

ESSAYS IN INTERNATIONAL FINANCE

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GOLD AND THE DOLLAR CRISIS:  
YESTERDAY AND TOMORROW

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ROBERT TRIFFIN



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

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*This Essay was presented as the first John J. McCloy Lecture at the Council on Foreign Relations. On that occasion, Robert V. Roosa, Under Secretary of the Treasury for Monetary Affairs in the Kennedy and Johnson Administrations and a distinguished contributor to thought and action in international monetary relations, introduced the author. He has graciously agreed to do so again here, in the Foreword to this Essay.*

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**PETER B. KENEN, Director**  
*International Finance Section*

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## FOREWORD

On November 14, 1978, Professor Robert Triffin inaugurated the newly established John J. McCloy Lectures at the Council on Foreign Relations. This Essay reproduces his lecture and fortunately includes several detailed sections that had to be trimmed in the oral presentation.

The McCloy series has been endowed to promote and perpetuate the spirit of action-oriented inquiry that Mr. McCloy has been bringing to the problems of world affairs for more than six decades. It was uniquely appropriate that Professor Triffin should have been the person selected to inaugurate the series, as he rounds out four decades of pioneering work in diagnosing and prescribing for a faltering international monetary system. He was asked to present both a personal history of his views and an appraisal of the prospects ahead.

Robert Triffin began his searching studies of monetary affairs (and also began his teaching) while a graduate student at Louvain, in Belgium, just as the Tripartite Agreement was collapsing. But, along with many others, he turned first to more general questions of theory as he faced the doctoral hurdle at Harvard in the late 1930s. His *Monopolistic Competition and General Equilibrium Theory* won the Wells Prize in 1940 as the most distinguished thesis of that year, and it was during his brilliant oral exposition of that *tour de force* before the Instructors Seminar at Harvard that I first met and began to learn from him.

His interest in the ways in which monetary systems support, guide, or possibly stifle economic progress soon became overpowering, however, and he turned in 1942 to the questions that have been the dominant theme of his professional career. Through the remaining war years, as head of the Latin American Unit at the Federal Reserve Board, he successively advised and reorganized central banks to serve the needs of countries throughout the hemisphere. In 1946, with the establishment of the International Monetary Fund, he was made the first director of the exchange-control division. Thereafter, he concentrated his work on monetary relations among nations, serving first the Fund and later the U.S. government as adviser on intra-European payments arrangements (and in practice as a principal designer of the European Payments Union).

In 1951, he began his professorship at Yale, where, while producing a succession of landmark studies up to the present moment, he has also served for a decade as Master of Berkeley College and has remained a consultant to various bodies engaged in organizing the European Economic Community and to the Community itself. It is a happy develop-

ment that, as he nears the formal retirement age, he is again teaching at Louvain, as well as at Yale, continuing his truly international career.

Robert Triffin's Essay reviews the evolution of his thoughts and the classic volumes he has written. But no introduction could conclude without emphasizing the pathbreaking contribution of his *Gold and the Dollar Crisis: The Future of Convertibility*, published in 1960. Indeed, in my first conversation with President-elect Kennedy after the announcement of my appointment as his Under Secretary for Monetary Affairs in December 1960, he pointed to the relevance of "Bob Triffin's thinking" for the effort we were then initiating to buttress the dollar's defenses through the transition period we saw ahead for the international monetary system.

The rest of the story is better told by Professor Triffin himself.

ROBERT V. ROOSA

## Introduction

To introduce this Essay, a few words of apology are necessary. There is a French saying, for which I fail to find an exact English equivalent, that "Le moi est haïssable," literally translatable as "The I is hateful." The organizers of the meeting at which I delivered the lecture from which this Essay is derived asked me to be "hateful" by reviewing the changes in, or the obstinacy of, my views regarding the major issues that confronted our international monetary system yesterday, and will still—alas!—confront it tomorrow. To quote the French again, have I, like Louis XVIII, "learnt nothing and forgotten nothing"? Or has our own brief experiment with freedom—of exchange rates, of course—taught me to forget the lures of the "ancien régime" of international monetary order and relative stability of exchange rates?

I shall group my remarks around the two fundamental approaches to international monetary reform to which I have devoted most of my career over more than thirty years, both in academia and as a consultant to the U.S. government and various international organizations: (1) *worldwide* monetary reform and (2) *regional* monetary cooperation, or integration.

## World Monetary Reform

### *Initial Diagnosis and Prescription: 1957 and 1959*

In 1957 I had already expressed my doubts about the forthcoming restoration of convertibility "if it remained based only—as in the nineteenth century—on the spontaneous adoption and unflinching pursuit of [appropriate] policies by independent, uncoordinated, national decisions on the part of sovereign countries" (Triffin, 1957, p. ix). I had argued for some years, in opposition to many of my closest economic friends, that the dollar shortage had ended and would not be an obstacle to the return to convertibility:

The enormous improvement of foreign countries' reserves which has taken place in recent years has been primarily the result of a vast redistribution of net reserves from the United States to the rest of the world. . . . It is evident that such a movement could not continue indefinitely without eventually undermining confidence in the dollar itself (1957, pp. 296-297).

This forecast has not yet been proved incorrect, to say the least.

My doubts about the future maintenance of convertibility were more broadly based:

The enormous expansion of the objectives and techniques of state intervention in economic life seems to me incompatible with the restoration and maintenance of convertibility on the basis of the uncoordinated national decisions and policies of several scores of independent sovereign states. The institutional framework of international convertibility needs to be greatly strengthened if it is to survive the inevitable shocks occasionally to be expected from unfavorable developments and policies in some of the major trading countries. A collective organization and effective internationalization of the present gold exchange standard are particularly essential in this respect, if we are to eschew the well-known pitfalls unanimously denounced by economists and sadly demonstrated by events in the early 1930's (1957, p. 303).

The analysis and suggestions presented in 1957 in *Europe and the Money Muddle* were expanded in 1959 in several articles, and particularly in those published by the *Banca Nazionale del Lavoro Quarterly Review* (1959a and 1959b) and reproduced, together with my October 1959 Statement to the Joint Economic Committee of Congress, in *Gold and the Dollar Crisis: The Future of Convertibility* (1960).

I cannot resist quoting to you the dedication of this book:

To my children:

NICKY  
KERRY  
ERIC

who undoubtedly will, some years from now, feel inordinately proud or amused, when discovering this intrepid attempt of their father to prophesy history and to deflect its course.

I think they have been mostly amused, and I hope my readers will be too. As for my publishers, they were worried about the title of the book. Since it would take about nine months to bring out in print, they feared that the "crisis" might be over by then. I reassured them that this was most unlikely indeed.

My *diagnosis* soon became known as "the Triffin Dilemma," the summary title given to it by Oscar Altman (1961). I forecast that if the United States corrected its persistent balance-of-payments deficits, the growth of world reserves could not be fed adequately by gold production at \$35 an ounce, but that if the United States continued to run deficits, its foreign liabilities would inevitably come to exceed by far its ability to convert dollars into gold upon demand and would bring about a "gold and dollar crisis."

My 1959 *prescription* was, in brief, gradually to replace gold and foreign-currency accretions by gold-guaranteed deposit accounts at the

International Monetary Fund as the major source of increase in world reserves. First of all, this would enable the IMF to control the expansion of world reserves, adjusting them to the noninflationary requirements of the feasible growth of world trade and production rather than to the unpredictable vagaries of the U.S. balance of payments and the private gold market. To guard against inflationary abuses of the Fund's lending capacity, I suggested that a qualified vote of two-thirds, three-fourths, and ultimately four-fifths of the total weighted voting power, or even unanimity, be required to authorize IMF lending susceptible of increasing world reserves by more than 3, 4, or 5 per cent a year.

Secondly, I suggested that this expansion of IMF lending capacity be used (1) primarily to finance the IMF's traditional stabilization assistance to deficit countries, subject, of course, to the adoption of agreed readjustment policies, (2) to offset speculative switches from some currencies into others or into gold, and (3) to accelerate the financing of development in the third world through the purchase of obligations of the World Bank, its affiliates, and the various regional development banks that were emerging at the time.

### *The Next Twenty Years: 1959-79*

*Diagnosis.* The events of the next twenty years could hardly have induced me to alter my diagnosis. They obviously resolved the 1959 "Triffin Dilemma," however, in favor of the second rather than the first horn of that dilemma. The United States did not correct its deficits, and its piling up of indebtedness to foreign central banks and commercial banks finally generated the gold and dollar crisis that culminated—but did not end—in 1971 with the suspension of dollar convertibility and the collapse of the Bretton Woods system.

May I claim, immodestly, to have been more clairvoyant in this respect than U.S. and international monetary leaders? They reacted to my 1959 Congressional presentation by asserting that IMF resources would enable it "to provide the degree of liquidity needed . . . in the *foreseeable* future" and "to play its part in overcoming monetary disequilibriums . . . *under any foreseeable conditions*" (italics mine).<sup>1</sup>

Let me also admit, however, that I *did* change my mind about the main danger confronting the future of the international monetary system.

<sup>1</sup> Secretary of the Treasury Robert Anderson's and IMF Managing Director Per Jacobsson's answers to Chairman Paul Douglas's request for comments on my statement to the Joint Economic Committee. For further details, see Triffin (1966, pp. 230-231).

While my initial diagnosis was seen by central bankers<sup>2</sup> as placing an excessive stress on the first horn of the Triffin Dilemma, the danger of world deflation, my later writings placed increasing stress on the second, the inflationary potential of continuing U.S. deficits and the threat of a gold and dollar crisis. Even so, I was totally wrong in underestimating the duration and the size of the U.S. deficits that foreign central bankers would be willing to absorb, at the cost of an inflationary explosion of world monetary reserves and of a multiple expansion of the money supply in their countries under the traditional system of fractional reserve requirements.

Measured in U.S. dollars, the world reserve pool rose moderately from \$58 billion at the end of 1959 to \$79 billion at the end of 1969, but it doubled in the next three years to \$159 billion at the end of 1972, increasing as much in this short span of three years as in all previous years and centuries since Adam and Eve. World reserves doubled again in the following five years to \$319 billion at the end of 1977 (see Table 1).

TABLE 1  
THE INFLATIONARY EXPLOSION OF INTERNATIONAL LIQUIDITY  
(dollar figures in billions)

	End of 1969	End of 1972	End of 1977	Mid- 1978	Mid-1978 in % of 1969
<b>Foreign dollar claims</b>	<b>\$ 78</b>	<b>\$146</b>	<b>\$363</b>	<b>\$373</b>	<b>478</b>
On U.S. government and banks	49	85	210	221	451
On foreign branches of U.S. banks	29	61	153	152	524
<b>International monetary reserves</b>	<b>79</b>	<b>159</b>	<b>319</b>	<b>330</b>	<b>418</b>
Foreign exchange	33	104	244	256	776
Dollars and Eurodollars	20	81	197		985
Other currencies	7	15	27		386
Other	7	8	22		314
Other <sup>a</sup>	46	55	75	75	163
<b>Commercial-bank foreign liabilities</b>	<b>121</b>	<b>217</b>	<b>658</b>	<b>700</b>	<b>579</b>
In dollars and Eurodollars	94	157	481		512
In other currencies	27	60	177		656

SOURCES: These rough estimates are derived from various tables published by the International Monetary Fund (*International Financial Statistics* and *Annual Reports*), by the *Federal Reserve Bulletin*, and by the Bank for International Settlements (*Annual Reports* and quarterly releases on Eurocurrency and other international banking developments). They are not fully comparable, owing particularly to the different definition of "foreign" liabilities in U.S. and European reporting.

<sup>a</sup> World monetary gold, SDR allocations, and IMF loans and investments.

World monetary gold holdings contributed scarcely at all to this ex-

<sup>2</sup> Notably Dr. Otmar Emminger. See, for instance, his (1973, p. 35) Per Jacobsson lecture.

plosion of world reserves. Measured at their last official price, they rose from \$40 billion in 1959 to \$49 billion in 1977, but this slight increase is more than accounted for by the bookkeeping impact of the two official dollar devaluations. In physical terms, they remained practically unchanged over these twenty years.

Allocations of Special Drawing Rights (SDRs) and IMF lending contributed barely 10 per cent to the global \$262 billion increase of world reserves between 1959 and 1977. The overwhelming source of this increase was foreign-exchange holdings (\$228 billion), of which traceable dollar and Eurodollar holdings accounted for more than 80 per cent, having risen *nearly twenty times*, from \$10 billion in 1959 to \$197 billion at the end of 1977.

The willingness of foreigners to absorb such huge dollar amounts, and to continue to do so even after the dollar became inconvertible, is too often ascribed to U.S. political pressures on unwilling dollar accumulators—the threat, for instance, to withdraw U.S. troops from Germany if Germany withdrew gold from Fort Knox. Such pressures undoubtedly played a part in the process, but other types of motivation were probably more important.

One motivation was merely bureaucratic routine, inherited from the days of the dollar shortage, and the convenience with which foreign central banks could invest their surpluses in the hugest financial market in the world.

Another was the fear of “rocking the boat” and repeating the disastrous experience of the 1930s, when the refusal to accumulate and hold sterling-exchange holdings led to the first collapse of the ill-fated gold-exchange standard and aggravated immensely the world depression of that decade.

Last, but not least, was the reluctance to accept the appreciation of its exchange rate that would flow from a country's refusal to accumulate dollars. The consequent deterioration of the country's competitiveness in world trade might have been bearable if all, or at least most, surplus countries *had acted together* and preserved exchange-rate stability between their currencies. This, however, would have required more mergers of national sovereignty over exchange rates than could be negotiated even between the members of the European Community. President de Gaulle might have been willing at times—and even happy?—to let the French franc appreciate vis-à-vis the dollar, and to let the French automobile industry become less competitive vis-à-vis the U.S. automobile industry. Even he, however, could not accept the deterioration of competitiveness vis-à-vis Volkswagen, Fiat, and other strong European com-

petitors that would occur in the absence of a parallel appreciation of the mark, the lira, etc., vis-à-vis the dollar.

*Prescription.* While I confess that the basic outline of my suggestions for world monetary reform remained about the same in the years following 1959, it was modified in some important respects, particularly the role of gold in the system.

My 1959 proposal would have required "all members to hold in the form of Fund deposits a certain proportion of their gross monetary reserves. All would agree to accept such deposits in settlement of their international claims without limit, but would have the right to convert at any time into gold, if they so wish, deposits accrued to their Fund account in excess of their minimum requirement" (1960, p. 106).

As of the end of 1958, I considered a minimum requirement of 20 per cent to be adequate and achievable mostly through net claims of \$2.6 billion already held by members on the Fund and by transfers to the Fund of about one-third, or \$5.3 billion, of the \$15.8 billion in foreign-exchange reserves then in existence. Only a handful of countries—primarily the United States, which held no foreign-exchange reserves—would have had to satisfy their minimum deposit requirements by gold transfers (\$3.4 billion, or less than 10 per cent of the \$37.9 billion in world monetary gold holdings at the time). Of total gold reserves of \$56.2 billion, a minimum of 20 per cent, or \$11.2 billion, would have been held in Fund deposits, but countries could have retained if they wished 61 per cent, or \$34.5 billion, in gold and 19 per cent, or \$10.5 billion, in foreign exchange.

After explaining my reasons for considering this minimum proposal as likely to be sufficient at the time, I added that "provision would have to be made to safeguard the Fund's liquidity both against unforeseen conversions of excess deposits into gold and, in the long run, against the increasing gap between the probable level of world gold stocks and the desirable expansion of overall monetary reserves" (1960, p. 114). I considered various alternative ways to meet the problem, the simplest of which was "to authorize the Fund to raise uniformly the 20 per cent deposit requirement to a higher ratio of . . . gross monetary reserves . . . [or] to leave the basic 20 per cent requirement unchanged—or to increase it more moderately—but to impose higher deposit requirements upon that portion of each member's reserves which exceeds the average ratio of world monetary gold to world imports" (1960, p. 114). As of June 1978, the implementation of the first of these suggestions would have increased the minimum deposits with the Fund to about two-thirds instead of 20 per cent, reduced gold holdings (valued at the last official

price) to 20 per cent and reduced maximum foreign-exchange balances to 14 per cent.

This would be in line with the still piously proclaimed objective of our officials to make SDRs (now 3 per cent of gross reserves) the major reserve instrument and to phase out reserve currencies, as well as gold, from the world monetary system.

The policies actually followed by the United States over this twenty-year period were, of course, very different. Robert V. Roosa, Under Secretary of the Treasury for Monetary Affairs, and Charles A. Coombs, at the Federal Reserve Bank of New York, deployed enormous skill and ingenuity to slow down the mounting conversions of dollar claims into gold by exchange guarantees to creditors in the form of "Roosa bonds" and "swap agreements," the creation of the "gold pool" and its replacement by the "two-tier" gold-pricing system, etc., etc. These palliatives postponed the day of reckoning much longer than I would have expected but did not prevent it. It came, on August 15, 1971, with a radical and—to my mind—disastrous reorientation of U.S. postwar foreign economic policies under the iron hand of Secretary of the Treasury John Connally.

Tribute should be paid, however, to the courage and skill with which an earlier Secretary of the Treasury, Henry H. Fowler, succeeded against tremendous odds in steering the negotiation of the first IMF amendment, which created about \$9.5 billion of SDRs very similar in effect to my proposed reserve deposits with the IMF. The SDRs, however, were an *addition* to, rather than a *substitute* for, gold and foreign-exchange holdings. I commented, in a number of speeches and articles, and particularly in my November 22, 1967, testimony before the Joint Economic Committee of Congress, on this basic shortcoming of the Rio Agreement:

General agreement on sensible and viable reforms of our anachronistic world monetary system depends . . . on the development of . . . a comprehensive approach, encompassing the respective role to be assigned in the future to all *three* components of world reserves, *i.e.*, to gold and foreign exchange as well as to collectively created reserve assets. . . . Rational decisions . . . regarding the amounts of new reserve assets to be created will remain out of reach as long as no parallel agreement is reached regarding the additions to overall reserves to be expected from gold and foreign exchange. New reserves well in excess of \$3 billion a year might have to be created if foreign central banks not only refuse to pile up more dollar and sterling balances as reserves, but convert into gold—as they did in 1965—large amounts of such balances accumulated over fifty years past. On the other hand, any creation of new reserve assets would be objected to by many countries as inflationary if dollar and sterling accumulation were to be resumed on a substantial scale in the future.

Although improbable at first view, this second possibility cannot be ruled

out in view of the enormous financial economic and political leverage which the United States can use on many countries to deter conversions of these dollars into gold (Joint Economic Committee, 1967, pp. 129-131).<sup>3</sup>

Under Secretary Roosa, who, as late as 1962, opposed my proposal for reserve deposits with the IMF as a "fruitless exercise" whose outcome might be "utter chaos and impairment of normal transactions among nations" (Roosa, 1962; 1967, pp. 102, 103), was among the first officials to admit, as one of the "main lines of inquiry" one year later, the possibility of reconstituting the IMF "by endowing it with the capacity to create credit and the power to allocate such credit among members" (Roosa, 1963; 1967).

The brunt of U.S. official policies, however, remained to phase out gold, but not dollars, from international reserve creation. The American negotiators of the SDR agreement desperately tried to shape it in such a way as to make it "better than gold, but not as good as the dollar"—a squaring of the circle, indeed! They may have received unintended encouragement from the greater stress placed by most of my academic friends (first and foremost, Professor Fritz Machlup) on the need to demonetize gold rather than on the need to control the flood of dollars into the world reserve pool. Most of the academic enthusiasm, however, was centered on floating exchange rates, which I shall discuss briefly in the next section.

*Today: November 1978*

Current developments and prospects give me little reason to modify the *fundamental* diagnosis and prescription outlined above, but they do force me to modify and supplement both in some important respects.

*Diagnosis.* For the United States, the inflationary proclivities of the system have been amply demonstrated, and they have not been restrained so far by the adoption of floating exchange rates. The U.S. government's indebtedness (mostly Treasury securities) and U.S. banks' liabilities to foreigners (including those of their branches abroad) nearly doubled in the years 1970-72, rising from \$78 billion at the end of 1969 to \$146 billion at the end of 1972, and increased two and one-half times more in the following five years to \$363 billion at the end of 1977 (see Table 1 above). The total increase in indebtedness of \$285 billion over these eight years is exactly equal to the total increase of the U.S. federal debt over this period, from \$279 billion at the end of 1969 to \$564 billion at the end of 1977—a bizarre coincidence but arguably not entirely accidental!

<sup>3</sup> This second possibility was to materialize indeed, on an undreamed-of scale, soon after the first allocation of SDRs in January 1970.

This led to an increasing overvaluation of the dollar, a decline in U.S. competitiveness in world trade, and consequent recessionary tendencies and unemployment in important sectors of U.S. industry. The two official devaluations of the dollar and its "dirty" downward float since March 1973 have undoubtedly overcorrected its 1971 overvaluation, but they have aggravated inflationary price and cost rises and, most ominous, seriously threaten today the continued acceptability of dollar settlements, on which the United States has become overly dependent for the financing of its budgetary, as well as its balance-of-payments, deficits.

The international paper-dollar standard has become even more distasteful and unbearable to foreign dollar accumulators than the pre-1971 gold-dollar standard. The flooding of world reserves by dollar and Euro-dollar overflows caused them to double over the years 1969-72 and to redouble over the years 1973-77. Central banks' so-called "stabilization" interventions in the exchange markets absorbed these overflows, but at the cost of "high power" reserve-money issues of their national currency, multiplied by their commercial banks under traditional fractional-reserve practices.

For countries already prone to inflationary policies, the increase in dollar reserves—shared by practically all of them until the explosion of oil prices at the end of 1973—added to internal inflationary pressures. At the same time it removed one of the main sanctions capable of persuading them to correct such policies, the devaluation or depreciation of their currency on the exchange markets, which had previously been forced upon them by their foreign deficits and the depletion of their monetary reserves.

For the countries most determined to combat inflation, only two ways remained open. First, they could try to offset some of their dollar purchases by a contraction of their domestic lending. This, however, was by no means as easy, economically or politically, as academic writers in the United States often made it seem. I certainly would not envy the job of a central bank governor having to argue that loans to his government, to other public entities, and to the private sector of the economy had to be curtailed in order to offset loans to the United States to help it finance its domestic inflation, its military escalation in Vietnam, and even the purchase of some of the home country's enterprises by U.S. firms. The second way open to such countries was to refuse to buy dollars and let their exchange rates appreciate. As I have already remarked, however, this would decrease their industries' competitiveness in world markets and arouse powerful political opposition from these industries—especially

if other trading countries could not be induced to follow suit promptly and participate in a joint float vis-à-vis the dollar.

*Prescription.* I would therefore continue to advocate the same fundamental reforms of the system which I have vainly supported since 1959 and which were largely endorsed in the early 1970s by the IMF Executive Directors and the Committee of Twenty. One of the favorite objections raised by my central bank friends to these proposals was that they might unleash pressures from the less developed countries to create excessive, inflationary amounts of SDRs—or similar reserve deposits in the IMF—to finance their deficits. I would hope that this objection has been laid to rest by now. The uncontrolled reserve creation of the unreformed dollar-exchange standard has certainly demonstrated its even greater and more inflationary power to finance the more developed countries, which are less in need of such financial assistance. Of the fantastic \$272 billion increase in world reserves from the end of 1959 through June 1978, 94 per cent benefited (?) the developed countries, *less than 3 per cent the less developed countries*, and the remaining 3 per cent the increase of the official gold price from \$35 to \$42.22 per ounce.

The changes in my own appraisal of world monetary reform flow from two new problems which I confess not to have foreseen in 1959: the explosion of oil prices and the explosion of the private financing of international deficits. I was also totally wrong in forecasting in March 1973 that the generalization of floating exchange rates would be only a short-lived expedient.

As for the oil-price explosion, I have come to these conclusions:

1. The oil-price explosion was in part the result of an inflation already well under way by then rather than its cause. World export and import prices, measured in dollars, were already rising at an annual rate of 30 per cent in the preceding twelve months from October 1972 to September 1973. This rise was not unconnected—to say the least—with the doubling of world monetary reserves over the previous three years, which was itself the result of U.S. procrastination—again, to say the least—in the negotiation of international monetary reform.

2. An earlier adoption of my proposals for reform would have channeled into reserve deposits with the Fund the bulk of OPEC's, as well as of other countries', surpluses. The IMF would then have been able to recycle these funds instead of having to solicit meager lending contributions from OPEC countries and to leave the bulk of the recycling responsibility to the United States and the Eurocurrency market. Direct recycling of the mounting surpluses of OPEC and a few other countries by the United States alone—excluding even foreign branches of U.S. banks—entailed an incredible expansion of U.S. government and U.S.

banks' foreign indebtedness from \$85 billion at the end of 1972 to \$221 billion in June of 1978. The annual pace doubled from \$12 billion in 1970-72 to \$25 billion in 1973-77 and peaked at \$74 billion in the last quarter of 1977. The world liabilities of commercial banks reported by the Bank for International Settlements—including those of U.S. banks and branches—rose from \$217 billion in 1972 to \$700 billion in mid-1978 (see Table 1 above).

The explosion of oil prices was thus financed by a corresponding explosion of international financing, mostly by commercial banks. Banks in the United States—again excluding their branches abroad—increased their foreign claims from \$21 billion in 1972 to \$87 billion in mid-1978, at an average rate of \$14 billion a year over the years 1973-77 and a peak rate of \$21 billion in 1976, compared with an average rate of \$2.5 billion in 1970-72 and well below \$1 billion in the 1960s. For the world as a whole, the foreign claims of commercial banks reported by the Bank for International Settlements rose from about \$200 billion in 1972 to \$700 billion in mid-1978. This \$500 billion increase in commercial banks' foreign loans dwarfed the \$14 billion increase in IMF lending and even the \$133 billion rise in central banks' foreign-exchange investments. The abdication of official control over the explosion of international financing could hardly be more complete.

What conclusions can I draw today from these developments?

1. They certainly call, first of all, for a rounding out of my 1959 proposals. The control of international liquidity must encompass not only all three components of *official* world reserves (gold, foreign exchange, and SDR or other reserve deposits in the IMF) but also the mushrooming of commercial-bank lending. If we are really determined to combat inflation as well as recession and unemployment, we must find ways to direct this lending toward the breaking up of inflationary bottlenecks and the relief of the worst pockets of recession and unemployment while restraining the excessive financing of other less essential or downright wasteful expenditures by the public and private sectors in many countries. It is incredible indeed that, in the continuous international consultations and repeated summit meetings of governments and their financial advisers, hardly a word has been breathed so far concerning the need to negotiate among the major financial centers some sensible framework for so-called "offshore banking" operations, which are undoubtedly prompted in part by a desire to escape regulations and taxation. This desire is only too understandable, but it should be met by reforms of unwise regulations and taxation rather than by blatant loopholes in the enforcement of those deemed essential to the public interest.

2. I must admit, however, that, in the absence of an adequate system of

IMF recycling, this recycling by the United States and the Eurocurrency market has helped provide adequate—or more than adequate?—financing to the countries worst hit by the sudden explosion of oil prices. The slowness of the international decision-making process—even under the weighted-voting *majority* procedures of the IMF as opposed to the usual *unanimity* rule—might have seriously impeded the prompt recycling of OPEC surpluses if they had been channeled into SDRs or similar reserve holdings with the IMF rather than into dollars and Eurodollars.

3. I concede that even an ideal management of world-reserve creation by a reformed IMF might have reduced, but could not have entirely avoided, inflationary financing of the deficits triggered by the rise of oil prices without risking a recession worse than the one the world experienced anyway. The unbridled financing of the unreformed dollar-exchange standard undoubtedly facilitated an excessive postponement of desirable adjustment policies by some of the oil-importing countries. But the surpluses of a few of the major oil-exporting countries could not have been eliminated except by inducing a slowdown of oil production and exports far below the levels essential to the preservation of feasible economic activity and employment in the rest of the world.

4. Last but not least, it is now apparent that our shrinking paper dollar is becoming increasingly unacceptable to the surplus countries as the major recycling instrument for their surpluses. Further procrastination in the negotiation of agreed reforms of the world settlement and reserve system will inevitably trigger an utter collapse of the international paper-dollar standard, after the collapse of the Bretton Woods gold-convertible dollar standard. The generalization of floating exchange rates was the first step in that direction rather than a viable and durable framework for international settlements and reserve accumulation.

*Floating rates.* Even before August 1971, persistent balance-of-payments deficits were sanctioned by downward re-pegging or downward floating of the deficit countries' currencies other than the reserve currencies (sterling and the dollar, at first, and the dollar alone after November 1967). The main difference introduced by floating rates is precisely that the surplus countries have the option of letting their currencies float upward in order to slow down their inflationary financing of U.S. deficits. As noted above, they have been only partially successful in that respect.

The advantage of floating rates for the depreciating-currency countries has been to preserve or restore their competitiveness in world trade by facilitating *prompter* adjustments of exchange rates, offsetting *faster* increases in domestic prices and wages. Under the previous pegged-rate system, currency devaluation was an official admission of the failure of

governmental policies, often accompanied or followed by the toppling of the officials in charge. This trauma has now been removed, thus accelerating currency depreciation by the countries in persistent deficit.

The elimination of the stigma of devaluation may be a mixed blessing, however, weakening the resistance of responsible officials and policy-makers to inflationary policies. Floating rates have tended, moreover, to amplify anticipatory capital movements, *overcorrecting* exchange rates well beyond what would be needed. The consequent higher domestic prices and costs have invited renewed or continuous currency depreciation to restore ever-elusive purchasing-power parities in world trade.<sup>4</sup>

The most striking feature of the last six to eight years of floating rates is that they scarcely changed the broad pattern of previous disequilibria among the major trading countries. The countries that experienced the largest surpluses before the increase of oil prices have about doubled them, in spite of the strong appreciation of their currencies, and the countries then in deficit saw their deficits more than triple in the following years, in spite of the sharp depreciation of their currencies (see Table 2).

TABLE 2  
THE UNCHANGING PATTERN OF MAJOR OECD COUNTRIES' SURPLUSES  
AND DEFICITS ON CURRENT ACCOUNT, 1972-78  
(in billions of dollars)

	Exchange-Rate Changes <sup>a</sup>		Surpluses and Deficits				
	Vis-à-Vis the \$	Effective Rates	1972	1973	1974-76 Average	1977	1978 Forecast
<b>Surplus countries</b>			<b>10.2</b>	<b>8.0</b>	<b>9.8</b>	<b>18.2</b>	<b>28.8</b>
Japan	+35	+28	6.6	-0.1	-0.6	11.0	17.5
Switzerland	+83	+62	0.2	0.3	2.1	3.7	4.8
Germany	+58	+43	0.8	4.3	5.8	3.8	5.0
Netherlands	+48	+22	1.3	2.4	2.2	0.2	1.5
Belgium- Luxembourg	+40	+12	1.4	1.2	0.3	-0.5	0
<b>Deficit countries</b>			<b>-8.0</b>	<b>-5.9</b>	<b>-12.7</b>	<b>-24.7</b>	<b>-24.3</b>
United States	...	-13	-9.9	-0.4	2.6	-20.2	-25.0
Canada	+ 1	- 2	-0.7	0	-3.3	-3.9	-3.5
United Kingdom	-27	-37	0.3	-2.2	-4.4	0.3	1.8
Italy	-29	-41	2.0	-2.7	-3.5	2.3	3.3
France	+13	- 1	0.3	-0.7	-4.1	-3.2	-0.8

SOURCES: Exchange rates: *International Financial Statistics*, lines ah x and am x of country tables. Surpluses or deficits on current account: OECD, *Economic Prospects*, July 1978.

<sup>a</sup> Percentage appreciation (+) or depreciation (-) of dollar rates and of effective multilateral exchange rates from May 1970 to 1977.

<sup>4</sup> I pointed out as early as 1959 what was later popularized as the "ratchet effect" (or "vicious circle") of floating rates for countries in deficit (see Triffin, 1960, pp. 82-86, and 1968, pp. 73-75).

(The United Kingdom and Italy moved to moderate surpluses in 1977, but informed opinion in both countries credits most of this improvement to the *internal* anti-inflationary policies forced upon them by the IMF as a condition for further lending, rather than to exchange-rate adjustments alone.)

While recognizing that floating rates became unavoidable as a result of the political inability or unwillingness of the United States—and other countries—to negotiate the reforms necessary to avoid a flooding of world reserves by reserve currencies, I continue to feel that floating rates should be managed internationally rather than nationally, and that international agreements should aim at (1) stabilizing rates eventually *within* so-called “optimum currency areas” and (2) defending jointly less firmly pegged rates *between* optimum currency areas (including, of course, the United States as such an area) and the occasional readjustments made unavoidable or desirable whenever domestic policies within each of these areas fail to prevent excessive cost-price disparities that destroy competitive equilibrium in their external transactions.

### **Regional Monetary Cooperation**

I have long considered regional monetary cooperation and integration as complementary, rather than alternative, to feasible world monetary agreements. My theoretical arguments for this view, which is in disagreement with the view held initially by many of my best economic friends, are summarized in Chapter 7, section III, of *Europe and the Money Muddle*; in a paper on “The Size of the Nation and Its Vulnerability to Economic Nationalism” presented at a roundtable of the International Economic Association in 1957 (in Robinson, ed., 1960, pp. 247-264; reprinted in Triffin, 1966, pp. 387-405); and in many other speeches and articles. These theoretical arguments need not be rehashed here, especially as they are now widely accepted by the profession. Let me merely mention that in the 1950s the European Payments Union (EPU) played a more effective role than the IMF in the changeover of Western Europe from bilateralism to world convertibility, and that the regional trade-liberalization agreements of the Organization for European Economic Cooperation (OEEC), and later the European Economic Community, have certainly proved “trade creating” rather than “trade diverting,” as initially feared by Jacob Viner, Gottfried Haberler, and *tutti quanti*.<sup>5</sup>

<sup>5</sup> Regional trade within the OEEC area, measured in dollars, increased 4.3 times from 1946 to 1958, but exports to other countries increased in the same proportions and imports from other countries increased 2.4 times. Regional trade among present European Community countries rose 16 times from 1958 to 1977, exports to other

My efforts to promote regional trade and payments agreements in Latin America (especially Central America), Asia, and Africa were only moderately successful.<sup>6</sup> For brevity's sake, I shall comment only on the checkered evolution of my proposals for European monetary union from 1947 to the present day.

### *The Creation and Demise of EPU: 1947-58*

I first proposed the creation of a "European Clearing Union" in a memorandum to the IMF prepared in September 1947 and distributed by the Fund to its member countries in December of the same year.<sup>7</sup> This proposal met with strenuous opposition from the U.S. Treasury and the Federal Reserve Board but was strongly supported by the Economic Cooperation Administration and the State Department. I was asked in December 1949 to formulate concrete U.S. proposals and to negotiate them in the OEEC. Nine months later, on September 19, 1950, the European Payments Agreement was signed, entering into operation, retroactively, as of July 1, 1950.

Rarely had an international negotiation been so successful in reaching its objectives rather than hiding its failures behind platonic declarations of intent nullified in effect by mountains of exceptions, transitory provisions, and escape clauses. The EPU agreement was a remarkably clean and simple document, embodying sweeping and precise commitments of a revolutionary nature, which overnight drastically shifted the whole structure of intra-European payments from a bilateral to a multilateral basis.

Equally rarely has an international agreement been as successful in reaching its objectives—the liberalization of trade and the restoration of currency convertibility, not only among its members but with other countries as well. It was this very success (and Britain's vain hopes of restoring sterling as a world reserve currency) that caused its unwise dismantlement in December 1958.

I was undoubtedly a very poor prophet and unsuccessful adviser in this respect. A few months earlier, in my inaugural Wicksell lectures of May

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countries 9 times, and imports from other countries 8 times. Price rises account for half or more of these latter increases, but they remain spectacular even in volume terms.

<sup>6</sup> See Triffin (1960, Chaps. XII and XIII), ECAFE (1967, Appendices 5 and 7), and later reports of ECAFE (1974) on the setting up of an Asian Clearing Union by five countries (Iran, Sri Lanka, India, Pakistan, and Nepal), later joined by two others (Bangladesh and Burma).

<sup>7</sup> See excerpts in Triffin (1966, pp. 407-418, and later proposals and comments on pp. 418-477) and in Triffin (1957, pp. 161-233 and 280-293).

22 and 28, 1958, I deplored the temptation to solve the European payments problems

by such simple slogans as that of a return to convertibility . . . (1958, p. 25)

or even

to try and expand on a world-wide scale the techniques of cooperation which have been so successful in OEEC. This undoubtedly could and should be done, but to a more limited extent than would appear at first . . . (p. 23).

The problems which this involves are political and administrative . . . as much as and even more than, economic. The basic challenge of our times is to escape from the hopeless dilemma of choosing between the dead hand of national sovereignty and the utopia of world government, and to distribute among different and overlapping groups the responsibilities for centralized decision making that it is most urgent and feasible to assign to each. This principle, long recognized within national boundaries in the delimitation of personal freedom, minority rights, municipal, provincial and state powers, etc., should apply equally to the delimitation of the respective fields of action of various regional groupings and of world-wide negotiations and institutions (p. 25).

The difficult and time-consuming process of world-wide negotiation should not be wasted on issues that can be solved at a more modest level (p. 23).

The same concatenation of concentric circles for policy harmonization and decision making at various levels is also indispensable to guard against the potential consequences of partial failures and unexpected breakdowns in planning. The fabric of international co-operation must be strengthened by a defense in depth rather than by a single Maginot line, in order to prevent a localized depression from spreading into world deflation or bilateralism.

Finally, the construction of a stable and freer system of world trade and payments must be conceived as a continuing and permanent effort to adjust international institutions and policies to new needs and new possibilities. Theoretical blueprints of ideal, but far distant, goals are always in danger of being overtaken and made obsolete by unforeseen events and of becoming an impediment rather than a spur to actual progress. The path of fastest advance is more likely to be charted tomorrow, as it has been yesterday, by the transitional solutions given to the immediate problems confronting us, and by the experience gained from the obstacles and success which we have met on the way (pp. 25-26).

The official rejection of this philosophy in the return to worldwide but unstructured convertibility in December 1958 was dearly paid for in the 1960s and 1970s by the recurrent and ever-deepening crises with which we are all too familiar. This grim record, I must admit, gives me no reason to change the philosophy expressed above. It has certainly dampened my optimism about the ability to persuade policy-makers, however, especially when so many of their official, and even academic, advisers are all too

prone to settle for “second best” or “nth best” advice as the only advice likely to be accepted by their masters.

### *The European Community: 1958-78*

The creation of the European Community gave a new impetus and new dimensions to concrete planning for European monetary integration. I have been closely associated with this planning as part-time consultant from the very beginning to this day. Even more rewarding was my association with the “Father of Europe,” Jean Monnet, and his Action Committee for the United States of Europe.

I shall not bore you with a repetition of the multiple suggestions I presented to the Community and the Action Committee over a twenty-year period or of the possible influence they may have had—but, alas, more often failed to have—on actual policy decisions during this period. Let me merely mention that at the first meeting of heads of state and government of the Community at The Hague in December 1969, Jean Monnet played a crucial role in convincing and helping Chancellor Willy Brandt to propose the creation of a “European reserve fund.”<sup>8</sup> This very concrete and immediately feasible proposal was, unfortunately to my mind, “kicked upstairs” into a more ambitious “monetary union” proposal inevitably subject to various preconditions (“*préalables*” in French) whose fulfillment would be extremely difficult and time-consuming. The high hopes entertained at that time were soon to be dashed by different reactions within the Community to the growing crisis of the dollar, and particularly by the clash between Gaullist and German policies in this respect.<sup>9</sup>

Enthusiastic as I have long been (see, e.g., Triffin, 1953) about European monetary union—inseparable, of course, from *political* union—my main concern has been throughout on *taking the first steps*, immediately negotiable and implementable, rather than on *merely talking about the last ones*. There will be no move at all until the first step is taken; the later ones will inevitably be shaped by the unforeseen opportunities and obstacles revealed by the preceding ones rather than by any preconceived blueprint of a still-distant future.

My second guideline has been to choose, among alternative first steps, those more likely to prove “seminal” or “germinal,” that is, to develop an internal momentum of their own toward the ultimate objective.

<sup>8</sup> See my report to the Action Committee’s sixteenth session in Bonn on Dec. 15 and 16, 1969, reprinted in Triffin (1969).

<sup>9</sup> See my letter of Feb. 22, 1965, to General de Gaulle in *Espoir*, Paris, October 1973.

This methodology inspired the emphasis I placed on (1) the creation of a European clearinghouse or reserve fund, developing gradually into a European central bank,<sup>10</sup> and (2) the adoption of a European unit of account, developing gradually into a unit of exchange accessible to the public as well as to member central banks, and ultimately into the common currency of the European Monetary Union.

Like Louis XVIII, I found nothing "to learn or to forget" about these two keystones of my prescription for progress toward monetary union. Yet, as I expected from the start, their concrete shape was progressively modified by the failures, successes, and new opportunities revealed by experience over these twenty years.<sup>11</sup>

My proposal for a European clearinghouse<sup>12</sup> or reserve fund in which each member central bank would hold in reserve deposits an agreed proportion of its global monetary reserves (initially 10 or 20 per cent, but rising gradually to 100 per cent in later years) was repeatedly endorsed by the Commission of the European Economic Community. It has now been adopted, at long last, as a keystone of the July 1978 Bremen proposals for a European monetary system. It would be matched by national-currency deposits and provide ample means for central banks' stabilization interventions in the exchange markets in member currencies as well as in dollars. It would expand and make fully multilateral existing provisions for mutual monetary support in defense of agreed exchange rates and policies. These credits could be made repayable in medium- or long-term bonds carrying appropriate exchange-rate and other guarantees, transferable among member central banks—from those whose reserves were falling to those whose reserves were rising—and negotiable by them on the private market in order to wipe out any inflationary excess of liquidity in their home market. They would thus serve to launch the open-market operations necessary to the organization of a genuine European financial market.

This form of repayment would be far more acceptable, in many cases, than the use, as now, of inconvertible, unguaranteed, and shrinking dollars for the repayment (!) of mutual-support operations in the Community.

<sup>10</sup> Just as clearinghouses for commercial banks have developed in the past, through a normal evolutionary process, into full-fledged national central banks.

<sup>11</sup> Compare, for instance, the articles quoted above with my more recent writings, such as my inaugural lectures at the Paul-Henri Spaak Foundation in Brussels in November 1974 (Triffin, 1976); Triffin (1974); Triffin (1977); Triffin (1978a); and particularly sections IV and V of Triffin (1978b).

<sup>12</sup> First developed at a meeting of central bank experts in Neufchatel, Switzerland, in August 1954 (see Triffin, 1957, pp. 224, 233, 284-286, and 301, and Triffin, 1960, p. 138).

My second major proposal was the adoption of a European unit of account that would develop gradually into an exchange unit for intra-European settlements, private as well as official, and ultimately into a common currency replacing the present national currencies in the final stage of full monetary union.

The abandonment by the IMF of any numeraire for par values and exchange rates and the failure of the Werner plan have induced me to modify important details of this proposal, but not its major features:

1. The use of a European unit of account as numeraire for European exchange rates and as benchmark for desirable or unavoidable readjustments of such rates. The need has become even more obvious today as a result of the rejection of gold as numeraire and benchmark, and of the wild fluctuations of the dollar as an alternative numeraire and benchmark.

2. The use of such a unit for official intra-European settlements, the accumulation of reserves, stabilization interventions by central banks in the exchange markets, and mutual monetary-support operations and their repayment.

3. The use of such a unit by the private sectors of the economy for the denomination of intra-European contracts. By definition, such contracts cannot be denominated simultaneously in the domestic currency of each of the contracting parties and are largely denominated in fact in a third currency—sterling in former days, dollars when I first wrote about the problem, and increasingly Eurodollars and other Eurocurrencies.

4. The progressive extension of this use from intra-European transactions to more and more categories of domestic transactions as well, and ultimately to all domestic as well as intra-European transactions within the Community.

The two major modifications of my views relate to the *definition* of the unit of account and to its description as a “parallel currency” circulating alongside the domestic currencies until the final stage of the merger into a single common currency.

Initially I suggested as a definition that the unit of account be equivalent to whatever EPU member currencies remained most stable in their IMF par values, which were then defined in terms of gold. This definition was actually adopted by Community for the Agricultural Common Market and, at the initiative of the President of the Kredietbank, Fernand Collin, for the flotation of Eurobonds, totaling over the years the equivalent of about \$2 billion.

For a number of reasons too long to detail here, my most recent proposal advocates the definition of the European Unit of Account (EUA) officially adopted by the Community in 1974 and extended gradually to

more and more of its transactions—a weighted basket of the member countries' currencies. This proposal was unanimously endorsed on May 12, 1978, by the European League for Economic Cooperation, as was my suggestion for christening the unit "Europa," both as a symbol of the ultimate aim of European union and to dispense with the need for multiple translations into the various languages of Europe and of the world.<sup>13</sup>

I still feel, however, that a stronger definition might prove desirable some day—particularly in view of the proposed enlargement of the Community through the accession of Greece, Spain, and Portugal. To prevent the value of the Europa from being dragged downward by the depreciation of any of the weaker currencies in the basket, any currency whose market exchange rate fell by more than 5 per cent vis-à-vis the EUA basket could be excluded temporarily from the basket calculation and reintegrated whenever it had avoided such a 5 per cent depreciation for a year.<sup>14</sup>

I had initially foreseen the transition from national currencies to a single European currency in three steps (see, e.g., Triffin, 1953, esp. pp. 11-12). The first, following a transitory period of flexible rates or successive rate readjustments, would have been to consecrate the effective stabilization of national exchange rates by replacing the existing national currency units with new currency units which would still be national but would be equivalent in value to the common European unit of account, for which I then proposed the name of ECU (European Currency Unit).

This step would pave the way for the second step, the circulation of national ECU's throughout the territory of the Union. In just this way, before the First World War, French, Swiss, Belgian, Greek, Spanish, and other national gold and silver coins (with a silver content far inferior to their nominal value) circulated in domestic as well as international payments throughout the territory of the Latin Monetary Union.

The third and final step of monetary unification would then merely require the replacement of national ECUs by European ECUs and the transfer of the outstanding assets and liabilities of national central banks to a joint European Monetary Authority, organized on a largely decentralized basis like the Federal Reserve System in the United States.<sup>15</sup>

<sup>13</sup> Reuter's press agency reported on July 11 that "leading Belgian banks are now accepting deposits in European units of account (EUA) from major corporations and public agencies, and hope to start lending in EUA soon."

<sup>14</sup> For further details and arguments on this subject, see Triffin (1977).

<sup>15</sup> For further details, and notably a method for the equitable distribution of the burdens associated with the maintenance of adequate reserve levels in gold or foreign currencies, see Triffin (1960, pp. 142-143).

My more recent description of the European monetary unit as a "parallel currency"—an apt wording that I did not originate—is designed to emphasize the fact that, even initially, this would not be a mere unit of account but an exchange unit circulating parallel to the domestic currencies of member countries. Domestic currencies would probably continue for many years to be used in all or most domestic payments. The ECU (or Europa) would substitute primarily for the foreign currencies, or Eurocurrencies, that are already widely and increasingly used in international transactions and bank accounts.<sup>16</sup> Even the most skeptical or nationalistic opponents of monetary union should welcome the use of the ECU as an alternative to such Eurocurrency denominations, which expose lenders and borrowers to huge windfall gains or losses on sharply rising Euro-Swiss franc or Euromark and declining Eurodollar and Eurosterling claims and liabilities.

This initial step would not entail a final commitment to the merging of national currencies into a single European currency. The use of the ECU, however, could be gradually extended to various categories of domestic transaction as each country succeeds in stabilizing its exchange-rate vis-à-vis the ECU. If and when sufficient progress has been achieved to make the hoped-for European monetary union feasible, the already existing Europa would offer a more realistic avenue of transition than the eventual merging of national currencies into a single European currency that was envisaged in the "Werner Plan."

### **Conclusion**

My conclusion can be very brief indeed. I have been a fairly successful prophet—alas!—of the inevitable collapse of the international gold-dollar standard enshrined at Bretton Woods, but an unsuccessful promoter—alas!—of the world monetary reforms that might have warded off the inflationary chaos in which we are now engulfed.

I hope that the outcome of the Bremen and Brussels meetings of the European Council regarding the development of a European monetary system will disclose that my proposals for regional monetary integration have been less barren. I also continue to hope that this emerging European monetary system will not remain an inward-looking oasis but instead will revive interest in the world monetary reforms into which it should be inserted. That would be in the interest of Europe as well as of the United States and the other countries of our shrinking planet.

<sup>16</sup> At the end of June 1978, about \$400 billion, or 81 per cent, of the \$492 billion of external assets and \$470 billion of external liabilities of banks in the eleven European countries reporting to the Bank for International Settlements.

## References

- Altman, Oscar L., "Professor Triffin on International Liquidity and the Role of the Fund," *IMF Staff Papers*, 8 (May 1961), pp. 151-191.
- ECAFE, *Report and Recommendations of the Seminar on Financial Aspects of Trade Expansion*, UN Economic Commission for Asia and the Far East, 1967.
- , *Asian Clearing Union*, UN Economic Commission for Asia and the Far East, 1974.
- Emminger, Otmar, *Inflation and the International Monetary System*, Basle, Switzerland, 1973.
- Joint Economic Committee, *Hearings before the Subcommittee on International Exchange and Payments*, Nov. 22, 1967, U.S. Congress.
- Robinson, Austin, ed., *The Economic Consequences of the Size of Nations*, New York, Macmillan, 1960.
- Roosa, Robert V., "Assuring the Free World's Liquidity: Panaceas or Prerequisites," *Business Review*, Federal Reserve Bank of Philadelphia (September 1962); reprinted in Roosa (1967, pp. 93-108).
- , "Reforming the International Monetary System: Pitfalls and Prospects," *Foreign Affairs*, 42 (October 1963), pp. 107-122; reprinted in Roosa (1967, pp. 109-126).
- , *The Dollar and World Liquidity*, New York, Random House, 1967.
- Triffin, Robert, "Système et politique monétaires de l'Europe fédérée," *Economia Internazionale*, Genoa (February-March 1953), pp. 207-214.
- , *Europe and the Money Muddle: From Bilateralism to Near-Convertibility, 1947-1956*, New Haven, Yale University Press, 1957.
- , *The Future of the European Payments System*, Stockholm, Almqvist and Wiksell, 1958.
- , "The Return to Convertibility: 1926-1931 and 1958-? or Convertibility and the Morning After," *Banca Nazionale del Lavoro Quarterly Review*, 12 (March 1959a), pp. 3-57; reprinted in Triffin (1960).
- , "Tomorrow's Convertibility: Aims and Means of International Monetary Policy," *Banca Nazionale del Lavoro Quarterly Review*, 12 (June 1959b), pp. 131-200; reprinted in Triffin (1960).
- , *Gold and the Dollar Crisis: The Future of Convertibility*, New Haven, Yale University Press, 1960.
- , *The World Money Maze: National Currencies in International Payments*, New Haven, Yale University Press, 1966.
- , *Our International Monetary System: Yesterday, Today, and Tomorrow*, New York, Random House, 1968.
- , "On the Creation of a European Reserve Fund," *Banca Nazionale del Lavoro Quarterly Review*, 22 (December 1969), pp. 327-346.

- , "L'Europa: Unité de change ou unité monétaire?" *Revue politique et parlementaire*, Paris (November-December 1974); published in English as "A European Settlement Area and Parallel Currency: The Europa," *International Bulletin*, Banco de Vizcaya, No. 6.
- , "L'Europe face à la crise du système monétaire international," pp. 1-75 in Triffin *et al.*, *L'Europe des crises*, Brussels, Bruylant, 1976; statistical annex on "A European Area in World Trade" and second lecture on "The Community and the Disruption of the World Monetary System" published in English in *Banca Nazionale del Lavoro Quarterly Review*, 27 (March 1975), pp. 3-35.
- , "A Parallel Currency as a Shelter against Exchange Rate Instability," *Bulletin de l'IREES*, No. 45, Université Catholique de Louvain, 1977.
- , "L'Europe face au chaos monétaire international," *Revue de la Banque*, No. 4, Brussels, 1978a.
- , "The International Role and Fate of the Dollar," *Foreign Affairs*, 57 (December 1978b), pp. 269-286.

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