone were approximately $11.4 billion, about 40 per cent of which was to fall due during the next decade. United States income on foreign investment as recorded in our balance of payments, that is excluding reinvested earnings, was approximately $2.6 billion in 1956. Our export trade surplus has increased substantially in recent years and would probably have risen at an even faster rate were it not for the desire of important trading areas to maintain or strengthen their own monetary reserves.

Further substantial foreign dollar gains could, of course, change the picture. Should foreign short-term dollar holdings continue to increase at a rate of more than $1 billion a year, they would eventually reach a level which, relative to our "excess" gold reserves, may be considered uncomfortable. Yet at this time such a contingency does not appear likely. While it is impossible to forecast with any degree of accuracy our balance of payments for several years ahead, it would seem reasonable to anticipate that any further substantial increase in foreign dollar availabilities may well induce governmental actions abroad that would reduce the rate of their dollar gains. There are many reasons for anticipating that foreign countries would soon find the acquisition of additional United States goods and services increasingly attractive relative to further accumulations of gold and dollar assets. We may expect, therefore, that they would further liberalize their imports from the dollar area and possibly also resort to a more rapid amortization of outstanding debts to the United States Government. This would result in a gradual shrinkage of the dollar gains of those countries whose reserve position would permit them to take such measures.

In the light of these various factors, it is difficult to visualize a deterioration of faith in the soundness of the dollar sufficient to make foreigners wish to withdraw their dollar balances. The conversion of such assets into gold on a scale that would threaten seriously to cut into our "excess" gold reserves seems unlikely in the calculable future.*

* See on this the letter of Mr. William McC. Martin, Jr., Chairman of the Board of Governors of Federal Reserve System to Senator Joseph C. O'Mahoney in "Monetary Policy: 1955-56," *Hearings,* Joint Economic Committee. 84th Congress, p. 98.

Money Market Implications

Public interest in the growth of foreign dollar assets has centered largely on the alleged threats of these balances to the stability of the dollar and has neglected the less dramatic but much more "real" implications for our money market. For instance, the recent shift in the monetary reserve policies of foreign monetary authorities away from gold and toward dollar assets, notably United States Treasury securities and to a lesser extent time deposits, has substantially changed the impact of foreign account operations on the New York money market. In the late 'forties, when foreign monetary authorities made heavy gold sales to the United States Treasury and then disbursed the proceeds of these gold sales in payment for goods and services in this country, foreign account operations resulted in sharp increases in member bank reserves, initially in New York City and subsequently throughout the country. (These increases, however, were more than offset through the redemption of maturing Treasury obligations held by the Federal Reserve System with funds obtained through tax collections and from security sales, mainly to nonbank investors.) On the other hand, in 1950 and early 1951 and again in the second half of 1952 and early 1953, when foreign official institutions used most of their net dollar acquisitions for gold purchases from the United States Treasury, foreign account operations had at times a noticeable tightening effect on our money market.

Since the termination in 1953 of large-scale foreign gold purchases from the United States Treasury, however, the contractionist effect on member bank reserves of foreign dollar gains has been almost entirely lost. Now that foreign monetary authorities invest their net dollar receipts primarily in Treasury securities, these balances remain in the money market or, if deposited in Federal Reserve Banks, are quickly returned to, the money market.* In case of dollar balance-of-payments developments adverse to certain foreign countries, their monetary authorities ordinarily have been able in recent years to fall back upon their ample dollar resources and thus did not need to sell gold to the United States Treasury. Whenever their dollar resources did run out and they found themselves compelled to sell gold, other foreign monetary authorities have in many cases been willing to acquire this gold,

* Whenever total foreign dollar deposits in the Federal Reserve Banks increase, and remain larger, this effect on the supply of money market funds can be readily taken into account among the other factors which influence the Federal Reserve System's own release of funds to the market or its absorption of funds from the market. In actual practice, however, foreign deposits at the Federal Reserve, on the whole, have shown no sharp and sudden changes.

drawing on their own dollar resources to pay for it.* It is thus clear that both the process of accumulation of dollar assets by foreign monetary authorities in lieu of conversion of their dollar gains into gold and the resulting availability of large dollar surplus reserves (which obviate sales of gold to the United States Treasury in case of dollar losses) have produced a situation where dollar balance-of-payments fluctuations are no longer significantly reflected in the United States gold stock. Consequently such fluctuations, on the whole, no longer affect the reserves of commercial banks; that is, they have lost not only their effect on our credit base, but also whatever impact they may have had in the past on the mechanism of adjustment of the United States balance of payments via their effect on interest rates and the lending policies of the banking system. Exceptions to this general rule occurred in 1956 when the monetary authorities of the United Kingdom, as well as those of Argentina and of several other Latin American countries, were forced to sell substantial amounts of gold to the Treasury Department in order to replenish their dollar balances.

Apart from the changed impact of foreign account operations on member bank reserves, it is also noteworthy that foreign monetary authorities play an important role in those sectors of the United States money market in which they have become relatively large net buyers or sellers, thus affecting the prices and yields of the respective money market assets.

By far the most important single earning asset held and traded by foreign monetary authorities is Treasury bills, although the exact amount cannot be determined since available statistics group foreign holdings of Treasury bills and certificates of indebtedness together under holdings of "United States Government short-term securities." Nevertheless, it is known that foreign operations in the Treasury bill market have assumed very substantial proportions. According to a comment on bill operations of foreign central banks in a recent study of the Federal Reserve Bank of New York, "it is not at all unusual during the course of any week for transactions on foreign account to reach a magnitude of 75 million dollars or 100 million dollars and they some-

* In recent years, foreign monetary authorities generally have preferred to acquire gold on international gold markets rather than from the United States Treasury. Foremost among the markets is the London gold market, reopened in 1954, on which gold has been traded at prices more attractive to buyers and sellers than the effective United States selling and buying prices. By and large, foreign monetary authorities have entered into gold transactions with the United States Treasury only if their purchase or sales requirements are too large to be absorbed by the London market or by other trading facilities for monetary gold.

times run much larger without even taking into account the weekly Treasury bill tender."*

The accumulation of several billions of dollars worth of Treasury bills for foreign account reflected in operations of such proportions has, of course, become an important factor in that market. Yet the growth of the foreign position has been gradual and, on the whole, foreign monetary authorities—despite the scale of their operations—have not exerted a disturbing impact on the market. Occasionally foreign operations have exerted effects on member bank reserve positions that have temporarily run counter to Federal Reserve objectives, but offsetting System purchases or sales of Treasury bills have generally been able to prevent any material deviation from the reserve pressures intended by Federal Reserve policy. At other times, of course, foreign operations have actually reinforced the effects intended by System action.

One consequence of the growing concentration of the world's monetary reserves in the United States Treasury bill market is that it is now subject to influences arising from foreign financial developments beyond the scope of our control, and not related to money market conditions here. This is one of the risks associated with the position of the United States as the world's leading international money market center—a problem which it cannot escape and with which this country must learn to live. Their presence emphasizes the need for our monetary authorities to watch closely foreign operations in our Treasury bill market so as to be able to minimize any disturbing consequences of the inevitable changes in foreign bill holdings as foreign central banks or governments settle balance-of-payments swings among themselves through sale or purchase of Treasury bills.

In the market for bankers' acceptances foreign central and commercial banks play a far more important role than in the Treasury bill market, making the acceptance market highly susceptible to changes in the foreign dollar position. Although there are no published statistics on foreign holdings of dollar acceptances—such holdings being grouped with other miscellaneous short-term dollar assets held by foreigners—it is generally known that foreign central and other foreign banks have long considered bankers' acceptances a most desirable type of investment, partly because of their safety and liquidity and partly because the income earned on acceptances is exempt from the United States withholding tax. There is no evidence that domestic investors other than accepting banks have shown any significant interest in this medium during recent years. For such investors, bankers' acceptances do not

* Robert V. Roosa, *Federal Reserve Operations in the Money and Government Securities Markets,* Federal Reserve Bank of New York, July 1956, p. 91.

have the tax advantage that they have for foreign investors. Had the supply of bankers' acceptances been appreciably larger than it actually was, there is little doubt that foreign holdings would have been even more sizable, given the aggregate volume of foreign dollar funds, the tax-exempt status of acceptances to foreigners, and the traditional attractiveness of acceptances as a medium for the short-term investment of foreign funds. Conversely, should foreign central banks in the future have reason to liquidate their investments in bankers' acceptances, no ready alternative market would be available unless yields were to rise substantially and become comparable with those on other short-term investment media of similar safety and liquidity.

It is evident from the foregoing discussion that the operations of foreign monetary authorities (and other foreigners) can have significant effects on yields and prices of money market assets and on the reserves of the banking system, whenever they change substantially the asset composition of their holdings or switch from dollar assets into gold and vice versa. Sometimes these effects might serve to reinforce Federal Reserve credit policies, but on other occasions they might run counter to them. It follows, then, that the presence in this market of a large volume of foreign dollar assets and the possibility of large and sudden movements of these assets, and of shifts in their composition and their distribution may at times influence materially the magnitude, timing, and direction of Federal Reserve operations. These facts make it desirable that foreign monetary authorities do not engage in operations in our money market that are contrary to, or not consistent with, Federal Reserve objectives.*

VI. CONCLUSION

Seen in historical perspective, the widespread utilization since World War II of dollar assets as an international reserve medium is only another instance in a long series of monetary arrangements under which key currencies have taken the place of, or supplemented, metallic reserves. There is ample reason to believe that the dollar exchange standard will prove to be far superior to the gold exchange standard prevailing in the 'twenties. Today, for all practical purposes, only the dollar qualifies as an international reserve asset comparable to gold among the world's currencies, whereas in the 'twenties, it was only one of several gold currencies (including sterling, the French franc, and the Dutch guilder) in which central banks held their monetary reserves. With only one international reserve center in operation, the post-1945 period has been

* See Roosa, *ibid.*, p. 91.

virtually unmarred by the sizable and capricious shifts of official funds which were such a notable and unfortunate feature of the gold exchange standard as it operated in the decade following World War I. Actually, the operation of the dollar exchange standard is reminiscent of the smoothly working monetary arrangements of the pre-World War I period when many central banks considered gold and sterling as equals and kept all or a large part of their international monetary reserves invested in London.

The pre-eminence attained by the dollar exchange standard since the war has brought with it tangible benefits as well as troublesome problems. It may be argued, however, that the United States' new position as the center of the world's financial system imposes a responsibility not only to provide and improve the facilities here for the holding and investment of international reserves but also to assume the risks involved. As shown in this essay, the various problems posed by the presence in our monetary system of large amounts of foreign assets convertible into gold and by shifts in the form in which these assets are held or changes in their total size have not materialized. There is no reason at the present time to anticipate that they will become acute in the foreseeable future. Our gold stock of over $22 billion is more than adequate to meet any conversion of existing balances likely to occur. The United States, by reason of its enormous productive power, its exceedingly favorable international position, and its broad, highly developed, and well-equipped money market, can well afford to perform the role of holding large amounts of dollar assets for foreign account. At the same time the United States in its new role as an international reserve center has additional reason to keep the dollar strong by proper monetary and fiscal policies inasmuch as the maintenance of international confidence in the dollar's value is the key to minimizing the potential strains associated with the dollar exchange standard and keeping them manageable.

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