ESSAYS IN INTERNATIONAL FINANCE

No. 60, June 1967:

GOLD: BARBAROUS RELIC
OR
USEFUL INSTRUMENT?

MIROSLAV A. KRIZ

INTERNATIONAL FINANCE SECTION
DEPARTMENT OF ECONOMICS
PRINCETON UNIVERSITY
Princeton, New Jersey
This is the sixtieth number in the series ESSAYS IN INTERNATIONAL FINANCE published from time to time by the International Finance Section of the Department of Economics at Princeton. It is the fourth in the series written by the present author, earlier ones having appeared in 1947, 1952, and most recently, "Gold in World Monetary Affairs Today," in 1959.

The author, Miroslav A. Kriz, is Vice President of the First National City Bank, New York. He was formerly a member of the Economic and Financial Department of the League of Nations and, for several years, Chief of the Foreign Research Division of the Federal Reserve Bank of New York. The views expressed in this essay are, of course, his own and do not purport to reflect those of any institution with which he is or has been associated.

The Section sponsors the essays in this series but takes no further responsibility for the opinions expressed in them. The writers are free to develop their topics as they will. Their ideas may or may not be shared by the editorial committee of the Section or the members of the Department.

FRITZ MACHLUP, Director
GOLD: BARBAROUS RELIC
OR USEFUL INSTRUMENT?

The world is at a critical juncture in its monetary affairs. No newly mined gold has of late flowed into the monetary stocks of governments and central banks, the entire output having been absorbed into private uses and holdings. At the same time, the governments and central banks of some of the leading Continental European countries have enlarged their share of the unchanged total of the world’s monetary gold stocks through conversions of U.S. dollars or purchases from the International Monetary Fund against their own currencies. Governments reluctant to purchase gold from the U.S. Treasury have frequently had recourse to a variety of transactions by which they replaced nonguaranteed dollars with claims on the United States in terms of their own currencies or with claims on the Fund that carry a gold-value guarantee.

Against such a background, this essay will describe, in Part I, the explosion of private demand for gold; review, in Part II, the demand for gold by the governments and central banks of most of the large industrial nations abroad; and discuss, in Part III, the future of gold.

Written from the vantage point of a student of international finance who is close to day-to-day business, and yet far enough removed to see trends and developments in perspective, the essay seeks to contribute to practical realism in the discussions of international monetary affairs.

The essay will accordingly argue that, in the world today, gold is neither an eternal standard (as those who advocate the return to the traditional gold standard would make us believe) nor a barbarous relic (as Keynes once called it). Treading halfway between the firing lines, it will disapprove of the politico-psychological guerilla skirmishing in certain French quarters against the international monetary system as it operates today and against the established price of gold. But, by the same token, it will reject such propositions as cutting loose from gold through steps like an embargo on U.S. Treasury sales to foreign governments and central banks—propositions that have of late been advanced on this side of the Atlantic as if everything would be all right if only Europe did not insist on receiving gold rather than dollars in the settlement of its payments surpluses. A unilateral action to change the present gold arrangements and practices is not open to the United States as a practical policy—for reasons the essay will endeavor to set forth convincingly and conclusively.
All things considered, therefore, the essay regards gold as a useful international monetary instrument. In our suspicious and unsettled world, the governments of the key nations hold by far the largest part of their international reserves in gold in preference to other forms of reserves, including dollars. The principal countries of Continental Europe with balance-of-payments surpluses—surpluses that are, directly or indirectly, the counterpart of United States deficits—want to retain gold as the ultimate means of international settlements. They are unwilling to grant to deficit nations, bilaterally or under intergovernmental, intercentral-bank or international arrangements, credits in unspecified amounts for unspecified periods of time. Furthermore, gold can provide, year in year out, an appreciable increment to international monetary reserves—so long at least as conditions are not developing, as they are today, under which a rise in the price of gold would appear inevitable. Also, gold can help assure the smooth and efficient functioning of the international monetary system.

So far ahead as can be seen, therefore, gold will remain the inner circle of our monetary universe—a circle which may, with the passage of time, become relatively smaller. For this to happen, however, it will be necessary to enhance respect for the dollar as the form of international reserves second only to gold, as well as respect for such new international monetary instruments as may be created as a supplement to or, perhaps, a substitute for gold. This problem, if it is ever to be mastered, will have to be resolved by protecting real values of the principal national currencies.

The essay will end with the pragmatic conclusion that the twin problems of international liquidity and balance-of-payments adjustment will be with us forever; as some of these problems are dealt with, others arise. Today, the real threat to world prosperity and trade comes from the shortage of monetary gold—the consequence of private gold absorption and official propensity to convert dollars into gold, which are themselves the inevitable accompaniment of uncertainties about the dollar and, hence, uncertainties about the continued maintenance of the present gold arrangements and practices. Their breakdown would, almost certainly, bring about more inflation and submerge nations in more economic and financial controls. And it would, quite certainly, damage—perhaps beyond repair for years to come—the substantial degree of convertibility, at fixed exchange rates, among the leading currencies and the reasonably free, multilateral, and nondiscriminatory world trade that the nations have achieved through imaginative and determined efforts over the past twenty years. This is the real contingency against which it is urgent for governments to plan today.
I. THE EXPLOSION OF PRIVATE DEMAND

The entire world gold output is currently being absorbed into private hands—roughly one third for the fabrication of jewelry and gold articles of all sorts and two thirds for additions to private holdings, whether for investment or speculative hedging against a possible gold-price rise. For 1966, private gold absorption may be estimated at $1.5 billion, roughly the same as in 1965. These are the highest amounts ever attained—$0.5 billion more than in 1964. For the past ten years, about $10 billion worth of gold has gone into private uses and holdings.

As a result, governments and central banks are not only being deprived of additions to monetary gold reserves from current output and Russian sales but they have also, in the aggregate, lost gold out of accumulated stocks—though only marginally thus far. During 1966, official gold stocks, as published, fell by $90 million—the first such decline in modern monetary history. Last year’s decline compares with a gain of $250 million in 1965—the smallest such addition since 1952.

Attenuating Circumstances

There are attenuating circumstances for this state of affairs. Among these is, first of all, the fact that in 1966, for the fourth consecutive year, world gold output rose less than in the preceding year. (See Appendix, Table 1.) The flattening in the rate of growth reflects production trends in South Africa, whose output represents about three fourths of the world total (excluding the Soviet Union, other Eastern European countries, and Mainland China). At only 1 per cent over 1965, last year’s rise in South African output compared with 5 per cent, 6 per cent, and 8 per cent during 1965, 1964, and 1963, respectively.

The flattening out in the hitherto dramatic increase in South African output is due to a slowdown in the rate of production of the new mining areas in the Orange Free State, which had begun operations in the early 1950’s. The rise has been the outcome of such factors as the richness of deposits, a geological formation that allows low-cost extraction methods, and efficiency of operation. At the same time, production in “older” mines has declined continuously, in large part because the scope of profitable operations is limited by production costs. For South Africa as a whole, the pace of output, at the present price of gold, is believed to be slowing down even more and production may peak out by 1970.

Despite the slowdown in South African output, world gold production outside Russia amounted to $1.4 billion in 1966—the highest level ever recorded. It stood at 70 per cent over 1953, before the postwar rise in production began, and 14 per cent over 1940, when output reached its previous peak following the worldwide currency devaluations in the 1930’s.
Last year's increase in output, however, was not large enough to make good the absence of gold sales by the Soviet Union—for the first time in the past decade. Russia's improved harvest made it unnecessary to sell gold to finance purchases of Canadian wheat. Perhaps, Soviet bankers are unwilling to sell gold under present circumstances. As sketched in the Appendix, Russian gold sales from 1956 through 1962 averaged close to $250 million a year; in 1963-65 they averaged above $500 million a year; and for the period 1953-65 as a whole they totaled close to $3.5 billion. As a result, total new supplies of gold, which in 1965 had reached $2 billion—the highest figure on record—amounted in 1966 to only three fourths of the 1965 supplies, or $1.5 billion.

A third attenuating circumstance for last year's gold performance was the fact that South Africa, which sells gold to the extent necessary to bridge gaps in its balance of payments, had a payments surplus. Shipments of gold from South Africa to the United Kingdom declined from $1,210 million in 1965 to $834 million in 1966. Later in the year, as South Africa substantially relaxed restrictions on merchandise imports and reportedly stockpiled vital materials such as oil, it again sold gold, not only out of current output but also, to a limited extent, out of reserves.

The Extraordinary Rise in Industrial Demand

Statistical estimates are available of the uses of gold during recent years: additions to official stocks, industrial uses in the United States and other leading countries, and additions to private stocks. (See Appendix, Table 2.) Additions to private stocks are a no-man's land, to be explored later in this essay.

The demand for industrial and artistic uses has risen markedly. For the United States in 1965 (the latest year for which data are available), such uses amounted to $185 million (net); only a few years ago they had averaged about $100 million a year. Gold uses in industry and the arts represent approximately three times domestic gold production. The deficit is covered by imports and from the Treasury stock; during 1966 the Treasury released $141 million, compared with $118 million for 1965. In eleven other countries, gold consumption has also shown a sharply rising trend—reaching some $300 million in 1966. (See Table 1.) In a few of these countries, industrial uses of gold are believed to be under-reported by, perhaps, over 10 per cent.

Roughly three fourths of industrial uses in the twelve countries included in the statistics are for jewelry and gold objects of all sorts. Increases in employment and incomes to all-time highs obviously stimulate the buying of gold articles—articles that have become relatively cheap, given the persistent rise in the cost of living. A development
worth noting here is the stoppage, in April 1966, of the manufacture and sale of medals, medallions, tablets, etc., in the United Kingdom on the ground that these practices tended to avoid exchange-control provisions prohibiting the hoarding of gold; in February 1967, the use of gold was permitted for the manufacture in the United Kingdom of charms, tablets, and other trinkets provided they were not worth more than £2 apiece.

*The Rapid Build-up of Private Holdings*

Something like $1 billion went last year into what, for lack of a better label, is described in Appendix II as "Added to Private Stocks, etc." Some of this gold may have gone into unpublished reserves of governments and central banks. In 1966, for the second successive year, Mainland China and certain Eastern European countries were reported as official buyers in the London market.

The great bulk of "disappeared" gold, however, undoubtedly consists of additions to private gold holdings. Some of this goes into the customary mode of savings in the Far East, the Middle East, and parts of Africa. The war in Vietnam, the plight of India, and political unrest in many countries in these parts of the world have increased the traditional demand for gold. Some of the "disappeared" gold goes for investment in gold to secure protection against the continuing depreciation of national currencies and against political upheavals, as in much of Europe and Latin America. Some is to hide funds in order to avoid inheritance taxes. Some reflects short-term speculation on, or hedging against, a possible world-wide rise in the gold price—activities nourished by debates, not always well informed, about weaknesses of the international monetary system and the lack of liquidity.

Given the tightness and the high cost of credit throughout much of the world, the persistence and the volume of gold buying are extraordinary. In the judgment of the Bank for International Settlements, "the indications are that most of this component of private gold offtake over the years is accounted for by fairly firmly held savings in gold, rather than by large blocks of speculative holdings awaiting a shorter-term capital gain."

Despite the strong and persistent private demand, the price in the London gold market has at no time during recent years exceeded $35.20 per fine ounce. This is not much in comparison with the $40 level momentarily reached in October 1960. To keep the price on an even keel, gold sales from British reserves were initiated in 1960 under a broad understanding that the Bank of England could recover from the United States gold it had sold in the London market. In 1962 this "gold bridge" was supplemented by a wider informal agreement among leading
central banks to refrain from buying gold in London whenever the supply is short and to participate with the United States in channeling gold to the market. The “gold pool” has thus maintained control over the market—at some cost to official reserves whenever gold offerings from “normal” sources fall short of demand, as they did in 1966.

The strength of demand has brought prices of coins to sizable premiums over bar gold. In Paris the popular Napoleon (the 20-French franc gold piece) has of late reached the highest level in a decade and a half, commanding a premium of over 50 per cent. In the Federal Republic of Germany, the 20-mark gold coin stands at a premium of about 90 per cent.

Prohibiting Private Ownership of Gold?

Private demand for gold in recent years has almost certainly been smaller that it would have been if citizens of a number of countries had not been barred from the market. As is well known, citizens of the United States are not allowed to hold gold in monetary form except for coins of recognized numismatic value minted before April 5, 1933. The United Kingdom, South Africa, and certain other countries also forbid their citizens to hold or trade in gold; only residents of nonsterling-area countries may buy gold in the London market.

Suggestions have repeatedly been made to prohibit private ownership of gold on the ground that leakages of gold into private holdings are undesirable. It has also been urged that the London gold market be abolished, because it serves no useful function in the monetary system and complicates the task of central banks. It has also been proposed that the price of gold should be raised gradually in such a way as to eliminate uncertainty and knock the bottom out of gold speculation. Another proposal aims at gradual and periodic preannounced reductions in the official price of gold. Yet another suggestion is for central banks to stop buying gold from private holders at the full official price—after a stated deadline—while continuing to buy newly mined gold or gold offered by other central banks at the official price.

There are many doubts about suggestions like these. In earlier postwar years, attempts were made by the International Monetary Fund to protect official stocks by asking member nations to refrain from selling gold in free markets, but this proved unenforceable. Private gold trading persisted. France and some other member nations found it necessary to legalize and deal in free markets to stabilize the price of gold and thus help ensure confidence in paper money. In much of the world private ownership of gold is deeply rooted in monetary ideas, attitudes, and experiences which—especially against the background of runaway infla-
tion, twice in one generation, in several European countries—cannot be dismissed as mere anachronisms.

To close the legitimate free markets would be to attack the symptoms rather than the cause of private demand for gold and to drive gold trading from efficient open markets into shadowy markets underground. Such a move would almost certainly be regarded as a recognition of the failure of efforts to hold down the price of gold and would give added fuel to speculation that the official gold price would be raised.

II. THE GROWING PREFERENCE FOR GOLD BY GOVERNMENTS

The explosion of private demand has left virtually no gold for governments and central banks to add to monetary reserves. As noted above, the record in 1965 was already bad; in 1966 it was disastrous. This experience can best be understood if it is placed in broader perspective. (See Appendix, Table 2.) Among other years during the past decade, the worst years, in absolute terms, were 1960 and 1962, when only somewhat over $300 million was added to official reserves; the best years were 1959, 1963, and 1964, when $750 million or more moved into official stocks. For the ten years ending in 1964, before the explosion of private demand in much of the world, the annual average was approximately $600 million.

A Bird's Eye View of International Gold Movements

All additions to monetary gold stocks from new output and Russian sales since World War II have—on a net basis—accrued to governments and central banks outside the United States. For most of the period, the United States has, of course, had a balance-of-payments deficit with the rest of the world. As a result, many industrial countries, having rebuilt official dollar reserves to levels they regard as desirable, have used some of the dollars to purchase gold from the U.S. Treasury or in London.

International gold flows have also been importantly affected by transactions of member governments with the International Monetary Fund. Over the past two years, the Fund itself has received sizable amounts of gold following payments by member governments as part of their increased subscriptions and has thus, in effect, absorbed some of the gold that has flowed into official reserves outside the United States. On the other hand, the Fund has sold gold to a number of countries outside the United States to replenish the holdings of national currencies it had needed to extend aid to the United Kingdom in dealing with the sterling crisis. (A bird's eye view of these and other changes in world monetary gold stocks over the past three years is presented in the Appendix, Table 3).

Gold acquired from the United States and the International Monetary
Fund has principally gone into the stocks of Continental European governments and central banks. The redistribution of gold between the United States and Europe is as striking as that of the late 1930's and the 1940's, when an avalanche of gold descended from Europe on the United States. The U.S. share in the world total today is—at about one third—roughly the same as in the early 1930's; it reached a level in excess of two thirds in the late 1940's. Even now, after the substantial transfers of gold to other countries, the gold reserve of the United States—at $13.2 billion as of the end of April 1967—is far larger than that of any other country; but, as will be argued in Part III, the United States needs a comfortably large gold stock.

Among the Continental European nations themselves, much gold has gone into the stocks of France. As is well known, France—following an announcement in early 1965 that its external surplus would henceforth be taken in gold—was the largest buyer of gold from the U.S. Treasury until the closing months of 1966, when its balance of payments went moderately into deficit. It is less well realized that France has, in fact, merely reacquired the gold it had sold to settle its payments deficits between the mid-1930's and the late 1950's. At today's $5.2 billion, France's reserve is, as a matter of fact, $200 million below the all-time peak in early 1935, when it represented as much as one fourth of the world total; the proportion now amounts to about one eighth.

The second largest gold gainer during 1964-66 was the Federal Republic of Germany—not so much through purchases from the United States as through acquisitions from the International Monetary Fund against German marks. As Otmar Emminger, Member of the Directorate of the German Federal Bank, noted, while Germany has welcomed these gold accruals to its reserves “as they have brought the proportion of gold to total reserves more nearly to the intended magnitude, we have carefully avoided large-scale conversions at the expense of the U.S. Treasury, in order not to ‘upset the apple cart’ at an untoward moment.” In March 1967, Germany agreed to regard dollars acquired through local expenditures by American troops as being, in effect, inconvertible into gold; this quid pro quo was, obviously, motivated by political considerations.

Italy disposed of gold in 1964 when its balance of payments was under severe strain, only to rebuild its stock in 1965 and 1966. On the whole, Italy's gold stock has thus shown practically no change over the past two years, as its large balance-of-payments surplus has been financed through offsetting operations, including a $250 million loan to the International Monetary Fund. In appraising recent international gold movements, it is of some interest to point out that Germany and Italy—two countries that had very little gold before World War II—are today among the world's largest gold holders. (See Table 3.)
Among other countries that added to their reserves during 1965 and 1966 are (in the order of magnitude of such additions) Canada, Spain, Austria, Belgium, Portugal, and the Netherlands. Canada enlarged its gold stock out of its own output—despite periodic sales to the United States; for other countries the main source of gold was the U.S. Treasury.

The United Kingdom is, as circumstances warrant, a large buyer of gold or a large seller out of official stocks. During much of the past three years, pressures on sterling in exchange markets necessitated sizable sales of gold to the United States. More recently, as sterling has strengthened, the United Kingdom has acquired substantial amounts of dollars; the bulk of these has been used to repay debts, not to show a rise in gross monetary reserves. The United Kingdom normally adds to its reserves from gold sold by producers in the London market.

The propensity of governments and central banks to hold gold has increased despite the fact that little gold was added to monetary reserves in 1965 and none in 1966. Several countries have during recent years increased the proportion of their monetary reserves held in gold. (See Table 4.)

During 1966 further increases in gold ratios occurred in France, Greece, Italy, Spain, and Canada. France's gold stock rose by some $500 million, while its foreign-exchange holdings declined by $250 million. On the other hand, in 1966 the gold ratios declined in the United Kingdom, Germany, and Switzerland. Each of these three countries had a small gold loss accompanied by gains in foreign-exchange holdings, which in the United Kingdom reflected borrowings in the wake of the sterling crisis, and in the cases of Germany and Switzerland a larger inflow of year-end “window-dressing” funds than in earlier years. For the United Kingdom, the ratio was until a few years ago in excess of 90 per cent, in line with Britain’s traditional stand that a country serving as an international financial center should hold most of its reserves in gold; of late it has been lower as reserves have been enlarged through borrowings of foreign exchange.

Conversely, holdings of foreign exchange—for all practical purposes, U.S. dollars—in official monetary reserves of Continental European countries have declined substantially. While the governments and central banks of Continental Europe from 1958 through 1964 added $4 billion to their foreign-exchange reserves, they reduced them by $1.6 billion during 1965 and 1966; about half of this reduction was accounted for by France. This reduction, contrasting sharply with the build-up of dollar reserves prior to 1965, marks the end of an era.

Given the existence of ample official reserves in U.S. dollars, gold—once acquired—is often kept at the bottom of the reserve pile, payments deficits being financed by drawings on dollar reserves. Thus, Germany
ran into a considerable payments deficit in late 1965 and part of 1966. But the authorities met the deficit by drawing on dollar reserves, which were large enough not to necessitate replenishment by gold sales. Italy, as already noted, disposed of gold in 1964, only to rebuild its stock in 1965 and 1966. France in late 1966 drew on its dollar reserves to meet a payments deficit. These examples point toward the conclusion that gold is not used so long as the country has sufficient dollar reserves. This results in a tendency for gold to leave the United States and not come back.

Summing up, gold has remained by far the most important single component of world monetary reserves, accounting at present for some $41 billion out of total official gold and foreign-exchange reserves of $64 billion. About half of the principal countries are thus virtually on a gold basis. In the United States, official holdings of convertible foreign currencies are quite small in comparison with the gold stock. Other nations hold—proportionately, and sometimes absolutely—more foreign exchange than the United States but gold predominates, especially among the major nations of Western Europe.

**The Preference for Gold**

The preference for gold is not a matter of legislation. For decades, gold stocks have not been determining factors in money supplies. Today, there are only three countries outside the United States where statutory gold requirements remain in force: Belgium, South Africa, and Switzerland. Elsewhere, the requirements were repealed or suspended at the outbreak of World War II; and a number of central banks established since the War, including the German Federal Bank, have no such requirement.

In the United States, when by early 1965 losses of gold had reduced the leeway of the Federal Reserve to accommodate money and credit needs of the growing economy, the President's proposal for liberalizing gold legislation was approved by Congress in a matter of weeks. Under this legislation, deposit liabilities of the Federal Reserve Banks were freed from the 25 per cent gold-cover requirement but the requirement was retained with regard to Federal Reserve notes. Today about $10 billion of gold must be held as backing for Federal Reserve notes. There remains, therefore, only something like $3 billion to protect the position of the dollar internationally. At the rate of Federal Reserve note expansion in recent years, the 25 per cent limit would be reached in a few years even if there were no further gold outflows; with further gold losses, reconsideration of the gold-reserve requirement will come sooner. Its elimination will be a matter of practical necessity.

The preference for gold basically reflects the deeply anchored views
of those responsible for a nation’s monetary reserves that there are times and circumstances where no other money will do, especially because gold alone is universally acceptable and anonymous. These views rest, in part, on the thought that gold is beyond the control of any one nation—especially as redistributed today, with the United States holding only one third of the world’s monetary gold stock. They also reflect the desire to protect reserves against the hazards of depreciation. Heavy losses suffered by central banks at the time of the sterling devaluation in September 1931 have not been forgotten. It is not a coincidence that Europe’s build-up of gold stocks dates from 1958, the first year when the deficit in the American balance of payments ceased to be regarded as desirable and a year, it ought to be recalled, of very cheap money.

In a number of countries, especially on the Continent of Europe, the attachment of governments and central banks to gold is also motivated by the desire to display respectably large gold stocks to people who, having lived through the inflation of the past half century, keep an eye on the state of the nation’s monetary reserves as a vital indicator of the soundness of its domestic finances.

According to the views of the French government, settlement of external deficits in gold is the best means of alerting government and public opinion in the deficit country to the need for putting its external accounts into better order. Judging from the fact that gold losses have done more than anything else to make the United States aware of the payments deficit, there is some truth in this thought. Balances of payments, of course, never stand still, with changes often coming unexpectedly. Sooner or later, therefore, France will undoubtedly have to live up to its commitment to settle its deficits in gold once it has used up available international credit. Some people can hardly hide their malicious joy at the prospect of France’s getting caught in its own game; they seem to forget that swings of this sort are an unavoidable companion of the process of adjustment in a world in which nations are unwilling to grant each other unlimited credit for indefinite periods.

Whatever the rationale behind the preference for gold, there is no obligation on any government or central bank to hold the nation’s monetary reserves in any particular form. As Julien-Pierre Koszul, summing up his many years of central-banking experience, pointed out recently, “up to now there has never been a time when central banks agreed to relinquish their fundamental right of deciding whether, when, in which currencies and for what amounts they were prepared to hold foreign exchange beside gold in their reserves. Freedom indeed is intimately associated with the development first of the pound, then of the U.S. dollar, as reserve currencies.” The gold-exchange standard thus just developed spontaneously in response to the circumstances of particular
countries at any given time. Holding pounds or dollars in reserves was a matter of free choice. Indeed, "what made for the strength and the soundness of the accession of the pound and of the dollar to the status of reserve currencies was the fact that this development was at its inception exempt from any element of compulsion."

III. THE FUTURE OF GOLD

Against the background of the shortage of monetary gold, let us endeavor to cast light on the probable future. First, we shall review the two extremes of the spectrum—returning to the traditional gold standard or reducing or even abolishing the central role of gold in the international monetary system. We shall then explore the middle bands of the spectrum as they have been broadly circumscribed by the statements of the Finance Ministers of the Ten: While making sure that, if need be, more man-made reserves will be created, the governments will retain gold as the "ultimate" or the "basic" international reserve asset.

1. Restoring the Traditional Gold Standard?

There is no need to restate the criticisms of the present monetary system made by Jacques Rueff, Philip Cortney, Michael Heilperin, or William Busschau. These criticisms have elements of truth in them. The leading nations have over the past twenty years allowed the purchasing power of currencies to be whittled away excessively and unnecessarily. "Monetary management" (and this includes fiscal policy) has not always shown itself to be as courageous and as skillful as would be necessary to deal with inflationary pressures and balance-of-payments crises.

Internationally, the monetary system is regarded by its critics as having overused the capability of the world to absorb dollars supplied through payments deficits of the United States. This, it must be conceded, was true until about two years ago. By now, however, a saturation point has been reached. Thus, in 1965 and 1966, practically the whole American deficit was officially settled through sales of gold or drawings on the International Monetary Fund—financing not different in substance from the ways in which any other country covers its deficit. The school of thought in France that challenges the present international monetary system as unfair on the ground that it gives the United States the option of running permanent deficits has, strangely enough, failed to recognize this striking change. It has also overlooked the fact that, throughout the postwar years, there has been practically no increase in holdings of sterling by foreign governments and central banks—holdings that, in any event, are virtually confined to the nations belonging to the sterling area.
Unwillingness to Give Up “Monetary Management”

Despite elements of truth in the criticisms of the gold-exchange standard, it is quite unlikely that in the world as it is today—with its pervasive urge for “growthmanship”—governments and central banks will want to return to the traditional gold standard and thus give up “monetary management,” domestically as well as internationally. There is, apart from certain quarters in France, little readiness to embark upon this path.

An abandonment of the gold-exchange standard is also unlikely for other reasons. Central banks can, by earning income on dollar assets, find it easier to maintain greater independence from their respective governments than if they depended on their governments for income—a most relevant point made by Milton Gilbert, of the Bank for International Settlements, who ought to know. From the practical operational angle, experience shows that holding dollar assets makes it easier for governments and central banks to borrow from American banks while, as a rule, simultaneously drawing on the International Monetary Fund; there are many examples of stabilization credits obtained from American commercial banks, including those to France at the time of the monetary reform of 1958.

From a still wider viewpoint, the gold-exchange standard economizes on gold. During the 1950’s, it made possible the rebuilding of Europe’s monetary reserves through an enormous transfer of dollars from the United States, which in turn helped Europe achieve higher levels of investment and higher standards of living. Additions to dollar reserves were made at the initiative of European governments and central banks in the interest of their own nations—not as a means for the United States to finance its payments deficits. Later, sizable amounts of gold were also added to European reserves, partly from new supplies but largely from the United States. This redistribution of reserves was universally hailed as a good thing, in that it measured the success of Europe in stabilizing its currencies and increasing its industrial power. This was a long-sought objective of postwar international and financial policies of the United States, beginning with the Marshall Plan in 1948.

There is nothing wrong with the gold-exchange standard so long as it is exempt from any element of compulsion with regard to holding reserves in a currency—dollars, sterling, or French francs—in preference to gold. To eliminate reserve currencies in the international monetary system would be a step backward.

Finally, and I think decisively, it is not at all certain that a gold standard restored in some formal sense would differ very much from what we have today. Domestic gold convertibility is gone. But, if a
country restrains credit and lets interest rates rise in order to help correct a balance-of-payments deficit—as Canada, France, Germany, Italy, and the United Kingdom have done at various times during the past decade, though of course under different circumstances—is this not the gold standard in actual practice?

The Differences between Then and Now

As a matter of fact, in all these cases, the adjustment process worked rather well. Surely, the political brakes on the adjustment process often lead to half-measures and delays while reserves are drawn down and funds borrowed abroad. But since international liquidity is—of necessity—exhaustible, policies long regarded as politically impossible in the countries concerned become acceptable at long last and do work. The experience of the United Kingdom over the past two and a half years is particularly illuminating.

The idea that gold takes the control of a nation’s economic and financial affairs out of its own hands dates, of course, back to the 1930’s. It was formulated during a prolonged depression and deflation—circumstances entirely different from those prevailing today; besides, it was worked out with reference principally to the United Kingdom and the United States, countries for which balance-of-payments “complications” could, at the time, be discarded. Little attention was paid to countries that could not neglect their international reserve position; nor was the theory worked out for the United Kingdom or the United States on the assumption that these countries would find themselves with inadequate reserves.

To be sure, the state of a country’s gold (and foreign-exchange) reserve is only one criterion for domestic monetary and fiscal policies and the importance of this guidepost varies from time to time; but, in the longer run, no country can frame its economic and financial plans and policies without regard to the external influences to which it is subject or to the external repercussions of its own domestic economic and financial conditions and policies. It cannot with impunity allow its overall demand for goods and services, as well as its costs, to get out of line with those of other nations. For, in a world in which the currencies of the principal countries are convertible, such a country is exposed to pressures from other nations to improve productivity, lower costs, and maintain attractive prices and interest rates in proper relationship to those in other major markets.

The main substantive difference between the traditional gold standard and what we have today is that a certain leeway has been built into the world monetary system through an enlarged network of international credit. Under the old gold standard, the limit to balance-of-payments
deficits that a country could run on current account was determined by the size of its disposable gold and foreign-exchange reserves plus the amount that it (or rather its nationals) might borrow abroad. Today, the function of financing a deficit is performed not only by gold and foreign exchange, and by borrowings in world financial markets, but also by drawings—subject to definite limits, rules, and safeguards—on inter-central-bank, intergovernmental or International Monetary Fund credits.

Furthermore, the Fund, while standing for stability in exchange rates, also makes possible orderly changes in exchange rates. The Fund aims to provide a pattern of exchange rates sufficiently rigid to enable traders and investors to count on reasonable exchange stability, and yet supple enough to permit such orderly adjustments of exchange rates as might be required to deal with a fundamental balance-of-payments disequilibrium.

A Frequently Overlooked Advantage of the Present Monetary System

The experience of the United States is, in this regard, conclusive. For many years, the United States was able to run balance-of-payments deficits without tears, because other nations were willing to add dollars to their monetary reserves. Today, however, this is history. As already noted, the turning point was reached two years ago, but, strangely enough, passed largely unnoticed.

To limit gold losses, the United States has been able to resort to devices like debt prepayments by the Governments of France, Germany, and Italy, sales of nonmarketable bonds to foreign governments and central banks, and arrangements with the Federal Republic of Germany so that the net receipts of dollars accruing from American expenditures on troops would not fully affect the balance-of-payments or gold position of the United States. But these and other devices have, with the passage of time, become less and less productive. Swap credit arrangements among central banks to finance balance-of-payments swings have also helped; these temporary credits are, however, subject to inherent limits.

As large deficits have persisted, the United States has increasingly had to make settlements in gold and drawings on the International Monetary Fund—drawings that by now have almost exhausted the tranche accessible automatically. Conditional access to the Fund means "multilateral surveillance"—an exercise that is not something to look forward to. The international monetary system, as it operates today, thus exerts pressures on the United States as the world's banker to keep its currency sound.

Few advocates of the gold standard favor unqualified automaticity.
To attempt to impose such a system would be more likely to prompt nations to explore payments arrangements to reduce the role of gold than to accept its present status.

2. Reducing or Abolishing the Central Role of Gold?

Like the advocacy of a return to the gold standard, the proposition that gold is a thing of the past dates back to the 1930's. But it is only in the past few years—marked as they have been by the persistence of the seemingly intractable gold losses by the United States—that the thought of reducing or even abolishing the central role of gold in the international monetary system has been elaborated in fuller detail. Many propositions that have been advanced are conveniently assembled in statements by the majority—and critically reviewed by those of the minority—of seventeen private economists in a recent compendium of views published under the title Contingency Planning for U.S. International Monetary Policy by the Subcommittee on International Exchange and Payments of the Joint Economic Committee.

The starting point of advocates of changes in gold policies of the United States is that present international financial difficulties are due to the inflated world demand for gold, private as well as governmental, and to apprehensions that, one of these days, there may be a run on the dollar by some foreign governments or central banks. To present "the worst possible case," a prominent student of international financial affairs visualizes "the foreign monetary authorities, like the biblical Gadarene swine rushing toward the abyss," demanding the $13 billion worth of gold that remains in this country's coffers. To deal with an eventuality of this sort, it is concluded, the United States should bring about, if necessary by unilateral action, changes in present world gold arrangements, practices, and techniques even if these changes should lead, sooner or later, to the demonetization of gold.

The list of ideas for dealing with the gold problem of the United States as the monetary innovators see it, is long: the continuation of U.S. Treasury gold sales right down to the last ounce; the very opposite of this idea—an embargo on gold sales; cessation or limitation of gold purchases; pre-announced periodic small reductions in the buying or selling price of gold; a wider margin between the buying and selling prices of gold; and the establishment of a dollar bloc.

The common denominator of all these propositions is their technical nature. This is, at the same time, their fundamental weakness, for substantive issues of international trade, investment, and payments cannot be dealt with by mere changes in institutional arrangements, practices, and techniques.
Selling Gold Down to the Last Bar?

The first of these proposals is that the United States should, on every appropriate occasion, reaffirm its determination to continue to sell gold at $35 per fine ounce—"unreservedly" right down to the last bar (Alvin H. Hansen). Even more specifically: One of the traditional arguments for a nation to hold a gold stock is that it constitutes a "war chest" for use in times of national emergency; "surely, if there ever was a time for using reserves to cover a deficit remaining after sensible corrective policies have been used to their limit, it is now" (Richard N. Cooper).

Even with all its productive power to give real value to money, however, the United States, as an international banker, cannot dispense with gold altogether. For foreign governments and central banks holding large dollar deposits and other short-term assets in the United States—while aware of the intrinsic strength of our economy—nevertheless expect us to maintain a suitable gold stock to provide what, in their eyes, is an assurance that the dollar will remain at all times a reliable and freely usable currency. Surely, this country's gold stock need not be so large as to cover all our liabilities to foreign governments and central banks—not to mention those to foreign private bankers, merchants, and investors. But the United States alone cannot cut loose from gold, and there is no prospect that, in the world around us, gold might be demonetized by international agreement.

Embargoing Gold Sales?

The opposite approach is for the U.S. Treasury to sell gold only at its discretion or to stop selling it altogether. The U.S. Treasury has, of course, no legal commitment to sell (or buy) gold; the present practice of selling gold virtually automatically to foreign governments and central banks, which dates back to 1934, could therefore be changed without notice.¹

¹ As to the official price of gold of $35 per troy ounce, it was established by Presidential Proclamation on January 31, 1934, under the authority conferred on the President by the Gold Reserve Act of 1934. The Proclamation reduced the gold content of the dollar to 59.06 per cent of its former parity; the President's power to devalue the dollar further (to 50 per cent of its former parity) expired in 1943. Only an Act of Congress can now alter the gold content of the dollar.

A distinction is sometimes made between the gold content of the dollar, which can be changed only by an Act of Congress, and the market price for gold, which could be changed under Sections 8 and 9 of the Gold Reserve Act authorizing the Secretary of the Treasury to buy and sell gold, at home and abroad, "at such rates and upon such terms and conditions as he may deem most advantageous to the public interest," that is, at rates other than $35 per ounce. This authority has, of course, been circumscribed by the obligations assumed by the United States as a member of the International Monetary Fund. It is stipulated in the Bretton Woods Agreements Act of July 31, 1945 that any change in the par value of the United States dollar shall require legislative action by Congress.
Those who advocate a gold embargo are in no way alarmed about the implications of such an action—a breach of the IMF Articles of Agreement—for the world exchange-rate structure. As they see the shape of things to come, the United States would, in such a contingency, be so strong as to virtually compel other large industrial countries to buy and hold dollars even if these were not convertible into gold. For, so runs the argument, these nations would have to prevent an appreciation of their currencies in terms of the dollar and thus protect themselves from being undersold, in their own or third markets, by so productive and competitive a country as the United States, which already has a large export surplus.

There is, however, a rub. Other large industrial nations could not be expected to remain passive. Given all the circumstances, they would certainly react—in self-defense, as they would stress, not unnaturally. Among the weapons in their arsenal are, conceivably, such moves as the imposition of countervailing duties on American exports or the refusal by governments and central banks to buy all dollars for which there is no spontaneous demand in the market and thus to support the official exchange rates. In this context, a historical episode may be worth recalling. During World War II and up through late 1949, the Swiss National Bank reduced inflows of unwanted dollars by buying, at the official rate, only such dollars as were generated by the country’s exports—thus stabilizing the one exchange rate that mattered most to it; dollars accruing from other sources, above all, capital imports—the so-called “financial” dollars—were allowed to find their own level in a free exchange market where the dollar stood at an appreciable discount.

To differentiate commercial from “financial” dollars would, of course, require exchange controls. Over the past decade, Continental European nations have liberalized and simplified exchange restrictions; but, except in a very few countries, the framework for exchange controls remains. The reestablishment of exchange controls would, of course, be a relapse into restrictionism, the negation of the basically convertible multilateral and nondiscriminatory patterns of world trade and investment. This would in turn be an open invitation to currency and trade warfare—a return to the beggar-my-neighbor practices of the 1930’s that hurt the national interest and world commerce of the United States so much that this country, to find a way out of inconvertibility and bilateralism, led the march to Bretton Woods.

Other Propositions

Next in the cupboard of gold innovations is the thought that the United States ought to stop buying gold freely at the $35 price while continuing to sell it, without limit, at that price. This idea is old, but it
has recently been worked out in considerable detail by Emile Despres. The thought is, basically, to limit the amounts of gold that governments would stand ready to buy when necessary for balance-of-payments reasons. This would, of course, destroy part of usable international reserves; but to compensate for this reduction, governments would simultaneously negotiate reciprocal credit facilities permitting drawings with no specified maturity, covered by exchange guarantees. Countries would be divided into several groupings. Thus, the United States would stand ready to buy all gold now held by the United Kingdom, but only one third of the present official holdings of Continental European countries and South Africa. For the future, all newly mined gold, all gold sold by the Soviet Union, and all gold returned from private hoards would be ineligible for sales to the United States.

The proposition to partly demonetize gold is visibly directed against Continental Europe and, if only for this reason, it is not negotiable among the governments. More fundamentally, it would divide the reserves of the world into a number of separate compartments and impart a strong bilateral bias to international trade and payments.

Yet another thought is that the United States should continue to sell gold at the present price but buy it at a lower price. This is, of course, a hollow threat so long as the United States has to sell gold because of its persistent balance-of-payments deficit. If the United States reached a payments surplus and were to refuse gold at the present fixed price from nations in deficit, it would tend to appreciate the dollar against other currencies once foreign governments and central banks had exhausted their dollar reserves and available dollar credits. An appreciation of the dollar would make it more difficult for the United States to sell its exports and would attract imports in excessive amounts—factors tending toward the reestablishment of equilibrium that are more acceptable in economic theorizing than in practical politics. It would also trigger uncertainties and disruptions in exchange markets and, hence, in international trade and investment.

Yet another idea is that the U.S. Government should seek agreements with other governments to hold dollars rather than to demand gold, with a quid pro quo of assured access for them to the money and capital markets in the United States. The interest-equalization tax, which increases the costs of borrowing for nonexempt countries, might thus be repealed for nations that cooperate in holding dollars; an arrangement of this sort already exists for Canada and, in a much more limited form, for Japan. This dollar-bloc idea is, of course, a replica of the sterling-area concept at its worst.

Proposals for restricting the free convertibility of gold into dollars or the free convertibility of dollars into gold would lead to a demonetiza-
tion of gold—partial (Despres) or complete. To begin with, the U.S. Government is urged to start laying the psychological groundwork for the "removal of gold as the monarch of international finance" and for the creation of "an adequate and potentially elastic substitute for gold in international reserves." The United States should seek an international agreement of this sort "cooperatively, even if some other countries do not choose to undertake commitments toward the new asset at this time" (Richard N. Cooper).

The Real Problem

Concern over gold today can best be seen within the context of the American balance of payments and, indeed, of the United States economy as a whole. Addressing European and American bankers on March 17, 1967, Secretary of the Treasury Henry H. Fowler found it necessary to emphasize that the way in which the United States handles its balance-of-payments problem "depends in large measure on the cooperation it receives from other countries in the process. . . ." This cooperation is not a matter of helping the United States deal with its problem but "a matter of enabling the United States to deal with its problem without undermining the international monetary system, subjecting that system, by unilateral action, to radical and undesirable change, or withdrawing from commitments involving the security and development of others." [Italics mine.] On a number of subsequent occasions, Treasury spokesmen have reiterated this thought while leaving out the words "unilateral action."

The tiny tail of its balance-of-payments deficit—$1 to 2 billion a year—cannot, of course, be allowed to wag the whole dog of the American economy—approaching $800 billion. Surely, the need for a more nearly sustainable balance in our international payments does not mean that the United States cannot take reasonable measures, including easier money, to help counter a business recession. Indeed, in such circumstances, other nations would expect us to take expansionary steps: they themselves have a large stake in the maintenance of high and rising levels of business in a country that provides the largest import market in the world.

And yet, precisely because its economic and financial trends, developments, and policies (also, what may appear as lack of policies) are being watched closely and appraised eagerly throughout the world, the United States may well have to exercise more discretion in the use of economic stimulants than it has at times in the past. Specifically, it can no longer afford to carry cheap money to extremes or loosen the reins on government spending. It needs to find policies that can check recession and stimulate production efforts and economic growth without giving rise
to renewed inflationary pressures. Since such policies are often needed in any event to help preserve the health of our economy, there is no “conflict” between what we ought to do domestically and what is expected of us internationally.

Some Continental nations also hold the view that the United States is living beyond its international financial means in that the foreign-exchange costs of its military spending and the ultimate foreign-exchange impact of its foreign aid greatly exceed the surplus generated by the private economy, after allowing for funds flowing into American private investments abroad. Views like these are, of course, also held by many Americans, who have reached the conclusion that lasting relief to our balance of payments will have to come, at least in part, from a major overhaul of government spending abroad. Some people in Europe are also critical of our private investments. However strongly we may believe that the payments deficit is attributable to world-wide responsibilities of the United States and, in fact, provides funds to lubricate world trade, there are influential people abroad who do not see it this way.

All things considered, therefore, European nations with large dollar surpluses can neither be expected willingly to build up their dollar holdings still further nor be compelled to do so through unilateral changes by the United States in the present gold arrangements and practices. The way to deal with the American balance-of-payments deficit is to reduce the dollar supplies to foreign governments and central banks to just about the amounts they are seeking and are willing to retain voluntarily without conversion into gold. Briefly, the dollar must be made as desirable as it was when, by the free choice of nations, it began to be used as a currency in which to hold reserves—along with gold and, for countries that wish to do so, in preference to gold.

3. The Role of Gold Today

In practical reality, nations do not want to demonetize gold, giving up their gold reserves and making gold merely a commodity traded in free markets. The Finance Ministers of the Ten have repeatedly stressed that gold will remain the “ultimate” or the “basic” reserve asset. Nevertheless, in discussions among government experts, the future place of gold has not, so far as is known, been dealt with comprehensively and unequivocally.

In 1963, when the official discussion of the international monetary system was initiated, the Finance Ministers agreed that the underlying structure of the present monetary system—based on fixed exchange rates and the established price of gold—had proven its value as the “foundation for present and future arrangements.” They accordingly took the
established price of gold as given. This pragmatic approach was understand-able; but, as a consequence, the place of gold has not been reviewed systematically. Only earlier this year has the debate come more into the open—principally because France has begun to speak more clearly about its attitude toward gold.

The French point of view was summed up last February by the Finance Minister, Michel Debré, in an interview in The Banker (London):

The role of gold is going to be discussed within the Group of Ten as well as on the occasion of the joint meetings between the executive directors of the IMF and the Deputies of the Group of Ten. A working group was created last November by the Group of Ten in order to examine the problems of gold quite objectively and calmly. In addition, at the request of the French delegation, it was decided during the first joint meeting between the executive directors of the IMF and the deputies of the Group of Ten, held in Washington on November 28 and 29, 1966, that the role of gold would be discussed during a joint meeting.

I think that here lie the important and useful decisions. It is abnormal that the work on international liquidity started more than three years ago has not dealt with gold, a fundamental subject in this field. I am particularly pleased that by its action France helped to put an end to the conspiracy of silence which prevented discussion on the preeminently monetary subject of concern in international relations.

Studies on this subject must, in my opinion, have three aims. Firstly, they should proceed to an analysis of the role of gold in the functioning of the international monetary system. I am convinced that this work will bring to light again the fundamental role played by this precious metal and which tended to be ignored because of the embargo imposed by official discussions of this subject.

Secondly, it would be useful to examine to what extent gold production corresponds to present and future needs; it is a question of studying the market for this product, that is its components, actual and foreseeable supply and demand, and the conditions of its balance. Of course, one cannot speak of balance in the market for a particular product exclusive of its price. I think, therefore, and this is in my opinion the third point that the experts should study, that we must undertake a study in depth of the problem of the price of gold. On this question the position of the French authorities is not a dogmatic but a pragmatic one. I have no a priori position as to the level at which the price of gold should be fixed. I think it necessary to analyse the facts and then draw conclusions from the evidence that will emerge.
In these studies we should, of course, take into account the advantages as well as the inconvenience which might result from a change in the price of gold. This will be useful notably in dispelling the myths that have been allowed to arise by refusing to face this fundamental question.

**How Much Gold Is Enough?**

Judging by what has so far become generally known, planning among government experts of the Ten rests on the plausible expectation that the amount of new gold available for monetary purposes will not by itself be enough to satisfy the requirements for reserves in an expanding world economy in an environment of fairly free international trade and investment. As the experts noted in 1964, “while any projection of the future supplies of monetary gold would be hazardous, we do not believe that the flow of new gold into official reserves can be relied on in fact to meet fully the liquidity needs of the future.” The planning also rests on the unstated but undoubtedly realistic presumption that, over time, the growth of international trade and the world economy will be hampered unless there is an appropriate expansion in the total volume of international reserve assets.

Nobody can tell how much is enough. But it is a common observation that those responsible for the nation's monetary reserves want, year in year out, to increase them, however modestly, and not to see them decrease. This has become known in the literature as “Mrs. Machlup's Wardrobe Theory of Monetary Reserves”—interpreted to mean that what she cares about is not so much how many dresses she has so long as she gets a few new dresses each year.

To this observation, experience makes me suggest a theorem dedicated to my own wife: Mrs. Kriz's Golden Theorem of International Banking. Succinctly, it depicts the desire to have something that goes along with new dresses—not, necessarily, a new brooch, necklace, or bracelet with each dress but something that would make dresses truly chic. The theorem cannot be explained by my wife's French ancestry; it is deeply ingrained in our culture. Similarly, the governments and central banks—not only those of France but also those in many other countries—like to display some addition to the nation’s gold stock along with a build-up of its global reserves—that is, gold besides foreign exchange and such international assets as may be created. The theorists may call it a cultural lag; but the pragmatists know that it is most important to take the world as it is if the seeds for change are to fall on fertile soil.

The shortage of monetary gold thus gives rise to two distinct, though related, problems. The first has long been recognized: how to provide for an adequate secular increase in global monetary reserves. The second
has been clarified and emphasized by Milton Gilbert: how to meet the
demand for monetary reserves in the form of gold even after the means
have been provided for a suitable rate of increase in global reserves. For,
however much we may intellectually disapprove, the innate desire of
governments to be just a little mercantilistic is, for the time being at
least, a stubborn fact of international financial life.

It seems reasonable to anticipate that, under more normal conditions
than during 1965 and 1966, gold worth, say, $600 million will be
available each year from fresh supplies for monetary reserves of govern-
ments and central banks—depending, apart from private demands, on
Russian sales. The $600 million figure corresponds to the amount of
gold that annually found its way into official reserves during the ten
years ending in 1964; this provided about one half of the average annual
increase in total official gold and foreign-exchange reserves. It is equiva-
lent to an average annual increase of 1.5 per cent in official monetary
gold stocks and 1 per cent in total official gold and foreign-exchange
reserves.

A Supplement to Gold

The difference between additions to world monetary gold stocks and
such additions to U.S. dollar holdings as governments and central banks
will really want to acquire and retain, on the one hand, and the total
growth of world reserves that might be regarded as appropriate, on the
other hand, would then be made good by the creation of a supplement
to gold, fabricating "instant gold," as it were, in amounts that could be
sufficiently small to command confidence and acceptability—something
like $1.2 billion a year, judging from what has become generally known
of the discussions among government experts.

The 1966 report of the Group of Ten showed a broad consensus
among the government experts on a number of important features of
planning for reserve creation. There remain, however, several other
features on which the Group agreed that further work was needed,
including organizational arrangements for decisions on the creation and
management of the new money. Among the unresolved problems is,
above all, the form of a new international monetary instrument—
whether an extension of automatic access to the International Monetary
Fund or creation of an asset that can be owned (a device that would
demeanize the credit aspect of the new international money and would
be more readily accepted as a fully owned supplement to gold) or a
combination of both a credit and a reserve asset.

As this essay is being written, it is not yet clear how the differences
among the governments may be bridged. One problem is the relation-
ship of the new international instrument to gold—how to make gold and
the new instrument equally attractive as reserves. In none of the plans that have been put forward would the new instrument be directly convertible into gold. The tying of the creation and initial distribution of new instruments to gold, put forward by French technicians in some of the earlier versions of their thinking, has also been discarded. This left the question as to whether or not there should be any tie to gold in the transferability and use of the new international money after its initial distribution. Basically, there were two approaches. Under the first approach, the use of the new instruments in settlement of payments balances was to be linked to the use of gold reserves (or total reserves) at a ratio that would be agreed upon; under the second, no country would be required to hold the new money beyond a certain limit. It now appears that the second formula is more likely to be retained than the first. Whatever form may be adopted, however, it is universally agreed that debts and claims would carry a gold-value guarantee.

_Gold Technicalities and Balance-of-Payments Fundamentals_

Behind these technicalities, there is a matter of fundamental importance. A mechanism for creating new international monetary instruments involves, by its very nature and whatever its form, a system of mutual credit commitments giving a participating country access to currencies of other countries participating in such a mechanism. Such a system can function only on a reciprocal basis, in that any country incurring a debt must be reliably expected to repay it. There would be no reciprocity if the same countries were continually in deficit. Understandably, therefore, the surplus nations of Continental Europe are, under present circumstances, reluctant to grant to deficit countries automatic credits of indeterminate amounts for an indeterminate duration. For the power to create international money implies, in the final analysis, the power to take tangible goods from some countries and give them to others. Such a power must, of necessity, be circumscribed both in amounts and in time.

The problems are not new. At the time of the Bretton Woods Conference in 1944, as an active participant, Edward M. Bernstein recollects, the attitude of the United States was that an international gold standard required the Fund to hold and to accept gold, and that convertibility of currencies into gold, as well as through the Fund, was essential to provide “an assured use for gold reserves in the international monetary system.” It may also be recalled that, under the European Payments Union among Western European nations, prior to the reestablishment of currency convertibility at the end of 1958, credit among participants was also circumscribed and gold payments were gradually increased to 100 per cent.

To create acceptable—continuously acceptable—international money
is a novel and, perhaps, very difficult task. The practical problem is not to arrive at a theoretically perfect solution—desirable as it may be to know what this would be—but rather to find workable schemes that governments might be willing to accept. The best bet is to bring about an evolutionary change in the state of mind of those who are responsible in each nation for managing its international financial affairs. This presupposes, among other things, an agreement concerning gold. As Milton Gilbert has noted,

The point is that obtaining some new reserve assets, without an agreement about gold, is not enough to solve the problem and there is some chance that they would strengthen the demand for gold reserves. Some people seem to have the vision that as the central banks become used to the new reserve assets, for example reserve units, they will begin to prefer them to gold, and that gold will gradually disappear as a monetary instrument—or at least become unimportant. This seems to me to be plain fantasy and about as close to reality as the original idea of Karl Marx that under communism the state would gradually wither away.

Summing up, therefore, it is clearly possible to devise aesthetically satisfying schemes to create new instruments of liquidity. But it is quite a different matter to make them operational in actual practice and acceptable to individual governments determined to protect national interest, as each understands it, in a world of manifold diversity.

4. The Price of Gold Once Again

While it is now increasingly accepted that it would be illogical to discuss international liquidity without discussing gold, it in no way follows that a rise in the world gold price might be a better way to enlarge the supply of monetary reserves than greater automatic access to the International Monetary Fund or the creation and distribution of new reserve assets. The silence barrier has been broken by France’s Finance Minister, Michel Debré; but, as is clear from his statement quoted above, he stresses the need for pragmatism on the gold-price issue.

Two Valid Objections to a Gold-Price Rise

Returning to the price of gold, I will restate two objections to a gold-price rise that I continue to consider valid.

The first is that a gold appreciation—through concerted international action, which is the only plausible working hypothesis—would bring about a sudden surge in the purchasing power of current gold output and accumulated reserves. Gold-producing nations, those holding the largest gold reserves and maintaining the highest proportion of gold in total
international reserves, and those whose private gold holdings are the
largest would benefit most. Yet, what is needed is not a sudden surge
in international liquidity, arbitrarily distributed, but a gradual expan-
sion, fairly shared.

This argument has been countered by the French Finance Minister
on the ground that the issue of the gold-price rise ought not to be dis-
sociated from agreements among governments regarding international
monetary policies and arrangements—including international debts, for-
eign aid, and tariffs. Thus, “the rights and the duties would be defined
comprehensively and no profit from an eventual gold appreciation would
accrue to gold-holding or gold-producing countries without counter-
parts.” (Le Monde, Weekly edition, January 5-11, 1967.)

Conceivably, the patterns of distribution of revaluation increments
could thus be designed to redistribute the profits as well as the burdens.
Gains accruing to gold producers and major holders could be passed on
in increased aid to underdeveloped nations. In this context, too, it has
been suggested by Rueff that a long-term loan to the United Kingdom
to replenish its reserves could be financed out of revaluation benefits.
Such intergovernmental agreements would, of course, be as difficult to
reach as arrangements for supplemental reserves that would make a
gold-price rise unnecessary. Besides, in the process, there would undoubt-
edly be much jockeying for position—something that would be more
likely to bring about international financial chaos than to lay the founda-
tion of a new order.

Most importantly, the repayment of short-term debts by the United
States and the possible distribution to less-developed countries of a part
of the proceeds of a gold revaluation would in no way help the complex
and delicate process of adjustment in the balances of payments. Indeed,
because of sharp increases in monetary reserves, a gold-price rise might
render the process of adjustment even more difficult. Thus, the United
States would witness a substantial improvement in its net gold position—
because of a rise in the gold stock and a reduction in liabilities to foreign
governments and central banks; but to conclude that this leeway would
be conducive to a better balance in its international payments would be
unduly optimistic, if not utterly naive.

Furthermore, a gold-price rise might mistakenly be regarded as a
substitute for the effective measures that nations will have to take to deal
with the manifold issues of international trade and investment of the late
1960’s. The fundamental task the world is facing is to promote economic
growth, productivity, and viability within a broad framework of eco-
nomic and financial freedom. The world would deceive itself in think-
ing that a gold appreciation could, in some undefinable but automatic
way, solve these fundamental problems.
The second objection is that a gold-price rise would add fuel to world-wide fires of inflation. The seemingly intractable propensity to inflate in contemporary society would be accentuated as a direct consequence of the actual increase in reserves due to gold revaluation. It would be exaggerated as a result of book profits accruing from a gold revaluation—profits that, in practice, would be exceedingly difficult to sterilize in the face of the readiness of governments and parliaments to expand spending. It would make it even harder than today to resist the temptations of growthmanship. Finally, the psychological effect of a gold-price rise would be decidedly inflationary.

The case of France is particularly intriguing. It is obvious that, in a country holding $3-4 billion in gold in its proverbial stockings and mattresses, a massive private dishoarding of gold would play havoc with the monetary stability that has been achieved as a result of the hard efforts of the past decade. To hold down the inflationary impact of dishoarding, it has been suggested by Pierre Dieterlen that all those who, following a gold-price rise, would want to dispose of gold would be given only two choices: either to sell gold to the Bank of France at the old price or to exchange it at the new price for long-term government bonds—bonds which could be “indexed” to offer present gold owners a means of protection against future depreciation of money. But is something of this sort really enforceable?

A Gold-Price Rise by Force of Circumstances

These two objections to a gold-price appreciation are relevant and, to my mind, remain convincing. But, to be pragmatic, I must also concede that since the $35 price was established thirty-three years ago—quite arbitrarily, as we have learned in Treasury Secretary Morgenthau’s memoirs—much water has flowed under the bridges of the Potomac. Surely, the fixed gold price is what makes gold the point of reference for national currencies; but whether or not the maintenance of the price at its 1934 level imposes a handicap on the international monetary system is, to say the least, a reasonable topic for dispassionate study.

I expect that such a study would not lead to the conclusion (to use Rudolf Frei’s language in a review of the gold-price issue today sponsored by the List Society) that the “virtues of a gold-price increase are great enough to warrant a reasonable belief that a gold-price increase is a genuine alternative to any realistic plan of monetary reform.” I rather fear that, if a world gold appreciation ever came about, it would not be the result of a concerted international decision by governments motivated by considerations commanding logical acceptance and intellectual respect. Much more likely, it would be either a move forced by the circumstances of the moment—a breakdown of the international mone-
tary system, as it operates today, and of international monetary coopera-
tion—or it would be brought about by governments as an expedient of
last resort.

The first course of events leaves me as unenthusiastic as the second.
But, having recognized this, I want to express the hope that, once the
dust has settled, we shall be able to say what Abbé Sieyès answered
almost two hundred years ago when he was asked how he fared in the
French Revolution: I survived. Hopefully, the leading governments
will want to safeguard the basically free world trade and investment and
persevere in building up a genuinely integrated world economy—as
productive, efficient, and resilient as is attainable in a world of sovereign
states.

I also dislike the thought of a rise in the world gold price because it
is the negation of what gold, fundamentally, stands for: a safeguard
against clearly excessive discretionary powers of governments. If the
world is willing to allow the creation of international means of payments
to be influenced by the vagaries of supply of and demand for gold, this
willingness can be best explained by the deep concern to prevent our
monetary fortunes from being entirely dominated by governments.
Surely, governments can change the price of gold; but, except under
conditions of unbearable pressure, they are unwilling to raise it—some-
thing that helps monetary stability, domestically as well as internation-
ally. A change in the price of gold might, perhaps, be acceptable as a
once-for-all move. But, if made once, it could be made again, and more
often than once in every generation. This mere idea of repetition, at
intervals, invalidates the role of gold as a fixed point of reference.

CONCLUSION

To recognize that, so far ahead as can be seen, continued use should
be made of gold in the international monetary system is simply practical
realism. The world monetary system is a product of a gradual process
constantly evolving in response to current experience; and the creation
of acceptable new international reserve assets will be made easier if
organic continuity is preserved. Past is prologue.

New gold production cannot, evidently, be expected to meet all the
liquidity needs of the future. Nevertheless, it can contribute appreciably.
The prospects for new gold finding its way into the monetary reserves
of governments and central banks will depend on the size and persistence
of the private demand for gold. But, as the world has learned the hard
way, gold will flow into official reserves to buttress liquidity only if there
is unquestioned confidence in the determination of governments and
central banks to protect the real values of currencies.

To supplement or reinforce the reserves in hand, the world needs
reserves of creditworthiness. It already has a going institution—the International Monetary Fund—that, although lacking formal power to create money, has proved a responsible custodian of international credit to help nations overcome balance-of-payments hurdles. It may be useful to overhaul the Fund’s statutes, including the rules governing voting rights, in order to align them with present realities and visible future needs. The Fund’s resources have already been increased on a number of occasions. Besides, the world has international reserves for emergencies in the guise of intercentral-bank or intergovernment credits—arrangements that have successfully been tested on a number of critical occasions and can be put to use when they may be most needed to prevent a crack in the international monetary structure.

In practical reality, whatever changes may be adopted in the present international monetary arrangements will also have to permit the continued use of the dollar as a reserve currency. The dollar does not, of course, serve as a reserve currency by divine right. It can only serve so long as it is sought and retained voluntarily. But dollars supplied through lending and investing abroad—as is quite fitting on the part of a country with a richly endowed, productive and flexible economy, large amounts of savings, and efficient money and capital markets—will be in demand only so long as the balance-of-payments deficit of the United States does not become too large and persistent.

Altogether, there must be enough international reserves to provide time for needed adjustments in balances of payments among nations, but not so much as to breed world-wide inflation. What is disquieting about proposals for increasing supplies of deliberately created reserves is the implicit danger of making domestic inflations comfortable internationally. It would be all too easy to sink the balance-of-payments deficits of nations into the sea of international liquidity.

At times the shoe may pinch, particularly if nations indulge in inflation. But in that event something ought to pinch to communicate a sense of harsh reality to the need for a nation to keep its economic and financial house in order. Surely, international liquidity must be “adequate”; but it must also be allowed to run out, for it is this ultimate sanction that makes it necessary for any country to frame its domestic plans and policies with continuing regard to the external influences to which it is subject, as well as to the external repercussions of its own acts.

Given these stubborn facts of international financial life, institutional arrangements that make continued use of gold offer better promise than the demonetization of gold to help preserve a nearly sustainable balance in the economies of the main industrial countries as well as in the economic and financial relationships among them. In this sense, gold helps
reinforce monetary discipline domestically as well as internationally—something we must have if we want orderly society.

Fundamentals like these are necessary prerequisites for a smooth and efficient functioning of any international monetary system. Without them, no international standard, whether or not based on gold, can work properly. With convincing evidence that they will be respected, many of the seemingly intractable problems of international liquidity will disappear.
### Table 1

**Estimated Supplies of Gold, 1950-66**

*(In Millions of Dollars)*

<table>
<thead>
<tr>
<th>Year</th>
<th>&quot;Older&quot; Mines</th>
<th>&quot;Newer&quot; Mines</th>
<th>Total Output in South Africa</th>
<th>Output in the Rest of the World</th>
<th>Total Output</th>
<th>Reported Sales by U.S.S.R.</th>
<th>Total Supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>n.a.</td>
<td>n.a.</td>
<td>$ 408</td>
<td>$ 438</td>
<td>$ 846</td>
<td>—</td>
<td>$ 846</td>
</tr>
<tr>
<td>1951</td>
<td>n.a.</td>
<td>n.a.</td>
<td>403</td>
<td>425</td>
<td>828</td>
<td>—</td>
<td>828</td>
</tr>
<tr>
<td>1952</td>
<td>348*</td>
<td>$ 66*</td>
<td>414</td>
<td>439</td>
<td>853</td>
<td>—</td>
<td>853</td>
</tr>
<tr>
<td>1953</td>
<td>330</td>
<td>88</td>
<td>418</td>
<td>430</td>
<td>848</td>
<td>$ 75</td>
<td>923</td>
</tr>
<tr>
<td>1954</td>
<td>333</td>
<td>130</td>
<td>463</td>
<td>434</td>
<td>897</td>
<td>75</td>
<td>972</td>
</tr>
<tr>
<td>1955</td>
<td>325</td>
<td>186</td>
<td>511</td>
<td>429</td>
<td>940</td>
<td>75</td>
<td>1,015</td>
</tr>
<tr>
<td>1956</td>
<td>318</td>
<td>238</td>
<td>556</td>
<td>424</td>
<td>980</td>
<td>150</td>
<td>1,130</td>
</tr>
<tr>
<td>1957</td>
<td>295</td>
<td>301</td>
<td>596</td>
<td>423</td>
<td>1,019</td>
<td>260</td>
<td>1,279</td>
</tr>
<tr>
<td>1958</td>
<td>282</td>
<td>336</td>
<td>618</td>
<td>433</td>
<td>1,051</td>
<td>220</td>
<td>1,271</td>
</tr>
<tr>
<td>1959</td>
<td>289</td>
<td>413</td>
<td>702</td>
<td>425</td>
<td>1,127</td>
<td>300</td>
<td>1,427</td>
</tr>
<tr>
<td>1960</td>
<td>282</td>
<td>466</td>
<td>748</td>
<td>430</td>
<td>1,178</td>
<td>200</td>
<td>1,378</td>
</tr>
<tr>
<td>1961</td>
<td>260</td>
<td>543</td>
<td>803</td>
<td>412</td>
<td>1,215</td>
<td>300</td>
<td>1,515</td>
</tr>
<tr>
<td>1962</td>
<td>251</td>
<td>641</td>
<td>892</td>
<td>408</td>
<td>1,300</td>
<td>200</td>
<td>1,500</td>
</tr>
<tr>
<td>1963</td>
<td>240</td>
<td>721</td>
<td>961</td>
<td>395</td>
<td>1,356</td>
<td>550</td>
<td>1,906</td>
</tr>
<tr>
<td>1964</td>
<td>231</td>
<td>788</td>
<td>1,019</td>
<td>387</td>
<td>1,406</td>
<td>450</td>
<td>1,856</td>
</tr>
<tr>
<td>1965</td>
<td>222</td>
<td>847</td>
<td>1,069</td>
<td>371</td>
<td>1,440</td>
<td>550*</td>
<td>1,990</td>
</tr>
<tr>
<td>1966</td>
<td>210</td>
<td>871</td>
<td>1,081</td>
<td>361</td>
<td>1,442</td>
<td>—</td>
<td>1,442</td>
</tr>
</tbody>
</table>

*a* Excluding the U.S.S.R., other Eastern European countries, Mainland China, etc.

*b* Estimated.

Including, in addition to Russian sales, $180 million of gold sold by another Eastern European country to Italy to repay a loan against gold collateral by Italian commercial banks.

n.a. Not available.

<table>
<thead>
<tr>
<th>Year</th>
<th>Added to Official Stocks</th>
<th>U.S.</th>
<th>Others</th>
<th>Total</th>
<th>Added to Private Stocks, etc.</th>
<th>Total Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>$325</td>
<td>$ 97.8</td>
<td>n.a.</td>
<td>n.a.</td>
<td>$ 423</td>
<td>$ 846</td>
</tr>
<tr>
<td>1951</td>
<td>265</td>
<td>69.5</td>
<td>n.a.</td>
<td>n.a.</td>
<td>493</td>
<td>828</td>
</tr>
<tr>
<td>1952</td>
<td>230</td>
<td>96.4</td>
<td>n.a.</td>
<td>n.a.</td>
<td>527</td>
<td>853</td>
</tr>
<tr>
<td>1953</td>
<td>455</td>
<td>75.0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>393</td>
<td>923</td>
</tr>
<tr>
<td>1954</td>
<td>670</td>
<td>44.4</td>
<td>n.a.</td>
<td>n.a.</td>
<td>258</td>
<td>972</td>
</tr>
<tr>
<td>1955</td>
<td>665</td>
<td>45.5</td>
<td>n.a.</td>
<td>n.a.</td>
<td>304</td>
<td>1,015</td>
</tr>
<tr>
<td>1956</td>
<td>490</td>
<td>49.0</td>
<td>$116</td>
<td>$165</td>
<td>475</td>
<td>1,130</td>
</tr>
<tr>
<td>1957</td>
<td>690</td>
<td>50.8</td>
<td>144</td>
<td>195</td>
<td>394</td>
<td>1,279</td>
</tr>
<tr>
<td>1958</td>
<td>680</td>
<td>64.2</td>
<td>136</td>
<td>200</td>
<td>391</td>
<td>1,271</td>
</tr>
<tr>
<td>1959</td>
<td>750</td>
<td>88.3</td>
<td>132</td>
<td>220</td>
<td>457</td>
<td>1,427</td>
</tr>
<tr>
<td>1960</td>
<td>345</td>
<td>105.0</td>
<td>160</td>
<td>265</td>
<td>768</td>
<td>1,378</td>
</tr>
<tr>
<td>1961</td>
<td>600</td>
<td>97.1</td>
<td>188</td>
<td>285</td>
<td>630</td>
<td>1,515</td>
</tr>
<tr>
<td>1962</td>
<td>330</td>
<td>125.2</td>
<td>205</td>
<td>330</td>
<td>840</td>
<td>1,500</td>
</tr>
<tr>
<td>1963</td>
<td>840</td>
<td>102.2</td>
<td>223</td>
<td>325</td>
<td>741</td>
<td>1,906</td>
</tr>
<tr>
<td>1964</td>
<td>750</td>
<td>168.0</td>
<td>262</td>
<td>430</td>
<td>676</td>
<td>1,856</td>
</tr>
<tr>
<td>1965</td>
<td>250^b</td>
<td>185.0</td>
<td>280</td>
<td>465</td>
<td>1,125</td>
<td>1,840^d</td>
</tr>
<tr>
<td>1966</td>
<td>-90</td>
<td>190.0</td>
<td>300</td>
<td>490</td>
<td>1,042</td>
<td>1,442</td>
</tr>
</tbody>
</table>

*Excluding the U.S.S.R., etc.  b Reported by Australia, Austria, Belgium, France, the Federal Republic of Germany, Italy, Japan, the Netherlands, Sweden, Switzerland and the United Kingdom.  c Including, for 1950-55, industrial uses for the nations mentioned in footnote b.  d Excluding, for 1965, $150 million reportedly purchased by the Government of Mainland China.

n.a. Not available.

<table>
<thead>
<tr>
<th></th>
<th>Changes through transactions with:</th>
<th></th>
<th>Mitigation</th>
<th>All other changesb</th>
<th>Total</th>
<th>Gold Stock December 1966</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.S.</td>
<td>Subscription</td>
<td>Gold sales</td>
<td>arrangements²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States²</td>
<td>$1,966</td>
<td>$259</td>
<td>0</td>
<td>$211</td>
<td>-$1,965</td>
<td>$2,013</td>
</tr>
<tr>
<td>All other countries</td>
<td>$1,010</td>
<td>$798</td>
<td>43</td>
<td></td>
<td>1,123</td>
<td>2,920</td>
</tr>
<tr>
<td>Of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>1,890</td>
<td>49</td>
<td>156</td>
<td>0</td>
<td>66</td>
<td>2,063</td>
</tr>
<tr>
<td>Germany (Fed. Rep.)²</td>
<td>225</td>
<td>103</td>
<td>373</td>
<td>0</td>
<td>46</td>
<td>449</td>
</tr>
<tr>
<td>Switzerland</td>
<td>133</td>
<td></td>
<td></td>
<td></td>
<td>112</td>
<td>21</td>
</tr>
<tr>
<td>Italy²</td>
<td>-60</td>
<td>89</td>
<td>36</td>
<td>0</td>
<td>184</td>
<td>71</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-848</td>
<td>123</td>
<td>0</td>
<td>43</td>
<td>384</td>
<td>544</td>
</tr>
<tr>
<td>Netherlands</td>
<td>95</td>
<td>27</td>
<td>59</td>
<td>0</td>
<td>2</td>
<td>129</td>
</tr>
<tr>
<td>Belgium</td>
<td>123</td>
<td>21</td>
<td>45</td>
<td>0</td>
<td>9</td>
<td>156</td>
</tr>
<tr>
<td>Canada</td>
<td>-200</td>
<td>47</td>
<td>37</td>
<td>0</td>
<td>439</td>
<td>229</td>
</tr>
<tr>
<td>Spain</td>
<td>212</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>212</td>
</tr>
<tr>
<td>Austria</td>
<td>180</td>
<td>25</td>
<td>8</td>
<td>0</td>
<td>2</td>
<td>165</td>
</tr>
<tr>
<td>Portugal</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>150</td>
<td>146</td>
</tr>
<tr>
<td>South Africa</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>International Monetary Fund</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
<td>292</td>
<td>340</td>
</tr>
<tr>
<td>World</td>
<td>$2,013</td>
<td>-$1,269</td>
<td>$798</td>
<td>$254</td>
<td>-$548</td>
<td>$1,248</td>
</tr>
</tbody>
</table>
a The IMF's gold stock excludes, and the gold stocks of the United States and the United Kingdom include, gold "deposited" by the IMF to "mitigate" gold sales by reserve centers to other countries to enable them to pay the gold portions of their enlarged subscriptions to the Fund in 1966. b Residual figures, including gold from new production, Russian sales, interest charges on IMF borrowings (which totaled $29 million during 1964-1966), repurchases in gold of currencies from the Fund ($71 million), interest charges paid in gold to the Fund ($83 million), etc.

Note: Details may not add to totals because of rounding.

c Excludes gold sales to domestic users totaling $348 million during 1964-1966. d U.S. gold transactions with Italy and Germany were affected in 1964 by a special triangular arrangement. During the Italian foreign exchange crisis in 1964, Italy sold $200 million in gold to Germany; for technical reasons, this gold went first to the U.S. Treasury and from there to the German Federal Bank. According to U.S. statistics, there is, therefore, a purchase of $200 million of gold from Italy in 1964 and a simultaneous sale to Germany of somewhat more than that amount.
Table 4
GOLD AS A PERCENTAGE OF TOTAL OFFICIAL GOLD AND FOREIGN EXCHANGE RESERVES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>100%</td>
<td>99%</td>
<td>97%</td>
<td>95%</td>
<td>91%</td>
</tr>
<tr>
<td>France</td>
<td>90%</td>
<td>72%</td>
<td>73%</td>
<td>86%</td>
<td>91%</td>
</tr>
<tr>
<td>South Africa</td>
<td>75%</td>
<td>82%</td>
<td>87%</td>
<td>79%</td>
<td>87%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>90%</td>
<td>93%</td>
<td>87%</td>
<td>94%</td>
<td>85%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>74%</td>
<td>91%</td>
<td>81%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>Belgium</td>
<td>80%</td>
<td>84%</td>
<td>73%</td>
<td>78%</td>
<td>78%</td>
</tr>
<tr>
<td>Turkey</td>
<td>54%</td>
<td>74%</td>
<td>72%</td>
<td>82%</td>
<td>78%</td>
</tr>
<tr>
<td>Spain</td>
<td>95%</td>
<td>44%</td>
<td>44%</td>
<td>64%</td>
<td>75%</td>
</tr>
<tr>
<td>Uruguay</td>
<td>91%</td>
<td>85%</td>
<td>90%</td>
<td>82%</td>
<td>74%</td>
</tr>
<tr>
<td>Lebanon</td>
<td>92%</td>
<td>84%</td>
<td>79%</td>
<td>73%</td>
<td>67%</td>
</tr>
<tr>
<td>Italy</td>
<td>33%</td>
<td>62%</td>
<td>57%</td>
<td>62%</td>
<td>66%</td>
</tr>
<tr>
<td>Germany (Fed. Rep.)</td>
<td>50%</td>
<td>57%</td>
<td>61%</td>
<td>69%</td>
<td>63%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>66%</td>
<td>92%</td>
<td>92%</td>
<td>75%</td>
<td>63%</td>
</tr>
<tr>
<td>Portugal</td>
<td>61%</td>
<td>59%</td>
<td>56%</td>
<td>58%</td>
<td>58%</td>
</tr>
<tr>
<td>Austria</td>
<td>20%</td>
<td>43%</td>
<td>48%</td>
<td>56%</td>
<td>57%</td>
</tr>
<tr>
<td>Venezuela</td>
<td>49%</td>
<td>74%</td>
<td>51%</td>
<td>50%</td>
<td>56%</td>
</tr>
<tr>
<td>Greece</td>
<td>7%</td>
<td>29%</td>
<td>29%</td>
<td>33%</td>
<td>48%</td>
</tr>
<tr>
<td>Canada</td>
<td>60%</td>
<td>28%</td>
<td>38%</td>
<td>43%</td>
<td>47%</td>
</tr>
<tr>
<td>India</td>
<td>26%</td>
<td>48%</td>
<td>50%</td>
<td>47%</td>
<td>40%</td>
</tr>
<tr>
<td>Mexico</td>
<td>40%</td>
<td>25%</td>
<td>31%</td>
<td>33%</td>
<td>26%</td>
</tr>
<tr>
<td>Sweden</td>
<td>46%</td>
<td>24%</td>
<td>22%</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>Denmark</td>
<td>19%</td>
<td>41%</td>
<td>15%</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Japan</td>
<td>3%</td>
<td>16%</td>
<td>17%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Australia</td>
<td>10%</td>
<td>15%</td>
<td>13%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Norway</td>
<td>24%</td>
<td>11%</td>
<td>9%</td>
<td>7%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Note: The ratio of gold in Britain's reserves in 1957 and again in 1965 and 1966 reflects the large holdings of foreign currencies borrowed in the wake of sterling crises. Usually, the ratio is in excess of 90 per cent, in line with Britain's traditional stand that a country serving as an international financial center should hold most of its reserves in gold.

Countries are arranged in the descending order of the gold ratios for 1966.

Source: Derived from the International Monetary Fund, International Financial Statistics.
PUBLICATIONS OF THE
INTERNATIONAL FINANCE SECTION

The International Finance Section publishes at irregular intervals papers in four series: ESSAYS IN INTERNATIONAL FINANCE, PRINCETON STUDIES IN INTERNATIONAL FINANCE, SPECIAL PAPERS IN INTERNATIONAL ECONOMICS, and REPRINTS IN INTERNATIONAL FINANCE. All four of these may be ordered directly from the Section.

Single copies of the ESSAYS and REPRINTS are distributed without charge to all interested persons, both here and abroad. Additional copies of any one issue may be obtained from the Section at a charge of $0.25 a copy, payable in advance. This charge may be waived to foreign institutions of education or research.

For the STUDIES and SPECIAL PAPERS there will be a charge of $1.00 a copy. This charge will be waived on copies distributed to college and university libraries here and abroad. In addition, the charge is sometimes waived on single copies requested by persons residing abroad who find it difficult to make remittance.

For the convenience of our British customers, arrangements have been made for retail distribution of the STUDIES and SPECIAL PAPERS through the Economists' Bookshop, Portugal Street, London, W.C. 2, and Blackwells, Broad Street, Oxford. These booksellers will usually have our publications in stock.

A mailing list is maintained for the distribution of ESSAYS and REPRINTS as they are issued and of announcements of new issues in the series of STUDIES and SPECIAL PAPERS. Requests for inclusion in this list will be honored, except that students will not be placed on the permanent mailing list, because waste results from frequent changes of addresses.

The following is a complete list of the publications of the International Finance Section. The issues of the four series that are still available from the Section are marked by asterisks. Those marked by daggers are out of stock at the International Finance Section but may be obtained in xerographic reproductions (that is, looking like the originals) from University Microfilms, Inc., 300 N. Zeeb Road, Ann Arbor, Michigan 48106. (Most of the issues are priced at $3.00.)
ESSAYS IN INTERNATIONAL FINANCE

†No. 1. Friedrich A. Lutz, International Monetary Mechanisms: The Keynes and White Proposals. (July 1943)
† 2. Frank D. Graham, Fundamentals of International Monetary Policy. (Autumn 1943)
† 4. Ragnar Nurkse, Conditions of International Monetary Equilibrium. (Spring 1945)
† 5. Howard S. Ellis, Bilateralism and the Future of International Trade. (Summer 1945)
† 7. Frank A. Southard, Jr., Some European Currency and Exchange Payments. (Summer 1946)
† 8. Miroslav A. Kriz, Postwar International Lending. (Spring 1947)
† 11. Horst Mendershausen, Dollar Shortage and Oil Surplus in 1949-1950. (Nov. 1950)
† 12. Sir Arthur Salter, Foreign Investment. (Feb. 1951)
† 13. Sir Roy Harrod, The Pound Sterling. (Feb. 1952)
† 15. Miroslav A. Kriz, The Price of Gold. (July 1952)
† 16. William Diebold, Jr., The End of the I.T.O. (Oct. 1952)
† 17. Sir Douglas Copland, Problems of the Sterling Area: With Special Reference to Australia. (Sept. 1953)
† 23. Wytze Gorter, United States Merchant Marine Policies: Some International Implications. (June 1955)
† 26. Samuel I. Katz, Two Approaches to the Exchange-Rate Problem: The United Kingdom and Canada. (Aug. 1956)
† 29. Raymond Vernon, Trade Policy in Crisis. (March 1958)
† 31. Randall Hinshaw, Toward European Convertibility. (Nov. 1958)
† 33. Alec Cairncross, The International Bank for Reconstruction and Development. (March 1959)
† 34. Miroslav A. Kriz, Gold in World Monetary Affairs Today. (June 1959)
† 35. Sir Donald MacDougall, The Dollar Problem: A Reappraisal. (Nov. 1960)
42. Sir Dennis Robertson, *A Memorandum Submitted to the Canadian Royal Commission on Banking and Finance*. (May 1963)
45. Jacob Viner, *Problems of Monetary Control*. (May 1964)
52. Raymond F. Mikesell, *Public Foreign Capital for Private Enterprise in Developing Countries*. (April 1966)
60. Miroslav A. Kriz, *Gold: Barbarous Relic or Useful Instrument?*. (June 1967)
* 12. Robert Triffin, *The Evolution of the International Monetary System: Historical Reappraisal and Future Perspectives.* (June 1964)

SPECIAL PAPERS IN INTERNATIONAL ECONOMICS

† 2. Oskar Morgenstern, *The Validity of International Gold Movement Statistics.* (Nov. 1955)

REPRINTS IN INTERNATIONAL FINANCE


SEPARATE PUBLICATIONS


AVAILABLE FROM PRINCETON UNIVERSITY PRESS
