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PART III

Who is Sovereign over the Foreign Exchanges?

CHAPTER 33

The Central Foreign Exchange Triangle, 1932–1934

The action of the United States in leaving the gold standard closed the first phase of the breakup of the nucleus. In Chapters 31 and 32 attention is concentrated on the division of the world's currency system into two great areas, gold and sterling, and direct emphasis is not placed on the position of the central foreign exchange triangle. This major thread in our analysis will now be taken up again and the rest of our discussion of Disintegration will be largely in terms of the behavior of the triangle as such.

The Triangle in 1932, Unbalanced but Provided with a Point of Reference for Future Stabilization

During the greater part of the year and a half after Great Britain abandoned the gold standard sterling depreciation in terms of the principal gold currencies was about 30 per cent (Chart 69). At this level British exporters enjoyed a competitive advantage over exporters in the gold standard countries though they were at a disadvantage in competition with the exporters of certain countries in the sterling area itself.[1] The exchange position therefore had the effect of concentrating upon the gold standard countries a disproportionate share of the world's burdens in finding a new economic equilibrium. As long as the depreciation of sterling was a common depreciation in terms of the exchanges of the other center countries, and the dollar-franc rate did not seriously overvalue either currency in terms of the other, a point of reference for a future stabilization existed that would eliminate this particular

[1] Cf. Ch. 31, Cultivating England's Garden.

source of international strain. As long as the gold standard arrangements in the United States and France made these two countries active buyers and sellers of gold in the London bullion market this point of reference was simply expressed by the London price of gold (cf. Ch. 30). By the simple act of fixing the price at which gold would be bought and sold freely by Great Britain at an appropriate level, sterling could be stabilized at a rate that would distribute more justly the unavoidable economic burdens of the three countries and of the currency groups they represented, and place the center countries on an equality in their dealings with the periphery countries as far as exchange rates were concerned. Time, however, was of the essence. The world of gold was a patchwork quilt, and prolonged sterling undervaluation, since it was bound to influence the different portions of that quilt in different ways and in unequal degree, was bound, sooner or later, to rob the dollar-franc rate and consequently the London price of gold of its serviceableness as a point of reference for future stabilization. In this respect the central foreign exchange triangle was seriously unbalanced. It was unbalanced also in a more profound sense. The fundamental lack of equilibrium in the world economy, which had destroyed the international gold standard as a device for facilitating the exchange of goods and services among nations and the creation and repayment of international debt, still continued. As long as fundamental economic adjustments were not made, any new system of exchange rates, even one that involved no serious overvaluation of the exchange of any one of the center countries, ran the risk of being overthrown by sudden movements of capital, or undermined by the efforts of individual countries to escape from intolerable economic strain by exporting their economic difficulties.

A Question of Precedence

Our account of the World of Sterling and the World of Gold has indicated that radical measures were being taken to meet

the underlying problems, but that permanent solutions were still to be worked out. International trade was becoming ever more deeply enmeshed in the trammels of the new protection. In the third quarter of 1932, as compared with the monthly average of 1929, three-fourths of the former amount of goods were being exchanged at one-half the former prices, so that in value international trade was little over one-third of what it had been before the depression. There was no real reversal in the general downward trend of prices, the course of which from September 1931 to March 1933 is described by the *World Economic Survey, 1932/3* (p. 40):

"There were few [countries] on or off the gold standard, where the index-number for March 1933 did not stand at the lowest level yet recorded in the depression. In the United Kingdom the recovery after June–July 1932, though subsequently diminished by a falling tendency from October onwards, had not been wholly lost by March. In Chile and Japan prices rose substantially because of currency inflation. There was, in March, a slight upward movement in several countries coincident with the security speculation and exchange disturbances which were caused by the depreciation of the United States dollar. . . .

Apart from the unsettlement in March 1933, . . ., there had been only one period in the last four years during which the downward trend of prices had definitely been arrested. That period was for three or four months before and after the Lausanne Conference in July 1932. The average level of wholesale prices rose between June and October by a little over 2 per cent in the United States of America, and by almost 9 per cent in the United Kingdom, but, in many countries, the decline continued steadily, and in none, except where there was definite inflation, was the improvement anything but hesitating and temporary."

The fundamental price deadlock between agricultural and industrial prices continued and was even intensified. Idle capital continued to seek short term employment in central money markets and to flow from countries where interest rates were high to countries where interest rates were low or falling. Budgetary deficits multiplied. The burdens upon

debtors became intolerable and led to defaults and the repudiation of domestic and international debt. Reparation had to be abolished and the payment of war debts suspended. World markets, in both commodities and internationally traded in securities were broken up.[2]

These conditions were clearly extremely unfavorable to permanent currency stabilization. Yet it was equally clear that they were in large measure the result of the currency instability represented by the depreciation of the periphery countries with reference to the center, and the breakup of the central nucleus. There could be no permanent exchange stability without a solution of the underlying economic problems. There could be no solution of these economic problems without exchange stabilization. Statesmen were divided on a great question of precedence in their endeavor to escape from this difficulty; namely, whether stabilization of the exchanges should precede or follow economic readjustment. But they did not always divide in the same way. The position taken by the major powers on this issue was colored throughout by the actual state of the exchanges. During 1932 the low rate of sterling in terms of gold currencies lay in the background of all practical discussions of international remedial measures. No account of the events of 1933 and 1934 can be complete or accurate without a proper appreciation of this fact.

The representatives of the powers assembled in Lausanne in the summer of 1932 to write the last chapter on German reparation were aware that the settlement of this problem was not in itself a sufficient remedy for the situation confronting them. They resolved therefore to request the League of Nations to convoke a World Monetary and Economic Conference to work out international solutions of the general financial and economic problem. The League of Nations appointed a Preparatory Commission of Experts to draw up an agenda. In their discussion in Geneva from October 31 to November 9, 1932, and from January 9 to 19, 1933, the divi-

[2] *World Economic Survey, 1932/3*, pp. 150–3, table, p. 157, and p. 188.

sion of the powers on the question of precedence was revealed.

Leo Pasvolsky has summed up the position of the British Experts on the Preparatory Commission:

"There were three fundamental conditions pre-requisite to a return to gold laid down by Great Britain and the other non-gold countries. They were as follows:

1. The gap between the level of costs of production and that of commodity prices, produced by the recent drastic fall in prices, must be closed by a rise in the latter.

2. An international economic balance must be reestablished through a satisfactory settlement of the war-debt controversy, a removal of foreign exchange controls, and a substantial modification of economic policies to be achieved by an abandonment of extraordinary trade restrictions and a progressive lowering, as well as eventual relative stabilization, of customs tariffs.

3. Agreement must be reached on a number of technical reforms of the gold standard system, such as a reduction in the percentage of reserves, the abolition of gold coins, and the establishment of a system of central banking collaboration." [8]

The British took this attitude for several reasons. In the first place the injury done to London as an international financial center by the shock of Great Britain's leaving the gold standard was not as great as might have been expected. Confidence in sterling had been effectually restored by the late spring of 1932. There was every prospect that a large volume of foreign exchange business temporarily diverted to Paris would soon return to London. Latin American countries had recently been converting their dollar deposits into sterling. No permanent injury to the sterling acceptance business was to be expected, for the attempt to build up an acceptance market in Paris had failed and there was a strong feeling on the continent that the American discount market did not possess

[8] *Current Monetary Issues* (Brookings Institution, 1933), pp. 23–4. In this section and in the succeeding account of the Conference this source is heavily drawn upon. Mr. Pasvolsky quotes many of the official documents relevant to the Conference, and for convenience, references are to his citations rather than to official sources.

and was not likely to achieve the stability required of an international financial center. The attitude of the British negotiators of the German standstill agreements had been more constructive and accommodating and less legalistic than that of the American negotiators and had created an atmosphere of confidence and trust in the steady continuance of German business relations with Great Britain in the future. As confidence in sterling increased, confidence in the dollar and in American financial institutions declined. On May 6 the *Commercial and Financial Chronicle* estimated that foreign deposits and holdings of sterling bills in London were about £300 million, an increase over September 1931. Immediate stabilization did not seem to the British an urgent necessity for the reestablishment of the international prestige of the City. On this score they could afford to wait and to lay down conditions.

In the second place, the British were in a position to see with peculiar clarity the vital importance of a reversal of the downward trend of prices, especially prices in the gold standard countries. The necessity for raising prices had been the burden of the Macmillan Report which had reached the following famous conclusion (sec. 267/8, pp. 114–15):

"We are emphatically of the opinion that, even if a further fall of wholesale prices be avoided, their stabilization at approximately the present level would be a serious disaster for all countries of the world alike; and that the avoidance of such an event should be a prime object of international statesmanship.

The losses which are now being incurred by nearly all categories of producers of average efficiency in nearly all countries of the world are an overwhelming proof that the fall of commodity prices has gone far beyond the substantial reduction which might be justified in the case of many important commodities by the increases in productive efficiency which have been achieved in recent years. Consequently, even the continuance of the present price level—quite apart from a further fall—must prolong business losses and the unemployment which the attempt to avoid these losses necessarily brings with it, until a substantial down-

ward readjustment of money-costs has been somehow brought about. This would mean a reduction of money-incomes except to the extent that efficiency can be increased yet further. But it is obvious that the reduction of money-incomes must encounter resistance. Each individual, whatever may be the ultimate effects upon his standard of life, resents the lowering of his salary or his wages by economic pressure, and cannot readily believe that this can be necessary at a time when the technique of production is making revolutionary strides forward. Governments and Central Banks will, justly or unjustly, be blamed for the misfortune. Social unrest will tend to make moderate and rational remedies more difficult the longer they are delayed."

This conclusion, in its general aspect, had been doubly and triply reinforced by the effects of the further drastic fall in prices following publication of the Report, and was widely accepted. But in 1932 a general increase in prices initiated outside Great Britain, in particular in the gold standard countries, was in peculiar harmony with British interests. The downward trend in British prices had been checked by the depreciation of sterling, and the restoration of confidence, and by the easy money policy which these two developments had made possible. Further drastic declines in prices in the other gold standard countries, whether brought about by government pressure, as in Germany, or by the general forces of deflation, were a threat to the continued enjoyment of the advantages gained by leaving the gold standard and at the same time clinging to orthodox financial practice. On the other hand, a general rise in prices in the world of gold would have meant that the British easy money policy upon which the cultivation of the home market largely depended, could be safely continued, that the debt-paying and buying capacity of British customers would be improved, and that the advantages of a sober fiscal policy and of a low rate of exchange could both be retained. Therefore the British experts urged a world-wide cheap money policy in order to raise prices, and asserted categorically that they could consider no definite rate for stabilizing sterling. Such a rate, they pointed out, could

not be determined upon until it was seen whether prices in gold standard countries were going to rise or fall.

In the third place, the new protection was peculiarly hampering to British trade, at variance with all British tradition, and a severe impediment to the successful functioning of the great British commodity markets and of the international financial machinery of the City.

Finally, Great Britain was provided with an alternative to world-wide stabilization of currencies, that of cultivating her own garden.

The experts of the gold standard countries advanced the general argument that there could be no restoration of a genuine economic balance, removal of exchange and trade restrictions, and no proper adjustment of prices to costs unless there was, concurrently, exchange stabilization. "They pointed out," Mr. Pasvolsky writes (*op. cit.*, p. 25):

"that fluctuating foreign exchanges represent an immense potential risk of sudden alterations in the terms of trade among countries, and that unless this risk were removed no country could consent to forego the use of trade restrictions which provide a weapon for combating these changes. The fulfillment of the conditions laid down would have for its principal objective the cessation of economic warfare and the promotion of an economic equilibrium, whereas in the absence of stable foreign exchanges, such warfare would be merely intensified and the already existing disequilibrium rendered more widespread and profound."

On the specific question of the necessity of raising prices Mr. Pasvolsky further describes their attitude (p. 29):

"Economic recovery, they argued, means fundamentally an increase in demand for goods and services, national and international, and a consequent expansion of production and trade. A proper functioning of a credit organization, again nationally and internationally, is a vital factor in this process. And whatever might be accomplished within a given country, internationally there can be no hope of a resumption of credit relations until an international standard of value exists once more. Without such a

standard, independent movements of national price levels under the impetus of uncoordinated domestic price-raising measures would merely serve to increase the already existing maladjustments in the world price structure and thus retard rather than promote general economic recovery through a curtailment of international trade.

Moreover, they maintained that efforts on the part of important commercial nations to seek foreign trade advantage through currency depreciation inevitably lead to a fall in gold prices. They pointed to the experience of the countries which were still on the gold standard and which found themselves compelled to meet the competition of the non-gold countries by reducing the prices of their exports."

When the Preparatory Commission held its first meeting in October the deadlock seemed complete, but at the second meeting it was broken sufficiently to allow the preparation of a Draft Annotated Agenda for the forthcoming World Economic Conference. The principle adopted was that the problems of exchange stabilization and economic reconstruction should be attacked simultaneously. A return to an international gold standard system operating in an international world economy was recommended as the objective; meanwhile, lines of policy were laid down for countries on the gold standard, countries off the gold standard, and countries pegged to gold. These policies were:

"a) *Countries with a free gold standard and with abundant monetary reserves:*

i) To pursue a liberal credit policy, characterised by low money rates in the short-term market and a reduction of long-term money rates by conversions and other operations as far as feasible;

ii) As far as market conditions and central bank statutes permit, to maintain an open market policy designed to provide a plentiful supply of credit;

iii) To allow gold to flow out freely;

iv) To permit the greatest freedom possible to outward capital movements in order to facilitate sound foreign investments.

b) *Countries which have left the gold standard:*

i) Efforts should be made to avoid a competition between states to acquire a temporary advantage in international trade by depreciating the external value of their currency below such a point as is required to re-establish internal equilibrium;

ii) Under present conditions, exchange rates are liable to be constantly disturbed by speculative movements to the disadvantage of international trade. In a period prior to the adoption of a new parity, it is advisable for the authorities regulating the currencies concerned to smooth out, so far as their resources permit, day-to-day fluctuations in the exchanges due to speculative influences by buying and selling foreign currencies. The success of such measures would be enhanced by the co-operation of other markets.

c) *Countries which have introduced exchange restrictions, whether they have abandoned the gold standard or not:*

i) It is desirable that these restrictions should be totally abolished as early as possible. It is realised, however, that this ultimate aim cannot in all cases be immediately attained. In such circumstances, the restrictions applied to foreign trade should be relaxed or abolished in the first instance, even though it may be necessary to maintain them for a time with regard to capital movements.

ii) Such relaxation may, in certain cases where the external value of the currency has depreciated, necessitate the abandonment of existing parities. In a number of countries, exchange restrictions would seem to defeat their own end; for, whenever the official rate of exchange is maintained at a higher level than the economic rate, a form of import premium is given to all importers and a form of export duty imposed on all exporters. Experience seems to have proved that, when a careful policy of gradually relaxing restrictions is pursued, internal confidence in the currency can be maintained, although, of course, in such circumstances, the necessity of effecting budgetary equilibrium and of resisting inflationary tendencies will prove to be of paramount importance. In such cases, it would seem particularly valuable to maintain a close relationship between these countries, the Financial Organization of the League and the Bank for International Settlements, in order to devise and apply the appropriate policy in each case. In the case of certain countries which are heavily indebted

abroad, more especially on short-term, a solution of the debt problem is necessary before their governments will be in a position to modify existing monetary policy." [4]

The first of these suggestions was clearly directed primarily to the United States, and the second to Great Britain, for in discussing stabilization the experts said: "in practice, certain countries are in a key position in that the reestablishment of a free gold standard by them would influence action in a number of other countries." [5]

Meanwhile, the characteristics of the central foreign exchange triangle continued unchanged. Persistent sterling undervaluation kept prices in the gold standard countries under pressure. This was a hard and uncompromising obstacle to price raising schemes by monetary means. But as long as a gold standard system existed with reference to which sterling fluctuated, this particular obstacle could have been overcome by a simple appreciation of sterling had the actual as well as the intended effects of the operations of the Exchange Equalization Account been confined to smoothing out day to day fluctuations in the exchanges. In the first quarter of 1933 they were not so confined, and contrary to the policy proclaimed when the Account was first established, the Account did interfere with the general level of sterling. By so doing it greatly increased the strains within the central triangle.

The Triangle, 1933–1934—graphically presented

During the single year 1933 and the first months of 1934 the central foreign exchange triangle passed through a series of extraordinary changes. A period of active support of the dollar by the British Exchange Equalization Account was followed in quick succession by a rapid depreciation of the dollar when the United States left the gold standard, a determined effort by the Account to peg the sterling-franc rate, a period of free three-cornered adjustment between the dollar, the franc, and the pound, the inauguration of a gold

[4] *Ibid.*, pp. 137–9. [5] *Ibid.*, p. 34.

buying policy by the United States designed to depreciate the dollar in both pounds and francs, and finally by the new exchange relationships resulting from the devaluation of the dollar.

The behavior of the triangle during this remarkable period is graphically presented in Chart 80, in which the following four series have been plotted from January 1933 to March 1934:

1) the sterling-franc exchange rate
2) the dollar-franc exchange rate
3) the sterling-dollar exchange rate
4) the London price of gold

The movement of these series is shown in relation to the position prevailing on April 1, 1933, and the base line is drawn at the following values: 87 francs per pound for the sterling-franc exchange rate; 3.93 cents per franc for the dollar-franc exchange rate; 3.42 dollars per pound for the sterling-dollar exchange rate; 120 shillings per ounce for the price of gold in London. These values are obtained as follows: the sterling-dollar rate and the sterling-franc rate are the actual rates prevailing on April 1, 1933. The dollar-franc rate is the calculated cross rate between New York and Paris derived from these two rates. It happens to be also the actual rate for francs in New York on that day. The price of gold in London—120 shillings per ounce—is the calculated franc T/T parity rate; that is, it is the price that represents the bid of the Bank of France in the London market at its established buying price for gold less cost of shipment when the sterling-franc rate was 87 francs per pound.

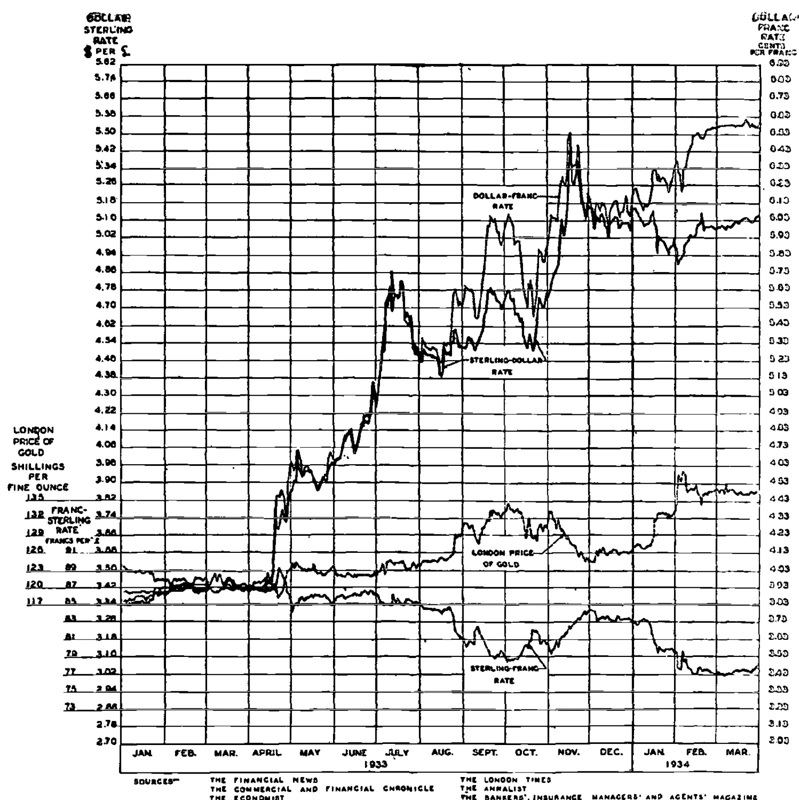
The arrangement of the scales for each of the three exchange rates is such that an equal distance on the chart represents an equal percentage deviation from the old parities prevailing before September 1931.

The chart is drawn from the viewpoint of London. A decline in the value of the pound in terms of the other two currencies is shown, therefore, by a falling line, and an in-

crease in the value of the pound in terms of the other two currencies is shown by a rising line. A depreciation of the dollar in terms of the pound being thus shown by a rising

CHART 80

The Central Foreign Exchange Triangle and the London Price of Gold, January 1, 1933–March 31, 1934, daily



line, a depreciation of the dollar in terms of the franc is also shown by a rising line.

This method of presentation carries no implications of any sort concerning the relative importance of any rate in the triangular system. As a byproduct, however, of the prepara-

tion of the chart, we examined the behavior of the dollar-franc rate to see whether it displayed any characteristics of a cross rate.[6] We compared the calculated cross rate between Paris and New York, derived from the sterling-franc and the sterling-dollar rates, with the actual rate for every day during 1933. The days on which it was cheaper to remit to Paris

	NUMBER OF DAYS DURING MONTH WHEN THE CROSS RATE, NEW YORK-PARIS, WAS	
	Lower than the actual rate	Higher than the actual rate
January	18	5
February	16	4
March	13	5
April	10	10
May	16	6
June	16	9
July	16	9
August	18	6
September	18	6
October	12	13
November	12	11
December	17	6

from New York by way of London than by purchasing francs directly were two to three times more numerous when the franc was strong in terms of both the dollar and the pound, as it was during most of the period from May to mid-October, than the days on which direct remittance was cheaper. The forces responsible for this phenomenon were the same in character as the movements between the continent and New York which passed through the London market during 1919–25 and continually complicated the process by which England returned to the gold standard in 1925. The evidence that strength in francs and indirect remittance through London go together supports two generalizations: (1) that a strong movement of funds between two centers whose direct exchange market is relatively narrow tends to move the rate between them so as to encourage remittance indirectly through the financial center with the broadest market; (2) that in the central foreign exchange triangle the franc-dollar rate was the weakest link. In October and November when

[6] Cf. Ch. 29, Possible Modes of Behavior of any Foreign Exchange Triangle.

the franc was weak in both dollars and pounds there was no tendency for indirect remittance to be the cheaper method, but in December, when the franc ceased to depreciate in sterling, the cross rate was lower than the actual rate two-thirds of the time.

Two precautions must be taken against possible misinterpretation of Chart 80. In the first place it is completely neutral on the question of the rising pound vs. the falling dollar or franc. During a large portion of the period covered alterations in the relations between the pound, the dollar, and the franc were undoubtedly due to events taking place in the United States. It might, therefore, be contended that a proper recognition of this fact would require a rise in the sterling-dollar rate to be represented by a downward line, instead of an upward one as is done in the chart, on the ground that the dollar was falling rather than the pound rising. The chart, however, has nothing to do with the underlying causes of the changes it discloses. It merely describes the relations between the rates. In the second place, the choice of the system of rates as it existed on April 1, 1933 as a basing point does not imply a belief that this system of rates was in any sense 'normal,' or that there was or should be any tendency to return to it. The market adjustment of the three rates to one another was, of course, as complete on any other day during the year as it was on April 1. That date is chosen as a base solely to bring out the relations of the three rates at various times compared with the relations actually existing just before America left the gold standard. It is a purely arbitrary choice made for descriptive purposes.

The fluctuations of the three rates illustrate the general modes of behavior to which any triangular system of rates is subject as described in Chapter 29. Whenever during 1933 the dollar fell faster in Paris than in London, the pound declined in Paris. This is particularly clear in August, September, and October. Whenever the sterling-franc rate was stable, as during June and July, the pound and the franc

moved together in terms of the dollar. Whenever the dollar fell faster in London than in Paris, as in the latter part of April, the pound rose in Paris. When, as in January and February, the dollar-franc rate fluctuations were held within gold points, the same principles applied, though the relationships are not clear in the chart because of the smallness of the scale.

The Triangle in 1933, Bound and Free

Pegging the Sterling-Dollar Rate

In January and February 1933 and during the American 'interregnum' of late March and early April the Exchange Equalization Account held the sterling-dollar rate within the range of 3.39 to 3.46, and for the greater part of this time the limits were even narrower, from 3.41 to 3.44. This intervention came at a critical moment in the relations of the center countries, and though based on financial, as distinct from economic or political grounds,[7] had major economic and political repercussions. Continued undervaluation of sterling, even if only a byproduct of 'day to day smoothing' of the exchanges was to the advantage of British exporters and did not relieve the gold standard countries of deflationary pressure. It also greatly increased the strains within the central foreign exchange triangle.

During January and the first ten days of February the pound was strong in both New York and Paris. This strength was accentuated by growing fears of inflation in the United

[7] Cf. Ch. 31, The Critical Decisions of January 1933. In *The Economist*, Exchange Account Supplement, May 5, 1934, N. F. Hall describes the Account's operations during the first months of 1933: "the movement of balances into London [which was] due partly to increasing apprehension about the general situation in the United States enabled the British authorities not only to support the dollar, and, in so doing, to reduce the movement of gold out of the United States, but also to take the opportunity of acquiring the quick assets that were necessary before any permanent stabilization of the pound could be carried out. Indeed, in view of the increasing instability of the United States, it was becoming more and more important that London should maintain and improve its international liquidity."

States and by a political crisis in France on February 9, which resulted in a strong movement of funds from Paris to London. The British control supported the franc by purchases of foreign exchange and of gold.[8] The franc-dollar rate was steady and the pound fluctuated in almost identical degree in terms of both currencies. During the week of February 16, however, the relations of the three currencies changed. The French situation improved with the formation of the Daladier government, while that in America was greatly weakened by the banking crisis in Michigan. The franc was strong in both London and New York. The fall of the dollar in terms of the franc was limited by the gold points, but there was no such limitation in the case of the sterling-franc rate. Francs tended to rise more rapidly in London than dollars fell in Paris. Under such circumstances arbitrage opportunities would have been opened tending to check the rise of the franc in London, or pull the dollar up with it. The strength of the franc was not in itself sufficient to carry the dollar upward against its underlying weakness in sterling, but the dollar did rise because it was being supported by the British control. The general strength of sterling soon spread to all markets, and but for the intervention of the Account, the triangle would have been adjusted by a common decline of francs and dollars in London.[9] From September 1931 to December 1932 the triangle, though unbalanced, had been free to adjust itself in this way, but now official intervention made this impossible. The pressures dammed up in one place found an outlet in another, however, and in so doing restored freedom of movement to the triangle. On April 20 the United States left the gold standard.

America leaves the Gold Standard

During the interregnum from March 4 to April 20 when the gold standard in the United States was partly suspended, the

[8] Rotterdamsche Bankvereeniging, *Monthly Review,* March, 1934.

[9] Cf. p. 1056 where this situation is abstractly stated in the third of the three generalizations there given

monetary and financial policy of the Roosevelt Administration took definite form.

The government was determined to raise prices. To accomplish this end it proposed to use the following means:
1) To impose upon the Federal Reserve system a program of purchases of government securities up to $3 billion. These purchases were to be made either from the public or the Treasury, and if they resulted in a deficit in the required reserves of the Federal Reserve banks, no penalty tax was to be imposed. This marked the end, for the time being, of the Federal Reserve banks as an independent force in the determination of credit policy.
2) If the Federal Reserve banks would not agree with the Treasury to carry out such a policy, or if such a policy did not raise prices, then the government would purchase maturing government bonds by Treasury notes up to $3 billion. This was a return to the greenbacks of the Civil War.
3) If this second expedient also proved ineffective in raising prices, then the government would reduce the gold content of the dollar.
4) To supplement the three major inflationary devices, some place would be found for silver in the banking reserves of the country.
5) These monetary measures would be supplemented by a large public works program.

This program was directed primarily toward bringing about a change in the relations between debtors and creditors in the United States by forcing a general increase in American prices. It marked a definite break with the policy of the other gold standard countries which opposed an inflationary rise in prices as the major solution of their economic problems. It marked an enthusiastic acceptance of that part of the recommendation of the Preparatory Commission chiefly addressed to the United States, but at the same time it paved the way for a rejection of the Commission's general thesis that the solutions of the world's economic problems should be international.

Membership in the gold standard system was, under the

conditions discussed above, an obstacle in the path of the new Administration in carrying out its economic program. On April 20 a bill was introduced into Congress with the approval of the President giving him the powers required to carry out the inflationary policy outlined above, but not making their use mandatory. This bill became, when passed on May 12, Title III of the Farm Relief Act, and was generally known as the Thomas Amendment or the Inflation Bill. On the day it was introduced the American gold export embargo was made absolute. America definitely left the gold standard and the depreciation of the dollar began.

The dollar depreciated rapidly in both sterling and francs immediately after April 19, but during the latter part of the month it depreciated more rapidly in sterling than in francs. This meant of course that the pound was strong in Paris, and the sterling-franc rate reached 90 on April 27. This three-cornered adjustment is shown on Chart 80 by the movement of the sterling-dollar line above the dollar-franc rate line, and a simultaneous rise in the sterling-franc line. Since, with the abandonment of the gold standard by the United States, the London price of gold was now based upon the Paris T/T parity price, the decline of the franc in London was reflected in a fall in the London price of gold. For the same reason, the British Exchange Equalization Account ceased to base its operations upon the dollar, and based them upon the franc.

The weakness of the franc immediately following the first depreciation of the dollar reflected the uncertainty in the markets as to the future of the remaining gold standard currencies, and on April 27 the French government felt compelled to issue a statement to the effect that France had no intention of following the United States off gold. At the same time the British Exchange Equalization Account purchased francs in order to minimize the rise of the pound in Paris and to provide itself with a portfolio of francs for future needs. The franc was also strengthened in London by the

conclusion of a £30 million credit which was announced on April 28, the day following M. Bonnet's announcement that France would remain on the gold standard. This credit was for 6 months at 2½ per cent and was granted to the French Treasury by a group of British banks. It was in the form of treasury bills which were to be sold against francs by the French Treasury in cooperation with the Bank of England, thus putting the French Treasury in funds pending the collection of taxes and also providing means for strengthening the French exchange. Repayment was provided for by an agreement under which the Bank of France would cede to the Treasury the remainder of its sterling balances acquired before the abandonment of the gold standard by England in exchange for francs without prejudice to the arrangements for apportioning the Bank of France losses on these balances already described.[10] In consequence, the franc improved strongly in London, the rate reaching 84 francs to the pound on May 1. The price of gold rose correspondingly to 123 s. 9 d. The dollar, however, continued to depreciate under the impact of a capital flight and speculative sales, and now fell more rapidly in Paris than in London. This is shown on the chart by the movement of the dollar-franc line above the sterling-dollar line.

Pegging the Sterling-Franc Rate

These April adjustments were followed by a period of relative stabilization of the sterling-franc rate which lasted through May, June, July, and the first part of August. The franc settled down at about 84 francs per pound with a corresponding London gold price of about 122 shillings. As one of the most remarkable characteristics of man is his capacity for getting used to things, only a relatively short period of narrow fluctuations about this rate was sufficient to give it a sort of *sanction* that no one reading the British

[10] Samuel Montagu & Co., *Weekly Review*, May 4, 1933; cf. Ch. 32, The Treatment of the Sterling Losses of the Bank of France.

financial press at that time could fail to note. It became a sort of symbol of the conservative aspect of British financial policy.

By contributing to a stable exchange relationship between the pound and the franc the British Exchange Equalization Account helped to bind together the exchanges of the sterling countries and those of the gold countries. A wide area of exchange stability was thus brought into being. Just as the dollar-franc rate had, after September 1931, provided a point of reference for a future stabilization of sterling, so the sterling-franc rate now provided a point of reference for a future dollar stabilization. The relatively stable price of gold in London of about 122 s. was a symbol of this wide area of stable exchanges. The common movement of the dollar in terms of francs and pounds, clearly shown in Chart 80, was a measure of dollar appreciation or depreciation in terms of a standard of genuine significance. But just as the appropriateness of the dollar-franc rate as a point of reference for a future sterling stabilization before April 1933 had been undermined by the unequal impact of sterling undervaluation upon the dollar and the franc, so the appropriateness of the sterling-franc rate as a point of reference for future dollar stabilization was undermined by the unequal impact of ever increasing dollar depreciation upon the pound and the franc.

The World Economic Conference

In conformity with the recommendations of the Preparatory Commission of Experts preliminary negotiations among the Powers were undertaken in the spring of 1933 to lay the basis for the projected World Monetary and Economic Conference. Plans for a series of conferences between President Roosevelt and foreign statesmen were made before the United States decided to abandon the gold standard, and Mr. MacDonald and M. Herriot were actually on the high seas en route to Washington when this action was taken. Communiques were issued after the conversations stressing, with

varying emphasis, the desirability of raising prices and stabilizing the exchanges. They revealed that the United States, which had so long urged Great Britain to stabilize sterling, had not completely disassociated herself from a program of exchange stabilization, but also that exchange stabilization had been replaced as a major objective by price raising in the American program and that price raising had become more and more closely associated with large scale public works expenditures. Though the original emphasis of the Preparatory Commission was thus radically changed, it was decided during the Washington discussions to convene the World Conference on June 12.

On May 12 the Inflation Bill became law. During its passage through Congress fears of inflation in America on a large scale had made the markets nervous. The dollar continued to depreciate in sterling until it reached 4.06 on May 6. It improved during the next two weeks, as shown in the chart, but forward dollars continued at a substantial discount. On May 20 sterling touched 3.87, but from then until the opening of the World Conference the dollar depreciated uninterruptedly in both London and Paris. On June 12 the sterling-dollar rate was 4.14 and the dollar-franc rate 4.84 cents.

During this decline of the dollar the position of the Powers on the 'question of precedence' changed remarkably. The British now perceived clearly the advantages of at least an immediate de facto stabilization and the dangers of an inflationary policy. The issues that had divided the experts at Geneva still divided the nations, but into different camps. This was made apparent in the informal negotiations in progress when the Conference opened and in the initial Declaration of Policy by the Chancellor of the Exchequer at the outset of the Conference itself.

This Declaration stated explicitly the British conviction that prices should be raised in order to bring about a proper adjustment of prices to costs, that exchange restrictions and trade barriers should be removed, and that international

lending should be resumed. It urged a world-wide policy of cheap credit backed by open market operations by central banks as the main instrument for raising prices, but damned with faint praise the American program of large government expenditures for public works. Great Britain was not willing, for the sake of rising prices, to abandon orthodox fiscal policies.

On the question of stabilization the Chancellor said:

"As the greatest international traders in the world, we fully recognise the great importance to international trade of stability of exchange rates. In our opinion, the attainment of this object must necessarily be attempted in two stages. The immediate objective should be to secure approximate stability between the currencies of the principal countries of the world in order that trade may not be hampered by violent and unpredictable fluctuations of what I may call the basic currencies. This end will be achieved in so far as the principal countries use their resources in order to counteract fluctuations in the value of their currency caused by temporary movements of capital rather than by fundamental economic factors.

This first stage should be dealt with immediately. As regards the second stage, the United Kingdom delegation endorse the view that the ultimate aim of monetary policy should be the restoration of a satisfactory international standard, and there is no doubt that a gold standard seems to be generally acceptable. The time and the exchange parity at which a return to gold could safely be made, must, as was pointed out in the Annotated Agenda prepared by the Preparatory Commission, fall to be determined by the proper authorities in each country separately, but in order that all countries may work harmoniously towards the same goal I have no doubt that the conference would wish me to state, in as positive and concrete terms as possible, the conditions under which the United Kingdom would feel justified in returning to the gold standard.

One of these conditions is a rise in the general level of the wholesale prices of commodities sufficient to restore equilibrium between prices and costs.

A second condition is an adjustment of the factors which caused

the breakdown of the gold standard in the past and which, if not corrected, would inevitably lead to a repetition of the process in the future. These factors include, of course, the disturbances due to reparations and war debt payments, and the obstacles to international trade caused by excessive tariffs, exchange restrictions, and other abnormal impediments to the flow of commerce.

A third condition is that the gold standard shall in the future be so administered that wide fluctuations in the purchasing power of gold (in so far as they arise from monetary causes) will be to the greatest possible extent prevented. Without entering in detail into the question of the requisite reforms in the working of the gold standard (in regard to which I hope that a substantial measure of international agreement will be found to exist) I will only mention three which seem to us essential, namely the withdrawal of gold from internal circulation and its use only for settlement of international balances; the reduction in the legal minimum proportions of gold which central banks are required to hold in their reserves; and a closer permanent co-operation between central banks." [11]

Behind these smoothly flowing periods was the hard determination of Great Britain to avoid any permanent commitment on a rate of stabilization that might restore the economic pressures experienced during the Defense of Sterling, or sacrifice the briefly tasted sweets of a low rate of exchange. On the other hand, there was clear appreciation that in a contest for exchange depreciation with the dollar these sweets might become bitter. In a central foreign exchange triangle free to adjust itself in a three sided way, at least a temporary accommodation had become extremely desirable.

At the time this Declaration was made, preliminary negotiations were still in progress between the British, the American, and the French governments designed to permit the Conference to approach its work in an atmosphere free from unexpected shocks. These negotiations concerned war debts, a tariff truce, and a temporary currency stabilization for the duration of the Conference. The war debts question

[11] Pasvolsky, *op. cit.*, pp. 165–6.

was shelved by the acceptance of token payments by the United States on the installments due on June 15 and a tariff truce was agreed upon by the principal powers. The de facto currency stabilization negotiations brought forward suggestions concerning the use of a "joint tri-partite equalization fund" or alternatively the "operation of individual equalization mechanisms" upon cooperative lines, destined to bear fruit later, but on the main issue the negotiations broke down completely.

The fundamental reason for this breakdown, apart from the question of the actual rate, which might have yielded to compromise, was the great and unexpected success of the Roosevelt Administration in raising prices in America. Between February and June 1933 the Bureau of Labor Statistics wholesale commodity price index rose 8.7 per cent. Within this index the greatest increases were in raw material prices. Farm products rose 30.1 per cent, hides and leather products 21.2 per cent, textile products 20.1 per cent, and foods 14 per cent. In describing these changes the *Federal Reserve Bulletin* for July 1933 said (p. 416):

"In general, the widest price advances have occurred in raw materials. The demand for these primary products, which are generally quoted in organized markets and many of which enter actively into international trade, usually responds quickly to changes in market conditions. Since February prices of these commodities have reflected increased demands, including forward buying, accompanying sharp increases in industrial output and, in the case of some agricultural commodities, prospects of reduced supplies owing to weather conditions and proposed reductions in acreage. They have also been influenced by increased trading in the organized commodity markets in expectation of further price advances, and, particularly in the case of international raw materials, by the change in the value of the dollar in the foreign exchange market."

During the stabilization negotiations an attempt was made to persuade President Roosevelt to refrain from using the

powers granted by the Inflation Bill, on the ground that inflation in the United States would cause pressures on the exchanges that would break down any stabilization arrangements. The converse of that argument, however, was that stabilization arrangements would break down the American attempt to raise prices by monetary means, and its force was soon demonstrated by the behavior of the markets. On June 14 and 15 there were rumors that a stabilization agreement had been reached, and as shown in Chart 80, the dollar began to appreciate at once. Security prices in New York fell and commodity prices momentarily turned downward. The stabilization negotiations were immediately broken off by President Roosevelt, and on June 22 the American delegation at the Conference issued a statement:

"The American government at Washington finds that measures of temporary stabilization now would be untimely. The reason why it is considered untimely, is because the American government feels that its efforts to raise prices are the most important contribution it can make, and that anything that would interfere with these efforts and possibly cause a violent price recession would harm the conference more than the lack of an immediate agreement for temporary stabilization." [12]

The same sequence of events occurred once more before the Conference ended. The dollar resumed its decline and sterling reached 4.38 in New York on June 28. At that time a final effort was made to reach a compromise on the stabilization issue. A declaration of policy was drawn up advocating in principle the restoration of the international gold standard as an ultimate objective, but leaving each government free to determine the time and the rate of its stabilization in gold. This declaration recorded the common interest of all powers in obtaining currency stability as quickly as possible and pledged the signatories to a program of central bank cooperation against exchange speculation. It was approved by the delegates of the major powers, including those of the United

[12] *Ibid.*, p. 70.

States. When this became known the dollar once more began to appreciate, but this time for a few days only.

The new declaration was submitted to President Roosevelt on June 30 and on July 3 was rejected by him in a famous message which brought the constructive labors of the Conference abruptly to an end. In this message Mr. Roosevelt espoused the cause of a managed currency with stable purchasing power in preference to a stable system of international exchange rates. "Old fetishes of so-called international bankers," he announced, "are being replaced by efforts to plan national currencies with the objective of giving their currencies a continuing purchasing power which does not greatly vary in terms of commodities." Upon the publication of this message, which contrasted strangely with Mr. Hoover's references in April 1932 to the gold standard as "the Gibraltar of world stability," the dollar once more resumed its decline in pounds and francs. This decline was broken in July by the creation of a special demand for dollars in connection with the refunding of the United Kingdom 5½ per cent dollar bonds due in 1937. Holders of the bonds were offered the right to exchange them into £2. 10 s. per cent British Treasury bonds of short maturity at the rate of £26 of the sterling bonds for $100 of the dollar bonds. At the prevailing rates of exchange this was a very favorable offer and led to a large scale repatriation of these bonds for purposes of conversion. When the special demand for dollars arising from this cause had spent its force, the decline of the dollar was resumed, as shown in Chart 80. This fresh decline, however, was in francs rather than in sterling, for by that time the central foreign exchange triangle had entered a new phase.

THE FOUR NEGATIVES OF THE CONFERENCE

This new phase began with the ending of the World Conference, which did not finally adjourn until July 27 though from the moment of the receipt of President Roosevelt's message of July 3 it was clear that it could not accomplish constructive

results. The Conference split apart as the result of four great negatives. The countries applying the new protection refused to modify their systems of trade restriction unless currency stability was assured. The countries on the gold standard, many of which had had bitter experience of currency inflation, refused to accept a policy of price raising as the major instrument of economic reconstruction. Great Britain, though favorable to price raising, refused to unbalance her budget to achieve it or to embark upon a great program of public works with that end in view. The United States refused to allow her own program of price raising and of public works to be interfered with by currency stabilization. The counterpart of these negatives was a series of public affirmations of currency policy which officially recognized the division of the world into three distinct currency groups.

THE WORLD OF THE DOLLAR, THE WORLD OF GOLD, AND THE WORLD OF STERLING

The first of these statements was the President's message to the Conference of July 3. This had been preceded one month before by the final legislative step in the process that took America off the gold standard, the passage on June 5 of a Joint Resolution by Congress abrogating the gold clause in all contracts of debt in the United States, including those of the government, and making all forms of money in the United States, including Federal Reserve Notes, full legal tender. On July 5 the American policy was formally put before the Conference in a declaration by the American delegation:

"The revaluation of the dollar in terms of American commodities is an end from which the government and the people of the United States cannot be diverted. We wish to make this perfectly clear: we are interested in American commodity prices. What is to be the value of the dollar in terms of foreign currencies is not and cannot be our immediate concern. The exchange value of the dollar will ultimately depend upon the success of other na-

tions in raising the prices of their own commodities in terms of their national moneys and cannot be determined in advance of our knowledge of such fact. There is nothing in our policy inimical to the interest of any other country and we are confident that no other country would seek to embarrass us in the attainment of economic ends required for our economic health." [13]

No attempt was made to regulate the dollar exchange. The Administration pressed forward a program of price raising through three major instruments of policy, the Agricultural Adjustment Act, the National Industrial Recovery Act, and credit expansion. In April 1933 open market purchases had been resumed on a large scale. By January 1934 government bonds held by the twelve Federal Reserve banks had increased $595 million, bills discounted and bills bought had fallen $345 million, and the excess reserves of the member banks had risen $487 million, reaching the large total of $866 million.

The final rejection of exchange stabilization by the United States in order to pursue this policy unchecked was immediately followed by the definite joining together of the gold standard countries under the leadership of France in a group known as the gold bloc. Upon the receipt of the President's message of July 3 the representatives of France, the Netherlands, Italy, Belgium, Switzerland, and Poland issued the following statement:

"The undersigned governments, convinced that the maintenance of their currencies is essential for the economic and financial recovery of the world and of credit and for the safeguarding of social progress in their respective countries, confirm their intention to maintain the free functioning of the gold standard in their respective countries at the existing gold parities and within the framework of existing monetary laws. They ask their central banks to keep in close touch to give the maximum efficacy to this declaration." [14]

[13] *Ibid.*, p. 85.

[14] *Ibid.*, p. 93.

On July 8 the heads of the central banks of these countries met in Paris to make plans for close inter-central bank co-operation to combat speculation in their currencies.

Finally, on the day of the adjournment of the World Conference the de facto grouping of the sterling countries about the pound was officially recognized, as far as the countries of the British Empire were concerned, by a British Empire Currency Declaration. This declaration was careful to avoid any commitment on the relation between the sterling countries and the French franc. With respect to the relations between the sterling countries it read in part:

"The undersigned delegations now reaffirm their view that the ultimate aim of monetary policy should be the restoration of a satisfactory international gold standard under which international cooperation would be secured and maintained with a view to avoiding, so far as may be found practicable, undue fluctuations in the purchasing power of gold. The problem with which the world is faced is to reconcile the stability of exchange rates with a reasonable measure of stability, not merely in the price level of a particular country, but in world prices. Effective action in this matter must largely depend on international cooperation, and in any further sessions of the World Economic and Monetary Conference this subject must have special prominence.

In the meantime the undersigned delegations recognize the importance of stability of exchange rates between the countries of the Empire in the interests of trade. This objective will be constantly kept in mind in determining their monetary policy, and its achievement will be aided by the pursuit of a common policy of raising price levels. Inter-Imperial stability of exchange rates is facilitated by the fact that the United Kingdom Government has no commitments to other countries as regards the future management of sterling and retains complete freedom of action in this respect. The adherence of other countries to a policy on similar lines would make possible the attainment of exchange stability over a still wider area." [16]

[16] *Ibid.*, p. 181.

No machinery was set up for the execution of this program. Each government concerned and its central bank merely undertook to pursue the policy appropriate to maintaining stable exchange relations with the pound sterling. No technique was laid down in advance for the administration of their currencies. None was necessary, for techniques long established by tradition and custom were already available. The invitation to other countries to join in this de facto grouping was soon accepted by Sweden, Denmark, and Argentina.[16]

A Three-Cornered Adjustment

With the formal breaking up of the international gold standard system into its three constituent elements in July 1933, the effort to bind two of them, the sterling and gold groups, together by pegging the sterling-franc exchange was relaxed. Almost from the beginning it had encountered great difficulties, which for the most part originated in the United States.

THE ADOPTION OF A MIDDLE OF THE ROAD POLICY BY ENGLAND WITH RESPECT TO THE FRANC

Ever since April 1933 there had been a fairly steady exodus of European capital from the New York market. From the beginning of President Roosevelt's monetary experiments the continent took a pessimistic view of the future of the dollar. French, Belgian, and Dutch interests sold dollar bonds and remitted the proceeds home through London with the effects noted, in the case of France, in our examination of the dollar-franc rate. The London market was obliged to absorb the dollars and find the required continental currencies. As the dollar depreciated, moreover, powerful British export interests, and certain parts of the Empire exerted pressure upon the authorities to abandon the de facto franc stabilization and secure relief from the new American competition by

[16] Cf. Ch. 31, Cultivating England's Garden.

allowing the pound to depreciate in terms of francs. This caused mounting uncertainty whether this de facto stabilization would continue and speculative transactions added to the weakness of the pound. In addition, the speculative markets were fully aware that large holdings of mobile funds which had been sent to London as a place of refuge might be suddenly withdrawn if sterling developed real weakness. This constituted a further reason for taking a speculative position against the pound.

As a consequence, the British Exchange Equalization Account was obliged to enter the market on a large scale as a seller of francs, and a rate of 86 francs to the pound was maintained wholly by artificial means. It was represented to the writer by sources close to the market for francs in London that during June, July, and the first part of August the Equalization Account was for long periods almost the sole seller of francs, and one important trader stated that there were only two days from early in June to early in August when 'natural' sellers were in the market. The francs sold by the Account were obtained partly from the portfolio accumulated in April when the franc was being supported, partly by the building up of sterling balances by the French government during July for the repayment of the French Treasury credit,[17] and partly by the sale and pledge of gold in France. There were at least two clear indications of these gold operations. First, during July and the first part of August gold moved in large quantities from New York to London. It was known that the French supplies of earmarked gold in New York had been repatriated in 1932, and these shipments were undoubtedly from gold earmarked in the United States by the Exchange Equalization Account and now sold in France to help support the pound.[18] Second, gold was coming to the London

[17] Cf. Ch. 31, The Credit Base, and Chart 73 showing a sudden increase in 'other accounts' at the Bank of England in July; also Samuel Montagu & Co., *Weekly Review*, Aug. 3, 1933.

[18] *Barrons Weekly*, Aug. 7, 1933; *Commercial and Financial Chronicle*, Aug. 12, 1933.

market for sale in amounts far greater than the increments that appeared on the balance sheets of either the Bank of England or the Bank of France. The British control was bidding for gold regularly in the market at a price above the franc parity price, taking what it needed, often as much as £600,000 per week, and allowing the French bid to take the rest. It was assumed by the London exchange market that this gold, whether held in London or in France, was by some arrangement used to provide the Equalization Account with francs with which to meet the steady market demand.

These operations in the gold market had one curious political aspect. The British Empire was on the whole strongly opposed to the policy of holding the sterling-franc rate at 86 francs to the pound, and was eager to have the sterling countries follow the United States in its general price raising policy, but the Empire provided the gold by which the policy to which it was opposed was carried out. It is not the function of these studies to probe political motives, but, as in the case of German policy in 1927,[19] it is sometimes necessary to touch briefly on the hidden springs of action in order to see clearly the course of events. It is therefore suggested that the opening of the London market to an Australian refunding loan and the £15 million Canadian government loan of the summer of 1933 [20] may have been in a sense a price paid by England to secure the adhesion of those two countries to the British Empire Currency Declaration without sacrificing the de facto stabilization of the pound in terms of the franc.

By the middle of August the pressure on sterling had become very severe. The sterling-dollar rate had fallen from 4.84 on July 19 to 4.40 on August 16 while the sterling-franc rate had been pegged at about 85. One way out of the exchange difficulties would have been to further drastically depreciate sterling in dollars, while the franc rate was main-

[19] Cf. Ch. 16, The Retreat from the Principle of Stopping Inflation, 1927-1928.

[20] Cf. Ch. 31, The Control of Sterling, March–December 1932.

tained; the other, to give up all thought of pegging the sterling-franc rate and to allow the market to find a new equilibrium. Quiet feelers were put out in the exchange market by the authorities to ascertain how much sterling would have to be sold to bring about a depreciation of sterling sufficient to restore the relative positions existing in April 1933. No drastic action of either kind was taken. A traditional British middle of the road policy began to assert itself and it seemed likely that the Equalization Account would relax its support of the pound in Paris sufficiently to allow continental exchange operations and seasonal influences to have their effect upon the exchanges. Toward the middle of August sterling was under severe pressure from insistent offers by the Netherlands, Belgium, and Switzerland for the purpose of replacing sterling investments at sight or short notice by investments in gold currencies or in gold.[21] These came on a generally weak market, and sterling for the first time since late April declined sharply in Paris. At the same time renewed rumors of further inflation in the United States caused a sharp depreciation of the dollar which fell in London from 4.50 on August 22 to 4.62 on August 26. The necessary adjustment in the triangular system was worked out by an even more rapid decline of the dollar in Paris (Chart 80). An extremely complicated balance came into existence between the interest of Great Britain in diminishing the foreign exchange advantage then being acquired by American exporters and the disadvantages of placing the gold countries under further strain by a still greater overvaluation of their currencies, not only in dollars but also in sterling. In the three cornered, relatively free adjustment now taking place within the triangle, the effect of further speculative dealings and capital flight from America as rumors of fresh inflationary measures gained strength was dominant. In the week of September 11–16 sterling rose in New York from 4.55 to 4.70 and on the 16th

[21] *L'Information,* Paris, quoted in Samuel Montagu & Co., *Weekly Review,* Aug. 24, 1933.

suddenly jumped to 4.80. As shown in Chart 80 the pound at the same time fell somewhat in Paris, and the decline of the dollar in Paris continued to be greater than in London.

The price of gold in London rose to over 130 s. early in September and on September 22 reached 133 s. 7 d., reflecting in its higher level and irregular movements the strains imposed upon the connecting link between the great sterling and gold groups of countries.

In the last quarter of 1933 the sterling-franc rate was subjected to a very remarkable set of conflicting forces. In October a fiscal crisis, long in the making, came to a head in France. During the early part of the depression France had enjoyed a relative immunity from deflationary forces experienced by other countries owing partly to her more nearly balanced internal economic structure and partly to her ability to export a portion of her unemployment through restricting the seasonal movement of labor into southern France from Spain, Italy, and other countries.[22] This immunity ceased with the decline of sterling. In spite of the extreme agricultural protection practiced in France, the use on a large scale of the quota system, and the maintenance of relatively stable retail prices, there was a steady deflationary pressure after 1931, which, in the words of Charles Rist, was "aggravated by every fall in the pound sterling." [23] National income declined and budget calculations were upset. Government income was reduced and government expenditures increased. By September 1933 a cumulative budget deficit had been built up amounting to 40 milliard francs according to the calculations of Mm. Caillaux and Cheron. Of this, only 15 milliard had been covered by long term bonds, and 25 milliard by increases in the short term debt. This was exclusive of the mounting deficits of the French railways. In spite of the urgency of the fiscal need, strong opposition was encountered by the gov-

[22] Cf. Ohlin, *Course and Phases of the World Depression*, pp. 234–5, and *World Economic Survey, 1932/3*, pp. 53–4.

[23] *Op. cit.*, p. 238.

ernment in its efforts to pass its budget through the French Chamber of Deputies in October, and as a result the direction of the international capital flow was reversed. Foreign funds seeking employment in London increased, enquiry for sterling bills from foreign sources was strong, and a capital flow into the United States began. The dollar appreciated in both Paris and London, but since the pound also was rising in Paris, the dollar rose faster in Paris than in London. These movements were the reverse of the three cornered adjustments of late August and mid-September, and restored the triangular system approximately to the position prevailing in the middle of August (Chart 80). At this moment, however, an entirely new and powerful factor entered the situation in the form of a further development of American monetary policy.

EFFECT OF THE AMERICAN GOLD BUYING POLICY ON THE TRIANGLE

On August 28, 1933 the executive orders issued by President Roosevelt on April 5 and 20 regulating transactions in gold and prohibiting gold hoarding were replaced by a new comprehensive regulation, and on the next day the Secretary of the Treasury was authorized to receive all newly mined gold of domestic origin. Beginning September 8 the Treasury bought all such gold at a price equal to the highest price in any free gold market. Purchases were made during September and October at prices ranging from $29.10 to $32.28.[24] On October 18, 1933 the Federal Reserve Bank of New York reduced its discount rate from 2½ to 2 per cent, partly in an effort to check the inflow of capital and partly as a further step in the general credit expansion program of the government. Four days later President Roosevelt announced by radio a new gold policy for the United States. The portions

[24] J. D. Paris, *Monetary Policies of the United States, 1932–1938* (Columbia University Press, 1938), pp. 21–5, especially the chart on p. 22, showing the prices paid for gold by the United States government, Sept. 1933–Jan. 1934.

of this famous speech bearing directly upon monetary policy were:

"Finally, I repeat what I have said on many occasions, that ever since last March the definite policy of the government has been to restore commodity price levels.

The object has been the attainment of such a level as will enable agriculture and industry once more to give work to the unemployed.

It has been to make possible the payment of public and private debts more nearly at the price level at which they were incurred.

It has been gradually to restore a balance in the price structure so that farmers may exchange their products for the products of industry on a fairer exchange basis.

It has been and is also the purpose to prevent prices from rising beyond the point necessary to attain these ends. The permanent welfare and security of every class of our people ultimately depends on our attainment of these purposes.

Obviously, and because hundreds of different kinds of crops and industrial occupations in the huge territory that makes up this nation are involved, we cannot reach the goal in only a few months. We may take one year or two years or three years.

No one who considers the plain facts of our situation believes that commodity prices, especially agricultural prices, are high enough yet.

Some people are putting the cart before the horse. They want a permanent revaluation of the dollar first. It is the government's policy to restore the price level first. I would not know, and no one else could tell, just what the permanent valuation of the dollar will be. To guess at a permanent gold valuation now would certainly require later changes caused by later facts.

When we have restored the price level, we shall seek to establish and maintain a dollar which will not change its purchasing and debt-paying power during the succeeding generation. I said that in my message to the American delegation in London last July. And I say it now once more.

Because of conditions in this country and because of events beyond our control in other parts of the world, it becomes increasingly important to develop and apply the further measures which

may be necessary from time to time to control the gold value of our own dollar at home.

Our dollar is now altogether too greatly influenced by the accidents of international trade, by the internal policies of other nations and by political disturbances in other continents.

Therefore the United States must take firmly in its own hands the control of the gold value of our dollar. This is necessary in order to prevent dollar disturbances from swinging us away from our ultimate goal, namely, the continued recovery of our commodity prices.

As a further effective means to this end, I am going to establish a government market for gold in the United States. Therefore, under the clearly defined authority of existing law, I am authorizing the Reconstruction Finance Corporation to buy gold newly mined in the United States at prices to be determined from time to time after consultation with the Secretary of the Treasury and the President. Whenever necessary to the end in view, we shall also buy or sell gold in the world market.

My aim in taking this step is to establish and maintain continuous control. This is a policy and not an expedient." [25]

The driving force behind this policy was quite clearly not a fine spun academic theory concerning the relations between the price of gold, the value of gold, and the price level of commodities. It is found in the simple statement that "no one who considers the plain facts of our situation believes that commodity prices, especially agricultural prices, are high enough yet." The general level of American prices was still 29 per cent under the 1926 price level, the restoration of which was the announced goal of the Administration. Far more important, as a factor in American politics, the relatively rapid rise in agricultural prices, which had accompanied the first depreciation of the dollar, had ended, as shown in the accompanying table. The primary object of the new policy was to raise farm prices by forcing a still fur-

[25] *Ibid.*, Ap. B, pp. 168–9. Paris gives a series of extracts from laws, proclamations, and other documents bearing on American monetary policy. Cf. Pasvolsky, *op. cit.*, pp. 188–9.

ther depreciation of the dollar in the foreign exchange markets.

To carry out this policy the purchase of domestically mined gold was transferred to the Reconstruction Finance Corporation from the Treasury, and the Federal Reserve banks were authorized to purchase gold abroad for the account of the

BLS Index of Wholesale Prices, 1933

(1926 = 100)

	MARCH	JULY	OCTOBER
All commodities	60.2	68.9	71.2
Farm products	42.8	60.1	55.7
Foods	54.6	65.5	64.2
Other commodities	65.5	72.2	77.2

Reconstruction Finance Corporation after November 1. The initial purchases of the Corporation on October 25 were made at $31.36, a price slightly above the dollar equivalent of the world price on that day at the existing exchange rates. As this price was gradually raised during the next few days the foreign exchange rates followed, largely under the influence of speculative purchases in anticipation of a devaluation of the dollar at approximately the gold content indicated by the Reconstruction Finance Corporation price. Furthermore, it was quite clear that the United States would not allow its new buying prices for gold to be disregarded by the exchange market by confining its purchases to domestic gold. On October 29 the President announced his intention of soon entering the world market for gold, and on November 2 the first purchases were made in Paris. The foreign purchases were carried out cautiously and on a moderate scale, but the American buying price was raised almost daily for over a month. On December 1 the price reached $34.01. The dollar began a violent depreciation in both pounds and francs, reaching $5.50 in London and 6.521 cents in Paris on November 16. At this time the market heard rumors of an impending stabilization operation, and as a result of a reversal of speculative positions the dollar began to rise. The closing rates in

November were $5.18 for sterling and 5.91 cents for francs. At the point of extreme dollar depreciation the American buying price was lower than the dollar equivalent of the world price, and at the end of the month it was higher.

The launching of the American gold buying policy caused an extraordinarily complicated adjustment in the foreign exchanges. There was a curious meeting in the markets of weakness in the franc, due to political and financial developments in France, and weakness in the dollar, due to the American gold buying policy. If at any time the Federal Reserve banks offered to buy gold at a price in dollars higher than the equivalent of the London market price at the existing sterling-dollar exchange, then their bid was competitive not only in London but also at the Bank of France, because the London price of gold was based fundamentally on the buying price of the Bank of France and the existing sterling-franc exchange. Consequently, either the sterling-dollar rate or the sterling-franc rate, or both, had to adjust themselves to this situation or the Bank of France would lose gold. There could no longer be a wholly free three cornered adjustment throughout the triangle. The American gold bid fixed, for the moment, a new parity between the franc and the dollar, below which the dollar-franc rate could not fall without the Bank of France losing gold to the United States. The dollar-franc rate could no longer exhibit in the same degree as before the characteristics of a cross rate. It was dominated by the American buying price for gold.

If the American buying price had been a standing offer to take all gold offered at the price fixed, the fluctuations in the dollar-franc rate would have been confined within new gold points. The adjustments in the sterling-dollar and sterling-franc rates would have had to be in the nature of a common movement of sterling in both francs and dollars. The behavior of the triangle from October 25, 1933 to the middle of February 1934 was intermediate between this situation and that of the free three sided adjustment prevailing from

mid-August to mid-October 1933. The American bid for gold was not fixed and unlimited, and the point at which it would become so was unknown. There was therefore ample room for deviations in the dollar-franc rate from the path marked out for it by the American gold price. Yet a path was marked out, which in general the franc had to follow, and in spite of great underlying weakness the franc appreciated in New York. Since no path was marked out for sterling, there was also room for considerable change in the relationships of the three rates. This continued to be true as long as the American gold policy was in its formative stages. Only gradually was a common movement in francs and dollars imposed on sterling, but this was the inevitable final result of the completion of the American program by a definitive devaluation of the dollar, and the continued determination of France to remain on the gold standard without changing the gold content of the franc. This determination was reiterated by M. Bonnet in an official statement during the October crisis.

From the middle of October to the middle of December gold moved steadily from France to England in support of the franc. In large measure this was gold previously pledged by the British Equalization Account against francs needed to support the pound. Since it thus represented in the main a reversal of an exchange stabilization operation this gold loss did not cause great anxiety in France.[26] Nevertheless, as shown in Chart 58, it reduced the gold holdings of the Bank of France below the level of the preceding April. At the same time almost the last remaining foreign exchange holdings of the Bank were given up. In spite of this support the franc depreciated steadily in London during November, and at the end of the month stood at 84.47, just under the level of the pegging operations of the preceding summer. Since the franc was at the same time rising in New York, the triangular adjustment was completed, under the play of arbitrage transactions, by a more rapid rise of the pound in New York than

[26] Mocatta and Goldsmid, *Annual Circular, 1933*, p. 4.

in Paris (shown in Chart 80 by the drawing together of the sterling-dollar and the dollar-franc lines).

From December 1 to 18 the Reconstruction Finance Corporation gold price remained at $34.01 and on December 18 was raised to $34.06. It was not changed again until January 16, 1934, when the execution of the program was transferred to the Federal Reserve banks and the price was raised to $34.45. This resulted in fluctuations of the dollar-franc rate about a general level of just over six cents to the franc. Since the sterling-franc rate also was kept stable the exchanges of the world enjoyed a brief period of relative calm. President Roosevelt had again expressed the view that the time was not yet ripe for stabilization, and the exchange markets were dull and inactive. This situation was abruptly terminated by the devaluation of the American dollar.

The Triangle in 1934, Unbalanced and without a Point of Reference for Future Stabilization

The Devaluation of the Dollar

On January 15, 1934 President Roosevelt requested Congress to give him power to define the gold content of the dollar at not over 60 per cent of its former weight. Under the Inflation Act he already had authority to fix the gold content as low as 50 per cent of its former weight. He requested Congress also to vest the title of all gold in the United States in the government in order to accomplish three purposes. The first was to complete the legal process by which the United States had given up the use of gold as a circulating medium. In the words of the President's message, it had become clear that the free circulation of gold coins was unnecessary, led to hoarding, and tended to a possible weakening of national financial structures in time of emergency. The second purpose was a corollary of the first, to confine the transfer of gold bullion to the purpose of settling international balances. The third was, again in the President's words, to make clear the government ownership of any added dollar value of the

country's gold stock that would result from any decrease in the gold content of the dollar. As a corollary of this, the government would be obliged to bear the loss of any future increase in the gold content of the dollar. The President requested also that, in order to bring some further stability into the foreign exchanges, the Treasury be granted, in addition to its existing power to buy and sell gold, the power to deal in the foreign exchanges, and that it should be given, out of the profits of dollar devaluation, a fund of $2 billion "for such purchases and sales of gold, foreign exchange and government securities as the regulation of the currency, the maintenance of the credit of the government and the general welfare of the United States" might require.[27]

On the same day a series of Treasury Regulations were issued under the emergency powers granted during the March 1933 crisis that made every transaction in the foreign exchanges, the transfer of credit between any banking institution within and outside the United States, and the export of any legal tender currency from the United States subject to Treasury license, except foreign exchange transactions for normal business requirements, for reasonable traveling expenses, and in fulfilment of contracts entered into before March 9, 1933. These regulations gave large reserve powers to the Treasury, including the right to prohibit any foreign exchange transactions and to require that complete information concerning every sort of foreign exchange transaction be made available to it. They restored the system of exchange restriction in force on March 10, 1933 [28] and were part of the armory with which the government placed itself in a position to enforce its wishes concerning the foreign exchanges. On the following day the function of buying gold of domestic origin was taken over by the Federal Reserve banks from the Reconstruction Finance Corporation, the price being fixed at $34.45 per ounce, and on January 30 the President's recom-

[27] *Federal Reserve Bulletin*, Feb. 1933, pp. 62–3.

[28] Executive Order 6560, Jan. 15, 1934 (*ibid.*, Feb. 1934, p. 78).

mendations were made law by the passage of the Gold Reserve Act of 1934.

This act fixed the upper limit of devaluation at 60 per cent of the former weight of the gold dollar; it transferred the ownership of the gold held by the Federal Reserve system to the government, and provided that the Federal Reserve banks should receive for that gold deposits with the Treasury of an equivalent amount in dollars payable in gold certificates, thus leaving the balance sheets of the Federal Reserve banks unchanged except that in all their gold items gold certificates appeared in place of gold; it prohibited the coinage of gold and directed the melting into bars of all gold coins in the United States; it gave the Secretary of the Treasury power to buy gold in any amount and to issue bonds in payment thereof, and to "sell gold in any amounts at home and abroad, in such manner, and at such rates and upon such terms and conditions as he might deem most advantageous to the public interest"; and it appropriated $2 billion from the profits of the devaluation as a stabilization fund under the exclusive direction of the Secretary of the Treasury, subject to the President's approval, and provided that the decisions of the Secretary in administering the fund should be final and not subject to review by any other officer of the United States.

The machinery by which the United States became once more a member of the gold standard world was provided for by the following passages in the Act (*ibid.*, pp. 64–6):

"The Secretary of the Treasury is hereby authorized and directed to receive deposits of gold and gold certificates with the Treasurer or Assistant Treasurer of the United States when tendered by any Federal Reserve bank or Federal Reserve Agent for credit to its or his account with the Federal Reserve Board. . . . Deposits so made shall be held subject to the orders of the Federal Reserve Board, and shall be payable in gold certificates on the order of the Federal Reserve Board to any Federal Reserve Bank or Federal Reserve Agent. . . ."

'Deposits made under this section standing to the credit of any

Federal Reserve Bank with the Federal Reserve Board shall, at the option of said bank, be counted as part of the lawful reserve which it is required to maintain against outstanding Federal Reserve notes, or as a part of the reserve it is required to maintain against deposits.'

The Secretary of the Treasury shall, by regulations issued hereunder, with the approval of the President, prescribe the conditions under which gold may be acquired and held, transported, melted or treated, imported, exported, or earmarked: (a) for industrial, professional, and artistic use; (b) by the Federal Reserve banks for the purpose of settling international balances; and, (c) for such other purposes as in his judgment are not inconsistent with the purposes of this Act. Gold in any form may be acquired, transported, melted or treated, imported, exported, or earmarked or held in custody for foreign or domestic account (except on behalf of the United States) only to the extent permitted by, and subject to the conditions prescribed in, or pursuant to, such regulations."

The form of gold bullion standard established by this Act may be described as an 'administrative international gold bullion standard,' for it laid upon the Federal Reserve banks and the Treasury no compulsion of law either to buy or sell gold. A simple exercise by the Secretary of the Treasury of the permissive powers granted to him to buy or sell gold, or a simple Treasury regulation permitting the Federal Reserve banks to import or export gold for the purposes of settling international balances was all that was required to establish a temporary and effective gold parity between the dollar and other gold standard currencies. A simple failure to exercise these powers, or a simple regulation restricting the right of the Reserve banks to export or import gold was all that was required to break down this connection. Nothing in the terms of the act required that gold, if bought or sold by the Secretary of the Treasury, should be bought or sold at a price corresponding to the gold content of the dollar as defined, within the limits laid down by Congress, by presidential proclamation.

On January 31 the President, by proclamation, fixed the weight of the gold dollar at 15⅐ grains of gold 9/10 fine, or 59.06 per cent of the former weight of 25 8/10 grains, specifically reserving, however, the right to alter this definition within the 10 per cent range permitted by Congress at some future date. On February 1 the Secretary of the Treasury, with the President's approval, announced that he would buy through the Federal Reserve Bank of New York, as fiscal agent for the Treasury, all gold delivered to the United States mints at $35 per ounce. The Treasury undertook also to sell gold for export to foreign central banks whenever the dollar exchange with other gold standard currencies reached gold export point. As long as these undertakings were observed there was a place for private gold arbitrage for both export and import in the new system.[29] In addition, the Federal Reserve banks were given a certain scope for the exercise of initiative in the export and import of gold for the purposes of regulating the exchanges. The first rulings under the Gold Reserve Act issued on January 31 provided that the Federal Reserve banks might acquire gold bullion from the United States in such amounts as in the judgment of the Secretary of the Treasury were necessary to settle international balances or to maintain the equal purchasing power of every kind of currency in the United States. *For the same purposes* the Federal Reserve banks were also permitted to acquire gold abroad or gold lawfully held in the United States (e.g., for industrial purposes), and to hold, transport, import, export, or earmark such gold or to hold it in custody for foreign or domestic account. This freedom of dealing in, importing, and reexporting gold was, however, limited by a provision giving the Treasury the right to take over such gold if it was not used for the purposes designated within six months.[30]

[29] On October 12, 1936 gold arbitrage for export ceased by administrative ruling of the Treasury, following the Tripartite Monetary Agreement between France, Great Britain, and the United States; cf. Paris, *op. cit.*, pp. 36–7.
[30] Regulations issued under the Gold Reserve Act of 1934, sec. 28, 29 (*Federal Reserve Bulletin*, Feb. 1934, p. 86).

The Great American Gold Magnet

The adjustment of the central foreign exchange triangle to the establishment of a new dollar parity with the gold currencies was slow and painful. Immediately following the President's message to Congress on January 15 American funds were repatriated from London and the continent. Sterling declined from 5.15 on January 15 to 4.95 on January 18 and remained at a range of slightly under 5.00 for the rest of the month. American gold purchases, however, supported the franc, which appreciated in dollars. This appreciation was not sufficient to bring the dollar-franc rate to the level indicated by the Federal Reserve buying price for gold and it was clear that the Federal Reserve banks were not taking all the gold offered to them at that price. Since the dollar was falling in Paris but rising in London the franc had to rise in London. On January 18 the sterling-franc rate reached 79.72 francs to the pound and the London price of gold rose to 132 s. 10 d.

The failure of the dollar-franc rate to adjust itself even to the American gold price of $34.45 per ounce, which prevailed from January 16 to February 1, meant that when the American bid was changed into a standing offer to buy all gold presented at $35 an ounce on February 1, extraordinary arbitrage profits were opened to private interests. The private gold arbitrageurs were encouraged to take advantage of these literally golden opportunities and an extraordinary movement of gold into the United States resulted. The situation is described by Samuel Montagu and Company in their *Annual Bullion Letter, 1934:*

"The drastic alteration in the United States Treasury gold price, made as it was for reasons of internal economics rather than because of any weakness in the world value of the dollar, created opportunities for gold arbitrage with the United States of America on a scale, and with a margin of profit, hitherto beyond the wildest dreams of the arbitrageur.

Immediately following the announcement, substantial shipments were arranged by the next available steamers leaving Europe for New York. For a few days, however, many operators held back, there being considerable speculation as to the exact nature of the new conditions attaching to the purchase of gold. When it was realized without doubt that the United States were again back on an effective gold standard and willing to take all gold tendered from abroad at the new statutory rate, a flow of gold commenced to that country which quickly assumed flood proportions, only abating towards the end of February.

Never before has such a huge movement of gold taken place in so short a time. Accommodation on all mail steamers was booked well ahead and many other vessels other than the regular liners were pressed into service as bullion carriers. The demand for insurance caused premiums to rise sharply and as much as 20s. per cent. was paid on occasion, compared with the normal market rate of 1s. per cent. Indeed it was the difficulty of placing insurance beyond certain amounts on any one steamer that limited the consignments carried, rather than shortage of space in vessels. The United States Treasury officials were overwhelmed by the inrush and at first there was considerable delay in making settlement for gold tendered."

At the new valuation of $35 per ounce these imports amounted in February alone to $454 million, of which $239 million came from London and $124 million from France. The gold losses of the Bank of France during the month were over 3 milliard francs and American demand carried all before it in the London market. Under this tremendous support both sterling and francs rose substantially in dollars, but the adjustment of the dollar-franc rate to the new parity was delayed by the underlying weakness of the franc. Just at this time political difficulties in France reached their peak in the Stavisky affair and in the riots in Bayonne and elsewhere which immediately preceded the formation of the Doumergue Cabinet on February 10. Not until the middle of February did the franc reach approximately the new parity with the dollar of 6.635 cents per franc. On February 16 it

was 6.54 cents and by the end of the month had worked up to 6.572 cents. In March, however, the settlement of French political difficulties resulted in a repatriation of capital, and this, together with an improvement in the balance of trade, supported the exchange and enabled the Bank of France to recover during the next six months all its gold losses since 1932 (Chart 58). The rise of sterling in New York during February was almost but not quite as great as that of the franc, and as a result the sterling-franc rate reached a level of just over 77 francs to the pound.

With these adjustments in the central foreign exchange triangle a new and relatively stable system of rates was established, shown in Chart 80 by the straightening out of the three foreign exchange rate lines—the franc-dollar rate around the level of 6.5 cents to the franc, the sterling-franc rate around the level of 77 francs to the pound, and the dollar-sterling rate around the level of 5.10 dollars to the pound. In this system the dollar-franc rate was fixed and the other two rates were consequently obliged to move together. If the new dollar-franc parity did not at the time it was first fixed represent an appropriate rate of stabilization, or by a subsequent movement of prices in the various countries come soon to represent such an appropriate rate, then the system, though externally more stable, was inherently more unstable than during the summer of 1933 when a free adjustment of all the rates was possible. With the stabilization of the least important of the three legs of the triangle, leaving the most important legs to find some compromise adjustment, an underlying chronic state of strain was introduced. The most spectacular evidence that this was actually the case was the reappearance of the United States as a great magnet for the world's gold.

At the conclusion of our description of the impact of the world depression upon the United States we stated that its power to attract gold was still growing, while that of France was at its zenith (cf. Ch. 27). During 1932 the spectacular

powers of France were exerted to their fullest extent, and until autumn 1933 they were reinforced and strengthened by the events just described. The financial crisis of October 1933, however, revealed the fundamental fact that the great pull over the world's exchanges exercised by France since 1926 had run its course. This meant that the basically triangular pattern of the world's central exchanges was modified in character and that for the future the adjustments in the world's system of exchange rates would have to be adjustments to the sterling-dollar rate, rather than to the sterling-dollar-franc system of rates. Such an underlying shift in the center of gravity of the world's exchanges was not and could not be sudden. It was not spectacular and not absolute, but beneath all the extraordinary events of the next few years it remained an underlying influence of ever growing importance.

The items in the French international balance for 1932–34, as presented in Table 76, show that in 1932 the inflow of short term capital into France was reduced from the extraordinary 1931 figure of 25.8 milliard francs to 2 milliard, but that the long term capital movement was inward to the extent of 6.4 milliard as compared with a net outward movement in 1931 of 2.1 milliard. Consequently, in 1932 France was able to meet an adverse balance of merchandise trade and current invisibles of 5.9 milliard in spite of the final end of reparation receipts and a decline in her income from investments abroad, and still absorb 3.8 milliard of new foreign issues. Her great gold import of 17.7 milliard was almost exactly the equivalent of the sales of foreign exchange by the Treasury and the Bank of France and was essentially a conversion operation. In 1933 the French import surplus on merchandise and current invisible account continued its decline with the general shrinkage in international trade, but for the year capital movements were outward to the extent of 1.3 milliard. This was the net result of the inward movement during the summer and the outward movement after the fiscal

crisis in October. Consequently, for the year as a whole the Treasury and the Bank of France had to draw upon their remaining foreign exchange holdings to the extent of 3.6 milliard and to export gold to the extent of 2 milliard. In 1934 capital movements, gold movements, and official dealings in foreign exchange played relatively minor roles in establishing the balance in France's international payments which was worked out chiefly through a still further decline in her import surplus and an increase in her return from foreign investment.

In contrast, capital movements began to play an ever increasing role in the American balance of payments after 1933. Merchandise trade and current invisibles other than interest and dividends showed a decreasing net debit balance from 1931 to 1933, but from 1933 to 1935 this part of the American balance of payments was in an approximate balance (Table 37). The net credit from interest and dividend payments also declined from 1931 to 1933, but from then on was relatively stable. From 1931 to 1933 the net inward movement of long term capital other than new issues also declined, but still showed a credit balance even in 1933 notwithstanding the large repatriations of foreign capital. In 1934 it began to grow and in 1935 was once more very substantial. Consequently there were net export surpluses of over $375 million in 1932 and $274 million in 1933 as a result of the current transactions of the country in goods and services, the receipt of payment on past investment abroad, and the dealings of the securities markets, other than new issues. In 1934 and 1935 this export surplus rose to $663 million and $689 million, respectively, as the influences that had reduced the inflow of long term capital were removed and investment in America was encouraged by the cheapening of the dollar. America thus exercised a strong basic pull over the exchanges even when the monetary policy of the Roosevelt Administration was forcing a depreciation of the dollar. New foreign issues had virtually ceased and on April 5, 1934 the chances of

their revival were dealt a severe blow by the passage of the Johnson Act which provided that no private or public securities could be issued in the United States by any country wholly or in part in default on the war debts due America. During 1932 and 1933 the basic pull was offset by an outward flow of short term capital of $409 and $355 million, leaving on balance a moderate net adjustment to be made in gold and currency. All that was needed therefore to convert the United States into a magnet for the world's gold was a reversal of the movement of short term capital. As shown in Table 37, this took place in 1934. The United States occupied the extraordinary position of having an export surplus in its current operations in goods and services and in its interest and dividend account, and at the same time being an importer of both long and short term capital. The dollar was consequently strong in the world's exchanges and gold and currency imports jumped from $83 million in 1933 to $1,329 million in 1934. In 1935 the inward movement of long and short term capital reached the extraordinary proportions of over a billion and a half dollars and the gold import was over $2 billion.

The increase in the price of gold in the United States called forth new production in all gold mining areas, but after an initial stimulus, the response of South African output to the new conditions encountered a technical obstacle. The higher price of gold made the exploitation of low grade ores profitable but new plants had first to be provided. Consequently production increases on a large scale were delayed several years, production even falling somewhat, though much greater output was only a matter of time. Russian output was also greatly stimulated, and Russia came, rather unexpectedly, into the arena as a gold exporter capable of challenging the supremacy even of South Africa. But this also was a gradual, though an inevitable, evolution. Finally, the inducements to gold export from the East continued great, and prospecting

was stimulated all over the world.[31] At the same time fewer ounces of gold were needed to fill the gap in the American balance of payments than would have been the case at the old price. Nevertheless, the powers of the United States to attract gold added to the deflationary pressure on the rest of the gold standard world. The central foreign exchange triangle was fundamentally unbalanced at the moment of the devaluation of the dollar. It was not free to adjust itself as long as the dollar-franc parity was maintained, and it could not cease to be a source of persistent economic strain the world over until a new economic balance was worked out through price and trade adjustments. Price adjustments in this connection meant continued deflation in the gold standard countries and inflation in the United States. There were, however, many obstacles to a solution along these lines, and there could be no assurance that the central foreign exchange triangle could be held in the pattern existing in February 1934 until these great economic adjustments had been worked out.

[31] Cf. J. M. Keynes, 'The Supply of Gold,' *Economic Journal*, Sept. 1936, pp. 413–8.

CHAPTER 34

The Concept of Parity with Gold and the Problem of Reconstruction

With the devaluation of the American dollar early in 1934 our detailed historical analysis of the international gold standard ends. Changes in its form were beginning to be made that were in harmony with the changes we have traced in the substance of the institution and in the environment in which it had to function. New techniques had been invented and placed in partial operation. There was, however, no assurance that these alterations had finally ended the Disintegration of the old structure. The process of rebuilding was not very far advanced. The foundations were still weak, the superstructure was only partly erected, and the purposes for which the building was to be used were still in doubt. The chief architects were not even in agreement as to whether they were engaged on a second Restoration or on a work of Reconstruction. But they had by no means abandoned the project. Ever since September 1931 the world had been proceeding upon the assumption of an ultimate return to *some* permanent form of international gold standard.

In its fourth Annual Report of May 1934 the Bank for International Settlements marshaled an impressive array of evidence to show that this had always been the objective of the three great groups of powers into which the gold standard system had split in 1933. The formation of the gold bloc itself and the declaration of the central banks of France, the Netherlands, Italy, Poland, and Switzerland of July 3, 1933, confirming "their intention to maintain the free functioning of the gold standard in their respective countries at the existing gold parities and within the framework of existing mone-

tary laws"; the British Empire declaration of July 27, 1933, with its statement that "the ultimate aim of monetary policy should be the restoration of a satisfactory international gold standard"; the adoption of an administrative international gold bullion standard by the United States in February 1934, accompanied by the general pronouncements of President Roosevelt concerning the desirability of a 'bullion base' for the currency and the use of gold in the settlement of international balances[1]—all combined to range the Western Powers in accord on the question of a return to gold. The attitude of central banks with respect to the preservation and increase of their gold reserves, public confidence in gold as a medium of hoarding, the establishment of new central banks as the agents for the administration of the gold standard when once reestablished, and a gradual bringing under control of the problem of unfaithful money were also cited in the Bank's report as evidence both of intent to return to the gold standard and of practical progress in the solution of some of the technical difficulties connected with such a return.

Running through these various declarations of policy and implicit in the governmental and central banking attitudes was the common view that gold was the only generally acceptable international standard, and that the restoration of an international monetary system meant some form of stabilization of national currencies in terms of gold; that is, the establishment in each country of a parity between its own currency and gold. At the conclusion of our studies, therefore, we return once more to an examination of the concept of parity with gold.

Gold Wears a Coat of Many Colors

The most striking feature of the history of gold as an international monetary standard from 1914 to 1934 was that its

[1] President Roosevelt's Message to Congress, Jan. 15, 1933 (*Federal Reserve Bulletin,* Feb. 1934, p. 62).

economic significance as a criterion of the appreciation or depreciation of non-gold currencies underwent a series of remarkable changes. We have at various points stressed the fact that before the war the abandonment of the gold standard meant the breaking off of *one* country from a system to which most of the important commercial countries still adhered. Since that system gave the world a fair degree of stability, the fluctuations in the exchange rates and prices of the country abandoning the gold standard could be clearly measured in their relation to those of a very large group of other nations bound together through gold. Abandonment of the gold standard was usually forced by budget disequilibrium and the need of governments to raise revenue by the most effective of all taxes—monetary inflation. This strengthened the popular conviction that stability in economic matters was assured by the use of gold as a standard, and that gold and 'sound money' were one and the same thing.

Between 1914 and 1935, however, the boundaries of the world of gold were subject to great changes. The significance of the terms 'appreciation' and 'depreciation in gold' was, as an inevitable corollary, subject to great changes also. Since during this period the forms of the gold standard were always maintained by at least one country of commercial importance, it was, indeed, always possible to find a measure of the appreciation or depreciation of other currencies in gold. The currencies of the world were at all times either rising or falling relative to, or were at par with, gold, but gold itself wore a coat of many colors. From 1919 to 1924 it was identified with the American dollar. From 1925 to 1931 it was restored to its pre-war significance as a general international standard. From September 1931 to March 1933 it was the symbol of a currency system whose two pillars were the dollar and the franc. From March 1933 to February 1934 it was the symbol of the small group of countries composing the gold bloc built up around the franc. After February 1934 it was once more restored in outward form to the position it held from Sep-

tember 1931 to March 1933, but in outward form only, for the world of gold of February 2, 1934 did not have the same economic significance as the world of gold of September 22, 1931. Nevertheless, throughout all these changes, the old connotations of gold as a universal standard continued to dominate feeling, thought, and action.

The Price of Gold

During the whole period from 1914 to 1934 the movement of gold in international trade was basically determined by the survival at all times of parts of the pre-war gold standard machinery. Whenever an organized market for the sale of gold is in operation and in any given country some institution stands ready to take all gold offered to it at a fixed price, there will be a bid in the market that is a function of that fixed buying price and the rate of exchange between the country offering it and the country in which the market is located. If, in any given country some institution stands ready to sell gold in unlimited amounts at a fixed price, there will be an offer in the market that is a function of that fixed selling price and the rate of exchange between the country offering it and the country in which the market is located. If no such standing offers are in the market, and one such standing bid is very much higher than the others, then the market price will be determined by that bid, and newly produced gold will go to the country that makes it. If the standing bids and offers are close together the market price will be determined by competition. Because the rate of exchange upon which every such bid or offer is partly based is never an isolated phenomenon but is always part of a world system of exchange rates, the market price then reflects the meeting of world-wide forces of supply and demand. When there is no organized market for the sale of gold, no world price can be recorded in terms of a single currency. It can only be expressed momentarily in terms of the currency of that country whose standing bid offers at any given moment the highest

return at the existing exchange rates to the sellers of gold. This was the situation during the war when the London bullion market suspended its functions. But after the war the traditional mechanism of the market with very minor interruptions was in full operation. Many gold transactions did not pass through it, but few were not influenced by or reflected in the London price. Fluctuations in a true world price for gold were regularly recorded in shillings and pence. For this reason the interpretation of fluctuations in the London price of gold has played an important part in these studies. For this reason also a further consideration of the bids for gold coming to the London market during the period immediately preceding the devaluation of the dollar can clarify, in important respects, the terms of the problem of Reconstruction.

The Bids in the London Market

It was a general characteristic of the post-war period that, with only a few exceptions,[2] countries that went off the gold standard by placing embargoes on the export of gold and ceasing to convert their currencies into gold, did not alter the legal obligation of their central banks and treasuries to buy gold at fixed prices. The central banks of all such countries remained potential buyers of gold in the London market and from one another. There was in the London market a series of potential bids of the same character as those which distributed gold throughout the world on an arbitrage basis under the pre-war gold standard. The fluctuations in the exchanges permitted by the suspension of the obligation of many central banks to sell gold at fixed prices simply drew these bids apart. None was in effective competition with the bid based upon the dollar exchange rate from 1919 to 1924. After 1925 a gradually increasing number, including the bid of the Bank of England, came again into competition with the

[2] Sweden was the only notable exception though, as shown elsewhere, other countries occasionally practiced gold repulsion policies.

American bid. After September 1931 the Bank of England bid, and after April 1933 the American bid, ceased to be competitive. At no time did the bids, which had ceased to be competitive with the highest bids in the market, cease to exist. They no longer influenced the distribution of gold simply because gold sellers continued uniformly to sell their gold to the highest bidder.

This fact, though obvious, is sufficiently important to justify some further illustration. The drawing apart of the American and French bids for gold after April 1933 when the dollar began to depreciate in Paris is shown by the accompanying table. The French parity bids differ slightly from

American and French Gold Bids in London, 1933

	MARCH 7	APRIL 25	JUNE 6	JULY 18
Pound-dollar rate	$3.43\frac{3}{4}$	$3.85\frac{1}{2}$	4.02	$4.83\frac{3}{4}$
Dollar-parity bid for gold	120.20	107.20	102.34	85.46
Pound-franc rate	$87\frac{1}{4}$	$87\frac{31}{32}$	$86\frac{5}{32}$	$85\frac{5}{32}$
Franc-parity price for gold	120.24	119.20	121.68	123.24
London market price for gold	120.3	119.0	122.6	124.55

the market price partly because they are calculated roughly from published exchange rates which may not have prevailed throughout the day, and without allowance for the costs involved which are separately determined for each transaction, and partly because of the possible presence of other bids in the market, either from other gold standard countries or from purchasers willing to pay a 'premium' over the basic price.

On the basis of the exchange rates on London prevailing on any particular day for several currencies, a cross section view of the bids in the market, excluding the bids of buyers willing to pay a 'premium,' may be obtained. Such a cross section view would include the official English bid, for the Bank of England continued to maintain its standing offer of 84.82 shillings per fine ounce. On September 28, 1933 such a cross section view would have included the following

bids (shillings per fine ounce): Danish, 68.70; Swedish, 79.32; English, 84.82; American, 87.84; French, 131.45; Italian, 131.74; Dutch, 132.20; German, 132.87. The actual gold price on that day was 132 s. 4 d., indicating that the roughness of our calculation does not involve serious error.

A Hypothetical Question

As suggested in the Introduction, the periods that throw most light on the essential character of the international gold standard system are those in which it is least effective. At such times the contributions of various important mechanisms to the working of the system, which are ordinarily not closely examined but rather taken for granted, can best be assessed. Similar considerations justify a serious attempt to answer the hypothetical question: What would have been the basis of the London price of gold if France had abandoned the gold standard in the autumn of 1933? Additional justification for asking this question lies in the undoubted fact that between the time the United States left the gold standard and the inauguration of its new gold policy, culminating in the Gold Reserve Act of 1934, there were periods of such financial difficulty in France as to raise genuine doubts concerning her ability to stay on the gold standard. In attempting an answer, the observations just taken of the distribution of bids, actual and potential, in the London market are of considerable assistance.

If France had left the gold standard, the other gold-bloc countries would either have remained on it or have abandoned it. If they had remained on it, the situation would have been as follows: the franc-parity bid for gold in London having become ineffective in the market, as the dollar-parity bid had become ineffective before it, the remaining gold-arbitrage bids would have been those of the Netherlands, Belgium, and Switzerland as genuine gold standard countries, and those of Germany, Poland, Italy, and other countries still 'pegged to gold.'

All the sterling countries, France, and the United States, as well as Japan and other countries not falling definitely within the gold or sterling groups, would then have been obliged to consider themselves as depreciated in terms of gold. Germany, Poland, Italy, and other countries maintaining parity with gold by means of exchange restrictions would have been left, presumably, so to regulate their foreign exchange policy as to avoid depreciation in terms of the Swiss franc, the belga, and the guilder. The Netherlands, Belgium, and Switzerland would alone have remained undepreciated. They would have stood at the apex of the world's currency system, and would have surveyed the spectacle of all the great commercial currencies of the former gold standard world either depreciated in terms of their own currencies or pegged to them.

The habit of thinking and acting with respect to gold upon the principle that parity with gold is the only true indication of a safe and stable currency came perilously near to leading the world to the extraordinary conclusion that all the major currencies of the world might become depreciated while only the currencies of a few small countries of Europe remained 'sound.'

This conclusion was implicit in the continued use, under radically altered conditions, of a method of reasoning appropriate under a widespread international gold standard. When faced with the hard facts of the case, no reasonable person would assume that the Netherlands, Belgium, and Switzerland would have been able to suffer the consequences of a depreciation of the franc, the dollar, and the pound in terms of their currencies. French departure from the gold standard in 1933 would undoubtedly have broken up the gold bloc. Persons of long experience in the gold market felt that such an event would probably have produced, temporarily at least, chaos in that market, because it would have produced chaos in the foreign exchange markets of which the gold market is a reflection. The foreign exchanges would, indeed, have fluc-

tuated for a time as violently as they did after the war, but it would have been to the interest of countries formerly associated in the gold bloc, especially the smaller countries, to attach themselves to the sterling group or to the dollar, or to maintain some cohesion among themselves. Some sort of rough approximation between the exchange rates and the purchasing powers of the various currencies, such as that which persisted from 1919 to 1925 between the dollar and the pound, may be assumed, provided the confusion of the situation had not given rise to uncontrollable panic within countries previously in the gold bloc. Their problem would not have been very different from that which faced Germany in 1924 in choosing between dollar and sterling stabilization. In fact, it would have been the same, except that the dollar would no longer have enjoyed the psychological attraction of being a gold currency.

As the foreign exchange rates fluctuated, the sellers of gold would still have sought to dispose of their gold to the highest bidder. If, under these circumstances, the war and post-war precedents of maintaining unchanged the legal obligations of the various central banks and treasuries to buy gold at the old prices had been observed, then the highest bid in the London market would still have been determined as it was before. It would still have been based upon the telegraphic transfer parity rate between England and that country whose legal buying price for gold, converted at the current rate of exchange, would produce the highest offer in shillings for gold in the London market. This might still have been the French parity rate. It might have been the dollar-parity rate if, for example, inflation in France or a flight of capital from France had brought the dollar to a point where it was appreciated in terms of sterling, as compared with the mint parity of 4.8665, more than the franc was appreciated in terms of sterling as compared with the mint parity of 124.21 francs to the pound.[8] If in the course of the fluctuations of the

[8] These mint parities are not used here because they would have been of

exchange rates there had been a sufficient movement of capital or sufficiently fundamental changes in the balance of payments due to inflation in former gold countries, the exchanges of those countries might have, and indeed probably would have, fallen in terms of sterling. That would have meant a fall in the price of gold in London, and it is conceivable that all exchanges, including the dollar, might have depreciated in terms of sterling to the point where the bid of the Bank of England of 84 s. 9.81 d. per fine ounce would have become once more an effective bid for gold. Under such circumstances gold would once more have become sterling and sterling gold. This result, it must be noted, might have taken place not through the process of Great Britain returning to the gold standard, but as the result of all other countries leaving it. It is, of course, possible to make another assumption with respect to the behavior of the exchanges; namely, that, as a result of the breakup of the gold bloc, exchanges of other countries, including sterling, might depreciate in terms of the dollar to such a point that the American bid for gold, based upon the United States Treasury's buying price of $20.67 per ounce, was the highest bid. Then the dollar would again have become gold, and gold the dollar, as it was from 1919 to 1925.

Under such a condition of confusion or chaos, if it may be so described, in the foreign exchange markets, *all* central banks and treasuries, whose bids for gold based upon legally fixed buying prices and fluctuating foreign exchange rates were lower than the highest bid in the market, would have been in the following position, already experienced in fact by many of them:

1) They would have been accumulating a hidden profit in their balance sheets as long as they continued to carry gold held by them at the same figure in terms of the national currency as be-

any special economic significance, but because they indicate rates of exchange at which the French and American bids for gold in London would be the same.

fore its depreciation in terms of the currency of that country whose central bank was, for the moment, the highest bidder for gold.
2) The ratios in which the standard coins of their countries stood to one another according to the legal definition of their gold contents would have been different from the ratios in which these currencies actually stood to one another in the foreign exchange markets.

These two things are not quite the same, for the first would have been the result of a change in the relationship between the given currency and that single currency which at the moment happened to represent the best market for gold; whereas the second would have been a reflection of a change in the relationships between the given currency and all other currencies that were previously gold standard currencies.

It is practically certain, however, that if the gold bloc had disintegrated before the United States again became an effective bidder for gold, the London price of gold would not have been allowed to become the football of the foreign exchanges and of an obsolete set of central bank buying prices for gold to the extent assumed above. The British Exchange Equalization Account would probably have bought gold at or above 120 shillings per ounce. It would not have submitted to the heavy losses on its gold that would have resulted from a lower price. Had it done this it would, however, have been acting upon the assumption of a subsequent return to the gold standard forced upon the world as a result of intolerable confusion in the foreign exchange markets. To escape from the inconveniences of fluctuating exchanges and incidentally to reap the profits hidden in the balance sheets of most central banks, there would have been sooner or later a general 'return to gold.' This would have had to take the form of a series of decisions by central banks to pay enough more for gold to make them again competitors in the market for gold; that is, there would have been a series of decisions in various countries to change the legally defined gold content of their stand-

ard coins in order to bring them into conformity with the relationships existing fundamentally between the values of their respective currencies and already roughly approximated by the exchange rates. In such a general return to gold the absolute quantities of gold to be contained in the various new currency units could have been determined by the system of exchange rates established by a series of stabilization operations, provided the legal definition of *one* important currency unit as a certain weight of gold was taken as fixed. This currency would probably, though not necessarily, have been the currency that for the moment was the basis for the highest bid for gold in the world's market. Such a choice would have maximized the profits that would have been realized by central banks as an incidental consequence of returning to gold, and would have minimized the losses of all who had bought gold for hoarding purposes or as a hedge against losses in exchange. If every country, however, felt free to change the definition of its currency unit by unilateral action, and were prepared to do so to force a solution of the problem of exchange rates favorable to itself, the problem of returning to gold would either have become insoluble or have been postponed until an answer had been obtained through destructive international economic warfare, of the question, Who is Sovereign over the Foreign Exchanges?

Who is Sovereign?

The discussion of the hypothetical question of the probable effects of the abandonment of the gold standard by France at a time when both the United States and Great Britain were off the gold standard has served to emphasize that in the reconstruction of a gold standard system that has once broken down the question of exchange rates is primary, and the question of the absolute quantities of gold in standard coins is secondary. Over the first no country is sovereign; therefore no country is sovereign over the second unless the standard coin is completely divested of all international sig-

nificance. A powerful country in a gold standard system may act entirely independently in defining its currency unit, and for a time force the exchange rates to move as it wishes, but the equal independence of other countries leaves it in their power to nullify this action by a redefinition of their own currency units. In the end, it is a condition of a general return to gold either that the gold content of the monetary units of powerful countries be simultaneously defined by international agreement or that the gold content of the unit of some one country be taken as a point of reference for unopposed sovereign acts of revaluation by other countries.

In 1933 an attempt was made at the World Economic Conference to decide upon a system of exchange rates by international negotiation that would best promote general economic recovery and give promise of stability in the future. Had this attempt been successful a general return to gold making this new system of rates permanent would have been possible by a simple redefinition of the gold content of the sovereign and the dollar. For in 1933 France did not leave the gold standard, the gold bloc did not break up, and the price of gold in London continued to reflect the relation between the pound and a substantial group of countries that had no intention of changing the legal definition of their monetary units. Therefore all that was necessary was to establish new dollar and sterling parities with the franc such that the new system of pars in the triangle would be in harmony with the desired exchange rates. The four negatives of the Conference, which had their basis in the conviction that sovereignty over the exchanges was an attribute of national sovereignty destroyed all hope of such action but left open the possibility of sterling and dollar revaluations independently determined upon and unopposed by France and the other gold bloc countries. When, however, the United States did redefine the gold content of the dollar on January 31, 1934, it redefined it on such a basis that the new American bid for gold in the world market would have been far higher than that based upon the

buying prices of the gold bloc countries, unless the currencies of those countries appreciated in dollars very substantially. Therefore the gold bloc countries were able to remain competitive bidders for gold only by accepting a large part of the burdens imposed by a depreciation of the dollar, and shifting the remainder to sterling. The problem left by the war of finding a proper set of exchange rates from which to proceed was still unsolved, for the choice of the rate of devaluation made by the United States government was not a recognition of a past change in the relation of the purchasing power of the dollar to that of other currencies, but an anticipation of changes that had not yet come into existence. It constituted the fourth major problem of over- and undervaluation of currencies in the post-war period. The new dollar-franc parity could not provide the basis for a permanent world-wide 'return to gold' unless American prices rose relatively to prices in other countries. Italy's action in decreeing a general deflation in all Italian prices in April 1934 was one answer to dollar devaluation, as Bruening's deflationary decrees of December 8, 1931 had been an answer to the abandonment of the gold standard by Great Britain. The reduction of the gold content of the Czechoslovak crown was an answer of a different sort. Inflation within America was the solution hoped for most generally, but this was by no means certain to result in the adjustment actually required. The fixed point of reference for a future sterling stabilization in gold had now become an artificial relationship of uncertain duration between the dollar and the franc.

The intention of the United States to maintain the definition of the gold content of the dollar unchanged was expressly left in doubt after the devaluation of 1934. The ability of France to maintain the definition of the gold content of the franc unchanged was also in doubt. The rate of exchange between the United States and France, and between the United States and all the 'gold bloc' countries, was not stabilized in any enduring way. There was no definitive

stabilization of the most important foreign exchange rate in the world—the dollar-sterling rate. The primary problem of exchange rates being unsolved, the secondary problem of the absolute content of the various gold standard units of the future was unsolved too. The price of gold in London reflected the competitive bids of gold arbitrageurs, alternately using the franc and the dollar-parity rate as the basis for their bids. It represented, as it had before April 1933, the relation of the pound to a group of gold currencies, including the dollar and the franc, but this group was now much more disunited and more subject to ultimate disruption.

The situation, as it stood immediately after the dollar devaluation but before the world-wide effects of that action and of the economic policies prompted by it had had time to work themselves out, may be described in terms of the adjustments possible in the triangle as newly constituted. When first established, the new parity between the franc and the dollar of 6.65 cents per franc appreciably undervalued the dollar in terms of the franc. At the same time, even in the light of the increase in American prices since April 1933, a large section of British opinion regarded a sterling-dollar rate of 4.50 as the maximum permissible. If, however, sterling had fallen to 4.50, the franc would have had to rise to 67.7 francs to the pound, an appreciation of 45½ per cent over sterling since September 1931. Thus, as long as the gold content of the dollar remained as defined by the Gold Reserve Act of 1934 and France did not revalue the franc, the establishment of a dollar-sterling rate satisfactory to Great Britain would have shifted an intolerable burden to France and to the gold countries. Their answer would surely have been devaluation before 1936. If the French franc had fallen in London to 84 francs to the pound, about the rate at which it had been temporarily stabilized during the World Economic Conference, while the dollar-franc rate remained at the new parity, sterling would have had to rise to 5.57 in New York. A heavy economic strain would have been shifted to the sterling group

and a deflationary policy would have been imposed on Great Britain. Neither a sterling-dollar rate satisfactory to Great Britain nor a sterling-franc rate satisfactory to France was compatible with the dollar-franc rate satisfactory to the United States. As long as the three rates remained approximately as they were in February 1934, the burdens of dollar undervaluation in francs were shared between the world of sterling and the world of gold, but they were not shared equally. The triangle was unbalanced and not free to adjust itself and was bound to break its bonds at the weakest point. The French devaluation of 1936 proved that the United States was not sovereign over the foreign exchanges.

Rationalizing the Behavior of Hoarders and Exchange Stabilization Funds with respect to Gold

Our cross section view of the bids in the London bullion market in 1933 excluded the bids of those willing to pay a 'premium' for gold. This term requires careful definition, for when used in connection with gold it may have any one of three meanings:

1) The amount the holder of paper money must pay above its face value in order to purchase the same nominal amount of gold. It is in this sense that the term has been traditionally used in discussing 'depreciated paper money,' e.g., the American greenbacks.

2) The difference between the open market price of gold in London and the statutory buying price of the Bank of England. It was in this sense that the South African gold mining industry habitually spoke of the premium on gold during the entire period 1919–25.

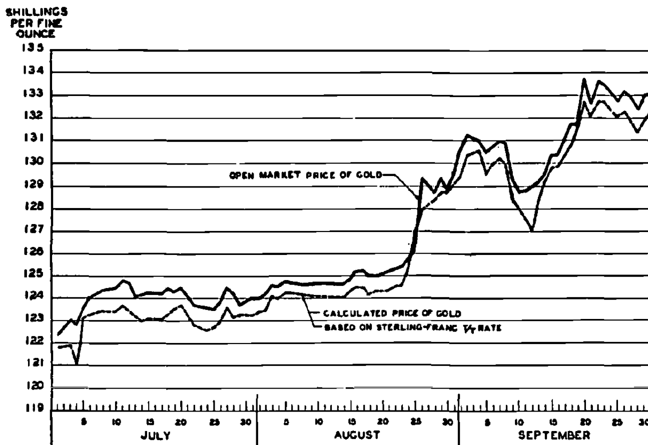
3) The difference between the price of gold based upon the telegraphic transfer rate between London and New York or Paris or some other gold standard country and the actual market price paid for gold in the London market. It is in this sense that the London bullion market speaks of a premium on gold.

The premium, in the third sense, existing in London during July, August, and September 1933 is shown on Chart 81,

in which the franc parity price in London, based upon the daily published quotations of the exchange rate between London and Paris with a deduction to allow for the cost of transporting gold between the two centers and the actual market price of gold, are plotted. Although the franc parity

CHART 81

Gold Premium in London, July–September 1933, daily



rate (Table 86) is only an approximation because actual quotations change during the day, and the actual cost of shipment is continually changing, the general behavior of the premium appears clearly in the chart.

The existence of this premium was a reflection of the demand for gold of purchasers who were willing to pay more than those who wished to buy gold as an arbitrage transaction. In contrast to the situation from 1919 to 1924,[4] India was not among them for reasons given in Chapter 23, but her place was taken by buyers of gold as a hedge in foreign exchange transactions, simple hoarders, and official control agencies.

For illustrative purposes two transactions showing the use of gold as a hedge may be briefly described. If someone pos-

[4] Cf. Ch. 10, New York as a Residual Buyer of Gold.

TABLE 86

Gold Premium in London, July–September 21, 1933, daily

DATE	OPEN MARKET PRICE OF GOLD IN LONDON		CALCULATED GOLD PRICE BASED ON STERLING-FRANC T/T RATE		OPEN MARKET PRICE OF GOLD IN LONDON		CALCULATED GOLD PRICE BASED ON STERLING-FRANC T/T RATE		OPEN MARKET PRICE OF GOLD IN LONDON		CALCULATED GOLD PRICE BASED ON STERLING-FRANC T/T RATE	
	JULY				AUGUST				SEPTEMBER			
	s	d	s	d	s	d	s	d	s	d	s	d
1	122	4½	121	10	124	0	123	5	130	8½	129	8
2					124	3	123	6	131	3	130	4½
3	123	1	121	11	124	7	124	1				
4	122	10	121	1	124	6½	124	0	131	0	130	7½
5	123	7	123	2	124	9	124	3	130	4	129	7½
6	124	2	123	4					130	7	130	0
7	124	3	123	5					131	0	130	2½
8	124	5	123	5½	124	7½	124	2	130	11	129	11¾
9					124	8	124	1	129	2½	128	5
10	124	6	123	5½	124	8	124	1				
11	124	10	123	8	124	8½	124	1	128	9½	127	6
12	124	9	123	5½	124	8½	124	1	127	7	127	0
13	124	1	123	2					129	2	128	4½
14	124	2	123	0	124	8	124	1	129	6	129	3
15	124	3	123	1	124	10	124	4½	130	5	129	10
16					125	3	124	6½	130	5	129	11
17	124	3	123	1	125	3	124	6½				
18	124	5½	123	3½	125	0	124	2½	131	9	130	10
19	124	4	123	6½	125	0	124	4	131	9	131	7½
20	124	6	123	8½					133	9	132	8½
21	124	1	123	3	125	2	124	4½	132	9	132	1
22	123	8	122	9½	125	3	124	6½				
23					125	5	124	7				
24	123	6½	122	7	125	9	125	3				
25	123	6	122	8½	126	2	126	11¾				
26	123	9½	122	11¾	129	4	127	11				
27	124	6	123	6								
28	124	3	123	2	128	8½	128	5				
29	123	8	123	3	129	4½	128	8½				
30					128	9½	128	9½				
31	124	0	123	3	129	7	129	1½				

sessing sterling had a future payment to make in France and wished to provide for it in advance, he could buy francs at the existing rate of exchange or he could buy gold. If he bought francs, and France did not go off the gold standard, and the franc rose in terms of sterling from 80 to 70 francs to the pound, his position would be protected, for he would have his francs at the old rate. If he had bought gold at a price based upon the then existing franc-sterling rate, or even a little above it, he would still have been protected, for the Bank of France would still have bought the gold from him at its statutory price, and he would have, in effect, obtained his francs at the old rate. If he had bought francs, and then France had gone off the gold standard, and the franc had depreciated in sterling he would have been protected against loss, but would not have derived any advantage from the fall in francs. If, however, he had bought gold, and France had gone off the gold standard, and the franc had depreciated in gold as well as in sterling, then he could have sold his gold in the Netherlands, or Switzerland, or in any other gold standard country and bought francs with the proceeds. This would have yielded him more francs and the franc debt would have been paid more cheaply. This was the reasoning of the market which did not take full account of the changes that a French departure from the gold standard would have brought about in the remaining gold bloc countries. Upon this reasoning persons having debts to pay in France in the future could lose nothing by buying gold instead of francs in any case, but if France went off the gold standard before the debt was due they might have made a profit. However faulty the logic, the conclusion had a strong pragmatic sanction. A second transaction was of the following type: speculators who thought that France might leave the gold standard could sell francs short and buy gold in India for future delivery in England. If France did go off the gold standard, they could ship the gold to England, sell it there, and purchase francs to cover. Such a position could be carried

forward from month to month, and was preferred by many speculators to purchasing and earmarking gold in France, because of fear that some such measures might be taken there with respect to gold hoarding as were subsequently taken in the United States. These examples are given because they represent the transactions of experts in the foreign exchange markets rather than those of the general public. They rested upon the assumption that if France had gone off the gold standard, there would still have been a high price for gold in London.

Many purchases of gold by private individuals were not based upon so refined a type of calculation, but upon an irrational conviction that gold was the safest of all stores of value. This was the same type of demand for gold that had persisted throughout the post-war period as a natural consequence of the loss of value of various types of paper money, and was exemplified on a gigantic scale in the domestic drain of gold in the United States prior to the breakdown of 1933. Many hoarders were willing to pay a premium in London for gold rather than take it from the Bank of France, thereby incurring the justified displeasure of that institution. This hoarding demand was primarily a reflection of the age-old confidence in gold as something having 'intrinsic' value. It was based upon the assumption that somewhere in the world there would still remain a demand for gold at a high price, whatever happened to particular currency units.

The statistical importance of such purchases is indicated by a passage in the *Fourth Annual Report of the Bank for International Settlements* (pp. 5–7):

"During the 15 months' period up to the end of March 1934 the net imports of gold to Great Britain were, according to Customs statistics, equal to about 4,500 million Swiss francs, while the increase in the holdings of the Bank of England was only about 1,750 million Swiss francs; the difference may to some minor extent represent an increase in the holdings of the Exchange Equalisation Account, but by far the larger portion appears to have

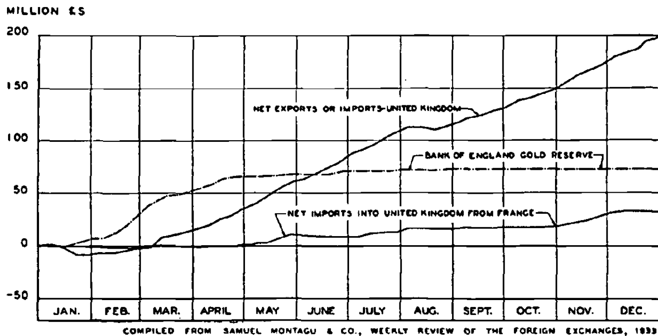
gone into private hoards. Indeed, out of 7,000 million Swiss francs, at which the total amount of gold hoarded has been estimated, it would appear that perhaps one third was held in England by persons who, as a rule, were non-residents."

The difference between British gold exports and imports and changes in the Bank of England reserve, brought out in this passage, is shown graphically for 1933 in Chart 82.

Though in comparison with the amount of gold bought for hoarding or as exchange hedges, the purchases of the British

CHART 82

Gold Exports and Imports of the United Kingdom and Gold Reserve of the Bank of England, 1933, changes cumulated weekly



Equalization Account and of other similar funds were not statistically impressive, they had a fundamental bearing upon the hoarding demand. Purchases of gold by the Account eliminated the exchange risk on its holdings of particular foreign currencies. They were in fact, like the gold purchases of private speculators, a foreign exchange hedge. The opportunity of hedging in this way was, of course, also open to the newly formed American Stabilization Fund, and to any other exchange stabilization funds that might be established by other countries, and to central banks. It provided the basis for a new general technique of exchange stabilization based on gold.

Purchases of gold by the Account did not however eliminate the general exchange risk involved in a fluctuating price of gold,[5] but created a strong interest on the part of the Treasury in seeing to it that the price of gold in sterling should not go below the average cost at which the gold in the Account was bought. This consideration also was of general application. The greatest holders of gold in the world were central banks and treasuries. As such they had a strong vested interest in preventing their gold holdings from falling in value in terms of their national currencies. To the extent that they did prevent the price of gold from falling, the expectations of gold hoarders and gold speculators would be justified.

If, indeed, the governments of the world decided to abandon the whole idea of gold as standard, even in a juridical sense, and all central banks consequently divested themselves entirely of their gold assets, then gold, as a store of value, might suffer the fate of silver in earlier years. Or if some commercially important gold standard country, in order to force an appreciation of its exchange with reference to other gold currencies or for any other reason, should reduce its buying price for gold, and the other gold standard countries reduced their buying prices for gold in order to resist the decline in their exchanges, then the expectations of gold hoarders and gold speculators would be falsified. The price of gold in all gold standard currencies would be less, and provided this readjustment had not moved the sterling rate on gold standard countries downward, the price of gold would be less in sterling also. Against such developments the self-interest of central banks and treasuries as large gold holders was a guarantee, even if other considerations had not made them extremely unlikely. In 1934 exactly the opposite sequence of events took place. The United States raised the price of gold in dollars, and in order to meet the situation created by this act, other central banks also were forced, eventually, to pay more for gold. The calculations of the

[5] Cf. Ch. 31, The Establishment of the Exchange Equalization Account.

sophisticated speculator in the exchange market, the instinct of the humble hoarder, and the policy of exchange stabilization funds and central banks found a practical justification in the fact that those who had power to reach final decisions in these matters had the strongest motives for preventing a decline in the price of gold.

Four Facets of the Problem of Reconstruction

The assurance given gold hoarders concerning the future of gold as a store of value by the self-interest of central banks and treasuries in maintaining the price of gold extended only to a guarantee that they would not receive less than they had paid in terms of national currencies for the gold they held. It did not, of course, include any protection against a change in the value of those currencies. In its concluding paragraphs this study cannot enter into the vast subject of the forces determining the value of gold, but it can point out that the logical outcome of the forces determining the price of gold after 1934 was to release the former gold bloc countries from deflationary pressure and to make possible, upon a more nearly world-wide scale, the development of the easy money and price raising programs insisted upon in one form or another by Great Britain and the United States.

The Question of Rates

This was accomplished in the course of two years because, in the language of the gold market, the devaluation of the American gold dollar forced the gold bloc countries to pay more for gold. In the terms employed in our discussion of the central foreign exchange triangle it was accomplished by an adjustment of the less important leg of the triangle to the more important legs. The triangle was not adjusted by a common movement of sterling in terms of francs and dollars, but by a breakdown in the newly established dollar-franc parity, and a common movement of francs in terms of dollars and pounds. The development of the inflationary policies of

the United States was sufficiently rapid to allow Great Britain to accept, if not willingly, at least de facto, the general level of about 5 as a basis for something more than a momentary stabilization of the pound in New York. At this rate it proved possible for the easy money and credit expansion policy of Great Britain to continue unchecked, and for the cultivation of England's garden to be carried vigorously forward. The dollar-sterling rate did in fact emerge once more as the trunk line of the world's exchanges and devaluations within the gold bloc constituted an adjustment of other exchange rates to it. These devaluations made possible in France, and in some degree in other countries, the adoption of expansionist monetary policies along the general lines being pushed forward elsewhere. In 1936 the groundwork was laid, as far as exchange rates were concerned, for basic solutions of the problem of setting in motion some sort of stable international currency system, though these solutions were not yet actually worked out.

The Question of Environment

The obstacles to the successful functioning of any form of fixed exchange rate system based on gold, moreover, were still formidable. The rigidity of the internal economic structure of countries experimenting with a planned economy or regulated trade meant that the so-called corrective influence of gold movements upon the structure of prices could no longer be relied on. This was not, however, a fatal obstacle to the successful operation of a properly managed gold standard system. We have stressed the view that even under the pre-war gold standard, the corrective influence of gold movements on price levels was not as vital in forcing international adjustments as has often been asserted. Price levels were held together more largely because they contained a common element, namely, the prices of internationally traded-in commodities, than because they were corrected by contractions and expansions in the credit base caused by gold movements.

Nevertheless, in further developing the techniques of the gold standard the fact had to be faced that changes in the reserve ratios of central banks would no longer be a very positive force in controlling the relations of the economies of particular countries with those of the mass of other countries. The quota system of trade restrictions, and the frequent changes by legislation and administrative action in effective tariff rates, was a second well recognized obstacle. The instability of the new protection was its chief menace to international trade, but there was force in the reiterated contention of the gold bloc countries that this instability was partly due to fluctuating exchanges. In part this obstacle could be overcome if once the exchange rates were stabilized and the deadlock over 'the question of precedence' broken, but an international gold standard with fixed exchange rates could not hope to operate successfully for many years unless some tariff system existed. It could operate successfully under a high tariff system supplemented by bilateral trade agreements, but frequent changes in tariff rates and the absence of any relatively fixed system of trade relations were forces against which it could not permanently contend. A third obstacle was 'unfaithful money,' and the new mobility of private investment in internationally traded in securities. In part this was a permanent problem arising out of new habits of investment, new methods of financing, and new distrust of money, which though lulled for long periods could easily be aroused by untoward events, as it could not have been before the war. In part it was an inheritance from the accumulated credit expansions of the post-war era. It was, however, also to some extent a function of exchange instability, and therefore could be partly met by the mere maintenance of stable exchange rates. In addition, 'the great American gold magnet,' and the fact that the New York market still retained great capacity to be an international money market but had abandoned its attempt to play that role on a large scale, added to the difficulties of operating a gold standard system. Finally, an essential and profoundly

significant element in the new environment was that a century of capital exports for the development of the world's resources had ended. With it had ended also the marvellously adaptable and flexible use of credit as a time-bridging device to fill the gaps in the international balances of payments characteristic of the pre-war international gold standard.

The Question of Techniques

These changes in the environment in which a reconstructed gold standard had to operate required radical changes in the techniques by which it was managed. The new techniques were introduced for the most part by a series of changes in detail of which our entire post-war analysis has been a record. The most spectacular were the dropping of the gold circulation; the decline in the importance of the discount market, and the taking over of its functions by direct central banking control over the volume of credit; the rise of exchange stabilization funds to deal with the problem of unfaithful money and capital flight and to provide a substitute for the balancing functions of private short term movements of the exchange and interest arbitrage type; the development of systems of exchange control; and the determination of foreign exchange and central banking policies by governments. The chief instruments for the promotion of exchange stability under the new order were already in existence in 1934. At the World Economic Conference the generalization of the techniques employed by the British Exchange Equalization Account was suggested, and in the Tripartite Currency Agreements of 1936 and their extensions this proposal received practical application, while the possibilities and limitations of exchange control as an alternative system were being discovered by the test of experience. No condensed summary of the new techniques, however, can do justice to the new forms of management which had replaced the pre-war type of banking control. A full length portrait, such as has been painted in these pages, alone can accomplish that task.

The Question of Objective

During the period of Disintegration fundamental questions of ultimate objective in the organization of international currency relations were raised. Many students of the problem held that, since the breakup of the integrated world credit system was complete and irrevocable, national currencies should not in future be bound together in a fixed system of exchange rates. Others, making a virtue of necessity, saw in exchange control the birth of a new and better system. The ultimate goal as well as the time, place, and method of a return to gold was called in question. These are very broad issues, involving the whole question whether the advantages of nationalism and national self-sufficiency outweigh the advantages of international division of labor, whether the advantages of an appropriately managed gold standard system with fixed exchange rates are greater than the advantages of alternative systems of stabilized national economies with free exchange rates, or of exchange control and authoritarian planning. Such questions lie outside the scope of this book, but the conclusion may be drawn from our historical analysis that, as far as currency management is concerned, the issues are not as clear cut as they sometimes appear to be.

The world does not escape from the strains of a decentralized credit system in which center countries pursue contradictory financial and economic policies and all countries assert that they are sovereign over the exchanges merely by casting its exchanges loose from their moorings or dividing its currencies into fragments. There is no escape from the problem of finding some way, if not of coordinating, at least of adjusting the economic policies of the various countries short of abandoning international trade. The history of post-war commercial policy is a story of mutual adjustment by measures of attack and defense. The unfortunate effects of unrestricted tariff warfare were universally recognized as undesirable, and therefore a solution of the problem of international trade ap-

propriate to a system of nationalistic economies and independent national currencies was brought forward. This was the conclusion of a series of bilateral trade agreements. In working out these agreements, however, it was early found necessary either to provide for triangular trade, and to make some headway against their restrictive effects by converting them into regional agreements and including in them the most favored nation clauses, or to divert the natural course of trade into new channels by methods of coercion, discrimination, and fractional depreciation. The logical conclusion of the first tendency is the restoration of a system of world-wide trade relations. The conditions most favorable to the establishment of such a world-wide system of general trade agreements are those which are also prerequisites for a workable international gold standard system. The logical conclusion of the second tendency is the antithesis of the first, namely, the destruction of world markets.

The intermediate program of establishing stable internal conditions and allowing the exchanges to fluctuate does not theoretically imply that any nation will force a certain exchange rate upon other nations. But because of the many short term influences that act in the exchange markets, and because it is relatively easy to move exchange rates under those circumstances, exchange rates often do not properly reflect the underlying relationships of various currencies. Unless their fluctuations are kept within relatively narrow bounds, they will continually over- and under-correct changes in the cost and price level relationships of various countries, and the interpretation of such under- and over-corrections will give rise to many points of international conflict. The inconvenience of unrestricted fluctuations brought exchange control funds into existence in order to carry out de facto pegging either by agreement or by conflict. The advantage of such an arrangement over the international gold standard with fixed exchange rates consists chiefly in the impermanence of the rates chosen for such de facto stabilization operations. Impermanence,

however, is a matter of degree. The advantages of temporary pegging by exchange equalization funds would be slight indeed if it did not continue long enough to make possible the conclusion and fulfilment of long term international contracts, including contracts of loan. The advantages of a permanent system of exchange rates that cannot be altered without grave psychological and political repercussions under conditions in which international trade is obstructed, domestic credit policies in the center countries diverse, capital movements sudden, large, and unpredictable, and currencies nominally standing at fixed gold parities broken up into many special categories, are also doubtful. Under such conditions occasional deviation from a system of fixed rates may be a positive good.

The long run objectives of all three policies, internal monetary management with fluctuating exchanges, the maintenance of fixed rates by an international gold standard, and exchange control are identical in one important respect. All aim to achieve maximum stability externally and internally. If all major economic powers follow a policy of internal price stability, relatively stable exchange rates are both a consequence of that policy and an aid in its execution. If all major economic powers join in an international convention of any sort permanently fixing the exchange rates between them, relatively stable prices are both a consequence of that convention and a requirement for its continued existence. This requirement cannot be met in a free economy unless a basic economic equilibrium can be established. Those who advocate a system of exchange control as a positive good rather than a necessary evil contend that it is a new monetary system that avoids the Hobson's choice between unstable exchanges and unstable internal prices. Under all these policies currencies are managed. None can be passive and none can be successful as an instrument for promoting human welfare unless there is economic and political peace. The policies of free exchanges and of exchange control can more easily be con-