

THE INTERNATIONAL GOLD STANDARD:  
LESSONS OF INTER-WAR EXPERIENCE

by

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## ABSTRACT

At one point in 1968 the world monetary system appeared to be close to collapse. Major balance of payments disequilibria had become critical, the major paper currencies of the world had suffered a severe crisis of confidence and instability in the value of gold meant that the world came close to being without a "world money." It is against this background that the present study of inter-war international monetary experience has been undertaken.

Monetary history in the period between 1918 and 1931 can be viewed in terms of strenuous efforts to restore and maintain an international gold standard. These efforts eventually failed. However, today gold remains the basis of international monetary relations. In this context, therefore, a more thorough examination of international monetary experience under the gold standard of the inter-war years may be instructive.

To this end the paper is divided into two major sections. The first of these emphasises the relevant historical experience of the inter-war period while the second emphasises economic analysis to derive some lessons from this experience.

Thus, in Section 2 we are concerned with historical perspectives. Initially the period up to 1925 is of interest from the point of view of why countries desired to resurrect the gold standard and within this general theme the return of the United Kingdom is felt to have greatest significance. After 1925 the historical pattern is seen to be one of growing disequilibrium in the balance of payments of several important countries and groups of countries. Finally in this section the sequence of events leading to the final breakdown of the international monetary system will bear some attention.

After such a process of setting the stage, Section 3 concentrates on economic analysis in an attempt to find the major lessons to be learned from the historical experience of failure to maintain a stable and viable international monetary system. This will be the central core of the paper.

Lastly, we draw together the threads of previous arguments and return briefly to our introductory reflections. Is history repeating itself? - is 1968 a re-enactment of 1928?

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## 1. INTRODUCTION

"The international gold standard is by no means such an old and venerable institution as many people seem to believe."<sup>1</sup> It only attained its world-wide character at the end of the nineteenth century when the U.S. definitely established its monetary system on a gold basis. The international monetary system, so formed, was maintained successfully until 1914 when it collapsed with the outbreak of the Great War. Monetary history of the inter-war period can be seen in terms of strenuous efforts to restore and preserve an international gold standard system, and the eventual failure of these efforts.

In 1968 the world monetary system again appears to be close to collapse. There is some comfort, to be sure, to be gained from the feeling that the world must have profited from the lessons of the collapse in the inter-war period and in forty years must have taken some steps to insure that a similar debacle could never recur. However, gold is still the fundamental ingredient of the international monetary system. And there is certainly no confidence to be gained from attempting to recall historical utopias of stability and efficiency under a past gold standard for the simple reason that no such happy precedents exist. In fact, in the two periods when the gold standard was in abeyance there were influential people who regarded its reinstatement as not only impracticable but undesirable. In 1923, Keynes could see "grave objections to reinstating gold in the pious hope that international co-operation [would] keep it in order."<sup>2</sup> A decade later, Cassell was moved to ask: "What in heaven's name is the sense of linking our currency in any way to gold?"<sup>3</sup>

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<sup>1</sup>G. Cassell, The Downfall of the Gold Standard (London: Frank Cass & Co. Ltd, 1936), p. 1.

<sup>2</sup>J.M. Keynes, Tract on Monetary Reform (London: Macmillan, 1923), p. 174.

<sup>3</sup>Cassell, op. cit., p. 246.

Obviously, in the present world monetary situation, a more thorough examination of international monetary experience under the gold standard of the inter-war years may be instructive. Although up until the mid-1940s there did appear many analyses written around the complex economic happenings of the two previous decades, interest seemed to wane thereafter. For one thing there has been little attempt to view closely and objectively the international monetary system in the inter-war years with respect to relating it in terms of continuity to the system which has emerged since 1945.

Perhaps the most important objective of this paper, then, will be to attempt to remedy this situation by examining in detail inter-war experience with the gold standard having the implications of such a possible continuity in mind. To this end the body of the paper is divided into two main stages. The first of these emphasises the relevant historical experience of the inter-war period while the second emphasises economic analysis in an attempt to derive some lessons from this experience.

Thus Section 2 is concerned with historical perspectives. Initially the period up to 1925 is of interest from the point of view of why countries desired to return to the gold standard and within this general theme the return of the United Kingdom is felt to be of greatest importance. After 1925 the historical pattern can be seen in terms of growing balance of payments disequilibrium in several important countries and groups of countries. Finally in this section the sequence of events leading to the final breakdown of the international monetary system will be enumerated.

After the stage has been set in this way economic analysis comes into its own in Section 3 to pinpoint the major lessons of this experience of failure to maintain a stable and viable international monetary system. This is the central core of the paper. Only after this has been done can we return to our introductory reflections to ask, if only in the most superficial way: Is history repeating itself? - Is 1968 a re-enactment of 1928?

## 2. THE HISTORICAL BACKGROUND OF GOLD STANDARD EXPERIENCE IN THE INTER-WAR PERIOD.

### 2.1. The United Kingdom's Return to the Gold Standard, 1925.

The violent economic disturbances of the immediate post-war period made it seem a matter of urgency to restore a certain minimum of stability and confidence in world monetary organisation. This principle was strongly stressed by the delegates to the Genoa Conference in 1922 where a call for a general return to the gold standard was made. Each country was to maintain its currency at a fixed value in relation to gold signifying free convertibility between the two. But on the basis of the most recent disturbances certain changes in the pre-1914 system were advocated for the successful maintenance of the "new" gold standard:

(a) It was realised that all countries could not return to their pre-war parities. Some currencies had greatly depreciated and "the social and economic dislocation attendant upon continuing readjustments of money wages and prices"<sup>4</sup> was well understood. The correct choice of parities to allow an equilibrium situation to be approximated was held to be of great importance.

(b) There was also thought to be a great need "to co-ordinate the demand for gold, and so to avoid those wide fluctuations in the purchasing power of gold which might otherwise result from the simultaneous and competitive efforts of a number of countries to secure metallic reserves."<sup>5</sup>

(c) Increased international co-operation and collaboration of central banks was deemed as not merely desirable but essential.

and (d) The fear of a shortage of gold called for economies in the use of gold by using currencies as reserves as well as gold and removing gold from internal circulation.<sup>6</sup>

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<sup>4</sup>Conference of Genoa. Committee of Experts, 1922.

<sup>5</sup>Conference of Genoa. Resolution 9.

<sup>6</sup>One of the most powerful pleas for a gold exchange standard is found in J.M. Keynes, Indian Currency and Finance (London: Macmillan, 1913).



For the United Kingdom, as for most countries, the immediate problems centred around the gold parity. At first the controversy in that country was couched in terms of a return to the pre-war gold parity at the expense of deflation. The question was whether the sacrifices involved were worth the benefits to be gained from bolstering international confidence and reviving the country's jaded prestige.

If dislike of deflation was as significant as is suggested in the contemporary literature<sup>7</sup> then why did not more people follow Keynes in rejecting the gold standard and why were there not stronger protests against the return to the pre-war parity? The simple answer to this is that it began to look as if the gold standard and a dislike of deflation might be compatible. One argument was that the gold hoarded in the U.S. would tend to be redistributed. But even more positively, by 1924, with the relative strengthening of sterling and a narrowing of the price index differential between the U.S. and Britain, it looked as if very little deflation would be necessary. This seemed to be borne out by the experience of Sweden, which had returned to the gold standard at the old parity in 1922 in spite of even greater inflation in her economy as a result of the war:

Table 1.: Price Indices, U.K., U.S. and Sweden. (1913 = 100)

<u>Year</u>	<u>United Kingdom</u>	<u>U.S.</u>	<u>Sweden</u>
1920	307	-	359
1923	159	154	163
1925	158	160	161

Sources: U.K. Board of Trade and  
G. Cassell, op. cit., p. 38.

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<sup>7</sup>See L. Hume, "The Gold Standard and Deflation, Issues and Attitudes in the Twenties," Economica, Vol. XXX (August, 1963), pp. 225-42.

A controversial question remains, however, concerning the extent to which the Bank of England actually manipulated the bank rate in order to strengthen sterling against the U.S. dollar. In other words, how artificial was the relative strength of sterling in the exchanges in the first quarter of 1925 and therefore, how artificial was the return to the old parity in April of the same year? Two problems can be identified here: official manipulation and the effects of speculation.

E. Victor Morgan<sup>8</sup> notes that official policy seems at least on the surface to have been dictated by the Cundliffe Committee Report in 1919 which urged an early return to the gold standard at the pre-war parity. But Morgan can present no evidence to prove active manipulation of interest rates, balance of payments and price levels to achieve this aim:

The Governor (of the Bank of England) was closely questioned by the Macmillan Committee about the return to the gold standard, but beyond a tacit admission that the Bank had been in favour of it, he gave little information. He denied that any special steps, other than those which were public knowledge, had been taken to raise the exchange in 1924-25, and when questioned about speculation, merely replied, 'there was no speculation by me or anybody connected with me.'<sup>9</sup>

The latter reference to speculation sidesteps what may be a more important issue. As the pound sterling rose towards its old parity it seems almost certain that speculation on the eventuality of reaching the old parity would reinforce the strength of the currency in the exchanges. However, again there is no concrete evidence to support this statement.

Thus we are presented with a dilemma as to the extent of any likely overvaluation of sterling in early 1925. The statistical indices show a varying gap but all show a closing gap between British and American price levels. Active exchange manipulation has been denied. Speculation, although likely, cannot be adequately gauged.

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<sup>8</sup>E.V. Morgan, Studies in British Financial Policy, 1914-25 (London: Macmillan, 1952), p. 360.

<sup>9</sup>Ibid., p. 367.

Be all this as it may, in April 1925, Churchill announced on behalf of the British government that the country had returned to the gold standard at the pre-war parity. The pound had eventually joined the U.S. dollar which had been stabilised in terms of gold as early as 1919. For many people normal conditions had at last returned. But for a few people, notably Keynes, trouble was seen to be just around the corner.<sup>10</sup>

## 2.2 The Fortunes of the United Kingdom after 1925.

With the United Kingdom's return to gold the crucial step to restoring the gold standard had been taken. Her lead was followed by a significant block of countries including the Dominions, the Dutch Empire and Switzerland. Monetary reconstruction had become world-wide and it is not too much to attribute some of the ensuing world recovery to this fact:<sup>11</sup>

Table 2.: Indices of Growth, 1925-29.

	<u>% Growth per year.</u>
Agricultural Production	+1.5
Non-agricultural Production	+6.0
International Trade	+5.0

Source: League of Nations, World Production and Prices (1935).

But the mere fact of setting up the new gold standard was not going to insure stability on its own. However, for some time it might have looked this way and the essential preconditions for success enumerated by the Genoa Conference seemed less immediate. In this way, the "equilibrium," so established, contained the seeds of its own destruction.

<sup>10</sup>J.M. Keynes, Essays in Persuasion (London: Macmillan, 1925).

<sup>11</sup>See, for example, W. Brown, The International Gold Standard Reinterpreted, 1914-34 (New York: National Bureau of Economic Research, 1940).

It was in the United Kingdom that the earliest danger signals were seen. "Here there was not even an interlude of prosperity; throughout there was a high level of unemployment, averaging between 10 and 11 per cent."<sup>12</sup> Deficits blamed on stagnant exports accompanied by a continuing high rate of overseas lending continued unabated. Churchill's "not very large" amount of deflation to achieve parity in 1925 was followed by a further six years of relatively severe deflation. Obviously something had gone wrong with the international monetary system's built-in adjustment process.

Popular opinion this time turned around to support Keynes's view that the United Kingdom's social and economic problems after 1925 were due to the "premature" step of restoring the pound to its old par value. In effect it was felt that the pound was overvalued.

But even if a degree of overvaluation is conceded,<sup>13</sup> this by no means suggests that devaluation in this period would have automatically stimulated existing export industries. For the problems in the export trades go much deeper than an unfavourable exchange rate. The coal industry, for example, was depressed not only because production was intensified on the continent with the renovation of the Ruhr and Silesian fields but also hydro-electric power was being fast developed elsewhere as a power substitute. In cotton, too, the United Kingdom was suffering not only from overseas competition, in this case from Japan, but also from increasing domestic production in some of her traditional export markets.<sup>14</sup> In shipbuilding, heavy engineering and metals wartime overexpansion was perhaps the major problem. Whether a modest devaluation could have done much to ameliorate the plight of any of these troubled industrial sectors seems doubtful.

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<sup>12</sup>W.A. Lewis, Economic Survey, 1919-1939 (London: George Allen & Unwin, 1949), p. 41.

<sup>13</sup>The degree of overvaluation is usually given as around 10%.

<sup>14</sup>India, Latin America, etc.

A more powerful argument is that devaluation might have helped new export industries to be established and new markets won. In this respect the level of United Kingdom prices certainly seems to have been too high:

Table 3.: Average Export Prices in 1927-29. (1913 = 100)

U.K.	162
Switzerland	149
Italy	123
France	101

Source: League of Nations, Review of World Trade, 1927-29. Quoted by W.A. Lewis, op. cit., p. 42.

Consequently exports failed to expand into new areas and their absolute total had fallen by some fifteen per cent by 1928 compared to 1913.

On the other hand, the initial overvaluation of the pound sterling in 1925 cannot be blamed completely for the eventual collapse in the international monetary system. Basically, the trouble lay not in the overvaluation per se but in the fact that there were forces impeding an adjustment of the disequilibrium via price level changes. It is certain, for instance, that the deflation and depression, which was forced on the United Kingdom, was emphasised by the general falling trend of world prices. Even in the U.S. and France, the major creditor countries, although it is true that they were enjoying a fair industrial boom, it is also true that this was against the background of falling price indices:

Table 4.: Wholesale Price Indices after 1924. (1913 = 100)

<u>Year</u>	<u>United Kingdom</u>	<u>U.S.</u>	<u>France</u>
1924	166	-	-
1925	158	159	-
1926	148	-	703
1928	-	149	-
1931	99	105	446

Source: G. Cassell, op. cit., p. 38 and p. 44.

In short, the United Kingdom's disequilibrium may be an important feature of the twenties and her currency may have been overvalued, but the more fundamental point is that there existed great obstacles preventing an equilibrium from being achieved. The pernicious nature of the disequilibrium was not only caused by the internal structural troubles of the country but by much more deep-seated problems in the international monetary system.

Lastly, to the problems of overvaluation and adjustment must be added a much less discussed set of problems, namely, the role of capital flows in the United Kingdom's balance of payments. For a start, it is perhaps significant that in no year between 1925 and 1930 did the country have a deficit in its current account. However, in all these years a large outflow of capital offset the surplus in exports and invisibles. Before 1914 London had geared itself to a high level of foreign investment and the institutional machinery continued to operate after 1925 when the country could not really afford to lend as much as before. To some extent, the gap as it developed could be covered by short-term borrowing abroad and this came to be a source of trouble later. It might even be held, as will be further developed in Section 3 below, that the crisis, which was to come to focus in 1931 "was due less to the small difference in prices than to the deterioration of London's international position."<sup>15</sup>

### 2.3 Disequilibrium in France, 1928-1931.

In June 1928, France returned to the gold standard at a U.S. dollar par of 3.92 cents as against the pre-war par of 19.30. At first it seemed as if the international gold standard system would be further strengthened. However, the actual result was just the opposite.<sup>16</sup> From

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<sup>15</sup>Morgan, op. cit., p. 367.

<sup>16</sup>Cassell, op. cit., p. 47.

that time on the international monetary system began to show greater and greater instability.

According to most economists, the French franc was significantly undervalued. A figure of eleven per cent is commonly given, although qualification, based on the difficulties of such a calculation, is usually added. Such a situation was, in fact, deliberate on the part of the French authorities for three reasons:

- (a) to allow a margin of safety,
- (b) to give at least temporary advantages to French exports,
- and (c) to protect home industry.

Naturally a minor storm erupted across the Channel. Complaints about the burdens, which the United Kingdom had assumed, increased and a new and strong weapon was put into the hands of the advocates of a tariff policy.<sup>17</sup>

With the return of confidence in the franc, capital streamed back into France largely in the form of gold imports. The deficit disequilibrium in the United Kingdom was matched by a surplus disequilibrium in France from 1927 through 1931. Receipts on account of German reparations, a strong surplus on the current account and an aversion to foreign investment served to perpetuate an inflow of gold:

Table 5.: Reported Central Bank Gold Reserves for Selected Countries  
(in pre-1933 dollars).

<u>Creditors</u>	<u>1923</u>	<u>1928</u>	<u>1931</u>	<u>1933</u>
France	710	1254		3022
U.S.	3834	3746		4012
Switzerland	104	103		387
Holland	235	175		372
<u>Debtors</u>				
U.K.		748	585	
Argentina		607		239
Australia		109		3
Brazil		149		0
Germany		650		92

Sources: League of Nations, International Currency Experience (Geneva, 1944).  
L. Robbins, The Great Depression (London: Macmillan & Co., 1934).

<sup>17</sup>Ibid., p. 49.

The French authorities refused to acknowledge any responsibility for this state of affairs. The official view was that gold was flowing automatically into the country without any government help. Yet, at the same time, France by her tariff policy made great efforts to prevent payments to her being made in the form of goods. Moreover, natural export of capital was hampered by legal and administrative restrictions and by heavy taxation. "After all, the French nation was quite pleased and proud to possess such a tremendous gold reserve, and saw in it - as they were systematically brought up to do - an indispensable condition for confidence in the franc and the basis of the nation's economic and political strength."<sup>18</sup>

However, looking beyond the short-run interests of the franc, what matters is the fact that a great creditor country during a series of years attracted such large quantities of gold that the international gold standard system was thereby threatened and a harmful process of deflation was imposed on a large part of the world. The extraordinary demand for gold resulted in a very detrimental increase in the value of gold.<sup>19</sup> And this instability in the "standard" of value was a basic element of instability in the whole system.

#### 2.4 The United States and Germany - Concealed Disequilibrium.

War debts and reparations, the sale of external capital assets during the war by the United Kingdom, and changes in world trade had completely altered the traditional patterns of international payments.<sup>20</sup> Perhaps most important, the U.S. had replaced the United Kingdom as the leading creditor country. As a result of the war, the former was owed \$10 milliard

<sup>18</sup> Ibid., p. 50.

<sup>19</sup> An increase of 60% between 1925 and 1931.

<sup>20</sup> H. Arndt, The Economic Lessons of the 1930s (London: Royal Institute of International Affairs, 1944), p. 12.



of "political debts" in addition to some \$2-4 milliard on private account. At the other extreme was Germany, saddled with a burden of reparations, which was determined in 1924 at a rate of about \$50-125m. a year.

The U.S.A. was the ultimate creditor country and the repayment of such colossal debts in goods would have involved not only a profound change in the direction of world trade but also a profound change in internal economic structures. Such a change was never even contemplated in the U.S. where the tariff was bound up with the internal political situation and powerful vested interests. And, of course, it would be unthinkable to cancel the war debts.

The only alternative, then, to accepting repayments in the form of European exports was to relend the money to the European debtors. Such loans by themselves could clearly not have solved the problem of international economic adjustment. But they could have granted a breathing space during which the necessary adjustments might have been effected - given certain essential conditions. During the 1920s therefore, the U.S. increased her tariff walls, but at the same time lent heavily abroad, largely to Germany.

This phase of German economic history does not seem to have received too much attention. The general tenor of comment seems to be that there was too much investment for a country so short of capital.<sup>21</sup> Net investment was running at 12% of national income and this was only possible without inflation because the U.S. and the United Kingdom to a lesser extent were willing to lend freely. Nearly half the investment was undertaken by foreign funds and although this money was easy to get it was also expensive with short-term rates of interest as high or even higher than 9%. Such high rates were generally bad for the economy, burdening it with debt. Also capital was being poured in regardless of whether it was raising productivity. Finally, the form of foreign borrowing was also extremely unfortunate in that upwards of 40% of it was short-term borrowing. Both

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<sup>21</sup>Lewis, op. cit., p. 40.

industry and the banking system became overdependent on a form of credit which could very easily be withdrawn:

Table 6.: Germany - Capital Movements. (Millions of Reichsmarks)

								<u>Total</u>	
<u>Capital Movements</u>	<u>---</u>	<u>1924</u>	<u>1925</u>	<u>1926</u>	<u>1927</u>	<u>1928</u>	<u>1929</u>	<u>1930</u>	<u>1924-30</u>
Long term . . .		+1.0	+1.1	+1.4	+1.7	+1.7	+0.6	+1.6	+9.1
Short term . . .		+1.5	+0.3	+0.1	+1.8	+1.4	+1.1	-	+6.2
Other capital movements, etc. .		+0.4	+1.7	-0.9	+0.4	+1.2	+1.0	-0.9	+2.9
Total		+2.9	+3.1	+0.6	+3.9	+4.3	+2.7	+0.7	+18.2

Source: L. Robbins, op. cit., p. 227.

## 2.5. Problems of Primary Producers.

Another disequilibrium, which could be covered up by international credits and concealed by the "prosperity" of the decade was the development of severe problems in primary producing countries. War conditions and remarkable improvements in agricultural technique had led to significant expansion of agricultural production outside Europe. At the same time within Europe, countries cut off from their normal peace time suppliers had also expanded agricultural production.<sup>22</sup> After the war overproduction was apparent especially in cereals and sugar and this was aggravated by a relative stagnation of population growth in Europe and North America accompanied by growing agricultural protection.

The upshot of all this was a tendency for the agricultural price level to fall relative to that of manufactured goods. The statistics for U.S. grain prices in Table 7. below are fairly typical of a general trend:

<sup>22</sup>Arndt, op. cit., p. 10.

Table 7.: Prices of Food Grains in the U.S. (1909-14 = 100)

<u>1925</u>	<u>1926</u>	<u>1927</u>	<u>1928</u>	<u>1929</u>
171	152	135	128	116

Source: W. Lewis, op. cit., p. 45.

To some extent at least the relative cheapening of food and raw materials benefited the industrial countries, stimulating their production and helping to raise their standards of living. However, the purchasing power of the primary producers tended to fall and this hit the export trades of the manufacturing countries. In effect, the share of manufactures in world trade decreased throughout the latter half of the twenties. And this share would probably have declined even more had it not been underpinned by international loans which allowed primary producing countries to import finished goods on credit.

The primary producers, thus, form yet another pole of disequilibrium in the world economy. Large depressed areas emerged fairly early in South America and the Caribbean. Elsewhere, through until 1929, in Australasia, Argentina and Canada trade was maintained and the prosperity of the manufacturing countries protected by means of international credits supplied in large measure from London. And the continuing supply of such funds had become vital to world economic well-being and stability.

## 2.6 The Collapse of the Gold Standard.

The dam began to burst in 1928 and the sequence of events highlights the typically ad hoc nature of policies. In 1927 the strain on the Bank of England's reserves had been mounting. To ease the pressure the U.S. Federal Reserve initiated a period of cheap money in order to drive capital across the Atlantic to seek higher interest rates in the U.K.

In actual fact, the reverse happened. The policy of 1927 appears to have fed a boom in the U.S. and increased the domestic demand for capital

so that the capacity of the U.S. for capital export was threatened. Also the debtor countries were beginning to exhaust their capacity for further borrowing. In 1928 the American export of capital was stemmed and the huge surplus in her balance of payments had to be paid for in gold.

Most of the debtor countries, excluding Germany, were also primary producers and so suffered too from the continuing fall in primary product prices. These countries found increasing difficulty in balancing their international accounts. With the setting in of slump in 1929 the agricultural price fall was accelerated and four countries were unable to maintain their currencies at par - Hungary, Argentina, Brazil and Paraguay.<sup>23</sup> Four more - Australia, New Zealand, Venezuela and Bolivia - were driven off the gold standard in 1930.

The increasing problems of the debtor countries were matched by another problem, namely, the demand for liquidity in the international creditor countries. France and the U.S. continued to hoard gold and by 1931 these two countries held 60% of the world's reserves (see Table 5.). According to the "theory" of the gold standard this should have been counter-balanced by a rise in the price level and an increase in the imports of gold-receiving countries. However, France did not use her newly acquired gold for any significant credit expansion. On the contrary, a continuing policy of deflation forced prices down while competitively higher tariffs kept foreign imports out:

Table 8.: Tariff Levels (ratio of duties to prices %) - Europe (excluding U.K. and U.S.S.R.).

<u>Agrarian Tariff Level</u>	<u>1913</u>	<u>1927</u>	<u>1931</u>
	26	26	65
<u>Manufacturing Tariff Level</u>			
	18	25	30

Source: H. Liepmann, Tariff Levels and the Economic Unity of Europe. Quoted by W. Lewis, op. cit., p. 151. Liepmann gives indices only for individual countries. Lewis has calculated the above figures using import values as weights.

<sup>23</sup>Lewis, op. cit., p. 58. Canada introduced exchange control in 1929.

The same holds for the U.S. where, with the exception of the ill-timed experiment with cheap money, interest rates continued at a relatively high level through to 1930.<sup>24</sup> Even after 1929 when boom conditions had been brought to an end by the "great crash" and had been followed by a violent depression, the Federal Reserve never made it clear that it intended to stop the process of deflation and so the situation continued to deteriorate. Gold piled up in the U.S. and France while a large number of countries were starved of liquidity.

The problems of the debtor countries and the incessant demand for liquidity from France and the U.S. built up pressure on London, which was still the most important short-term international financial centre in the world.<sup>25</sup> Before 1914 she had been able to finance the downswing of the international cycle mainly by reducing long-term foreign lending, borrowing from abroad on short-term account from other international creditor countries (France, Austria and Germany) and relending this to the debtor countries. However, in the intervening period London's international position had deteriorated.

During 1929-31 London reduced sharply the outflow of long-term capital and more than accounted for this by increasing the supply of short-term finance to overseas countries just as she would have done before 1914.<sup>26</sup> However, in terms of reduced liquidity and the immediate burden on the balance of payments, she could not have withstood the strain for long without imposing a sharp deflation at home.

The historical way out of this, as noted above, was for London herself to borrow abroad. In 1929-31 she found herself no longer able to do this. This is the great contrast with pre-1914. Indeed, the international creditor states withdrew funds from London almost continuously

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<sup>24</sup>Data relating to the bank rate in the U.S. and Germany is given in the Statistical Appendix.

<sup>25</sup>D. Williams, "London and the 1931 Commercial Crisis," Economic History Review, Vol. XV, No. 3 (1963), p. 518. This whole section draws heavily on William's article.

<sup>26</sup>Ibid.

from early 1930 onwards. Moreover, Bank of England policy was geared to helping the depressed internal economy. In effect, the regime of relatively low interest rates (compare the U.S., Germany and U.K. data in the Statistical Appendix) only encouraged further borrowing in London while making it a relatively unattractive centre in which to deposit funds.

By 1931 the focus of the crisis had spread into Central Europe. Early in that year Austria and Germany had announced their desire to form a customs union. This was resented by the ex-Allied nations, especially France, who exerted pressure by withdrawing short-term funds. And this withdrawal exposed the weakness of Central Europe. The largest Austrian bank, the Creditanstalt, was found to be insolvent in May:<sup>27</sup>

A new run developed on German foreign reserves; the Reichsbank lost gold heavily, and one of the biggest commercial banks, the Danat bank, suspended payments in July. The run on Germany continued until an international moratorium was agreed in August. Austria and Germany having succumbed, confidence was lower than ever, and attention shifted back to London.<sup>28</sup>

The final stages of the liquidity crisis were concentrated in London. The Continental crisis had served not only to increase the general demand for liquidity but, because of the close links between London and the Continent - British short-term assets in Germany alone of £70 million had been effectively immobilised - the liquidity of London's financial institutions was now in doubt.<sup>29</sup> Add to this the lax Snowden budget, after which another deficit was regarded as a certainty, and a recent Royal Commission Report<sup>30</sup> drawing attention to the weakness of the United Kingdom's gold reserves, then the outcome was inevitable.

By late summer the United Kingdom's resources had proved inadequate in face of a fundamental lack of confidence that the authorities could or would maintain the exchange rate. In the end capital flight was decisive. In

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<sup>27</sup>Lewis, op. cit., p. 63.

<sup>28</sup>Ibid.

<sup>29</sup>Williams, op. cit., p. 518.

<sup>30</sup>Macmillan Report.

September 1931 the United Kingdom was forced off the gold standard and the pound sterling was allowed to depreciate.

The psychological repercussions of the United Kingdom's abandonment of the gold standard were immense. The fall of the pound heralded the collapse of the international monetary mechanism which had been painfully rebuilt during the twenties. The relatively small group of countries remaining true to gold "could not claim to represent an international gold standard."<sup>31</sup> They could maintain gold parities only by quite artificial means such as tariffs and import quotas as in France or exchange controls and decreed wage and price reductions as in Germany. But desperate measures were not enough. All were doomed "to walk a painful road - whether long or short - towards final monetary collapse."<sup>32</sup>

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<sup>31</sup>Cassell, op. cit., p. 68.

<sup>32</sup>Ibid. U.S.A. 1933; Czechoslovakia 1934; Belgium 1935; France 1936, etc.

### 3. ECONOMIC ANALYSIS OF THE LESSONS OF INTER-WAR EXPERIENCE.

#### 3.1 Introduction - Elements of Instability.

If the gold standard ever did work smoothly, and this may be doubted, then it was in the pre-1914 era. To idealise this period, we can say that the gold standard system rested on the universal acceptability of the pound sterling backed by the strong economy of the United Kingdom. It was controlled and effectively co-ordinated centrally by the Bank of England. Finally, add to this an automatic adjustment mechanism based on gold flows and there existed a viable world monetary system. On the one hand, here under the gold standard was a world money with all national currencies kept stable in terms of each other and in terms of gold. And, on the other hand, here was the framework of an integrated world economy with automatic adjustments based on price changes and market forces always assuring a quick return to equilibrium.<sup>33</sup>

If this ever was the system prevailing before 1914, then three crucial types of change had occurred by the twenties. These concern:

- (a) adjustment and equilibrium,
- (b) world money and liquidity,
- and (c) confidence and control.

We now turn to examine each of these in turn with respect to our "theory" of the hypothesised pre-1914 utopia to make comparisons with the practical experience of the inter-war period.

#### 3.2 Adjustment and Equilibrium.

The gold standard in theory provided an automatic mechanism for the correction of any disequilibrium in the balance of payments because this would lead to gold movements, which, in turn, would lead automatically either to expansions or contractions in the volume of credit in the country

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<sup>33</sup>W. Scammell. Public Lecture at Simon Fraser University, Burnaby, B.C., Canada. 20 March, 1968.



concerned. Deflation would reduce costs and prices, discourage imports and stimulate exports so readjusting the balance of payments. Inflation would work in the opposite direction.

Now, whether this process of adjustment of prices and incomes had ever worked as smoothly as some authors have suggested, it certainly ceased to work in the inter-war period. Disequilibria, as has been shown, persisted.

According to the rules of the game, France after 1928 should have inflated to stimulate imports and encourage self-liquidating foreign investment. The U.S. should have done the same although, admittedly, there was a risk of further stimulating the run-away boom. However, given the fact that these countries deflated, then the United Kingdom was in an unenviable position. In order to correct her balance of payments deficit she was being asked to deflate at a greater rate than either France or the U.S. This, in terms of social and economic costs, would have been intolerable.<sup>34</sup>

Partly, the rigidity introduced into the adjustment mechanism was related to the magnitudes of the adjustments involved. Perhaps the major maladjustments:

- (a) the immense favourable balance in the U.S.,
- (b) the reparations obligation imposed on Germany,
- (c) the United Kingdom's export problem,
- and (d) the tendency to overproduce in world agriculture

were of too great a magnitude, with respect to the implications for individual production systems, for market forces working through prices and costs to have any result, except at prohibitive and politically unacceptable costs.

However, other factors were involved. The problems of maladjustment were not helped by the inherent difficulty of knowing in the early twenties what the "correct" exchange rate should be. The pound sterling was almost certainly overvalued while the franc and the U.S. dollar were relatively undervalued.

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<sup>34</sup>1931 in the U.K. saw last gasp efforts to force down wages. The major result was the naval mutiny at Invergordon (Ross and Cromarty, Scotland).

Lastly, with respect to adjustment, many writers have placed a great emphasis on trade barriers as sources of rigidity arguing that market forces would have done their job very well if only they had been allowed to take their course and not constantly interfered with. However, it can be argued that the reason for all the neo-mercantilist devices, which appeared at the time, can be traced to making the best of a disequilibrium situation. This is not to say that vested interests were unimportant, but often the vested interest was so large a proportion of the population that to protect it was in the national interest. Moreover, the voice of the vested interest becomes stronger in a situation where deficits refuse to be corrected because other nations are carrying out a beggar-my-neighbour policy. For example, when Britain and Germany found themselves short of foreign exchange then discrimination and a move away from multilateral and towards bilateral trade was one way of circumventing the problem. In fact, much of the trade in the inter-war years could never have taken place if such principles as "non-discrimination" had been adhered to. Economic policies which were sound in theoretical conditions of equilibrium were not necessarily sound in actual conditions in which equilibrium neither obtained nor could quickly or easily be restored.<sup>35</sup>

### 3.3 World Money and Liquidity.

The second major category of instability arising from inter-war experience concerns liquidity. The pre-war gold standard assumed that the value of gold could be regarded as stable so that the maintenance of a fixed gold parity guaranteed a currency's stability in terms of purchasing power.

However, even before 1914 variations in the demand for and supply of gold seem to have caused some instability. For example, "the large

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<sup>35</sup>Arndt, op. cit., p. 294.

accumulation of gold in the United States in preparation for the introduction of the gold standard so increased the scarcity of gold prevailing in the [eighteen] eighties as seriously to raise the value of gold and to depress the general level of commodity prices."<sup>36</sup> But this was exceptional. Generally, it could be assumed that "no central bank would be so extravagant as to keep more gold than it required or so imprudent as to keep less."<sup>37</sup>

This situation did not prevail after the Great War. Countries came openly to compete with each other in building up their stocks of the metal. "The West as well as the East has learnt to hoard gold," said Keynes in 1923. In order to attract gold the late twenties saw countries raise their discount rates to a height that bore little relation to the internal situation, but was solely determined by the desire to keep rates at least as high as those of other central banks. Moreover, protectionism was strengthened so that gold rather than goods would have to be paid for past debts and export surpluses became desirable ends in themselves because of the bullion inflow which they would bring. Lastly, what had been the "natural" course for surplus countries in pre-war days, namely, to invest overseas to equalise the balance of payments, tended to lose force in face of these developments.

To these worries about extraordinary demand for gold can be added the problems of variability of supply. The major problem in the twenties seems to have been the danger of a very low annual output being outrun by the fast increasing international demands for liquidity. At the same time, these latter demands could only be met by gold because there was no confidence in the only available alternative, the pound sterling, especially after 1925.

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<sup>36</sup>Cassell, op. cit., p. 11.

<sup>37</sup>Keynes, Tract . . ., op. cit., p.171.

To sum up, the world in the late twenties was facing a liquidity crisis. The value of gold was tending to rise rapidly. This condition threatened the very heart of the international monetary mechanism.

### 3.4 Confidence and Control.

The assumptions of adequate liquidity and automatic adjustment tended to produce a synthesis of confidence in the pre-1914 gold standard. At the risk of overstatement it could be contended that in these years the gold standard worked well because of the governing position the pound sterling held in the system.

The pound had been the generally recognised means of international payments. Its strength lay in the United Kingdom's unbroken adherence to free trade, her capacity and willingness to export capital and her abstention from using her position to accumulate an unnecessary amount of gold.<sup>38</sup> Moreover, the Bank of England "would allow itself to be swayed by the tides of gold, permitting the inflowing and outflowing streams to produce their natural consequences unchecked by any ideas as to preventing the effect on prices."<sup>39</sup> Thus, the gold standard game was being played with some respect for the rules.

This was not evident, as has been shown, in the post-war era. Under the changed economic conditions, a very much weakened London was still expected to play the role of provider of liquidity to the rest of the world. This she could not hope to do and maintain confidence in the pound at the same time. And the former European sources of short-term funds had either disappeared (Vienna and Berlin) or were unwilling to lend (Paris). The world's new creditors also had no inclination to act as

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<sup>38</sup>Cassell, op. cit., p. 4.

<sup>39</sup>Keynes, Tract . . ., op. cit., p. 171.

suppliers of liquidity. Under such conditions the international monetary system could not be expected to operate.

In perspective, the confidence problem is very much tied up with the question of organisation and control. The fact that the gold exchange nucleus came to consist of more than one country seems to have been a special source of instability and weakness. With adequate co-operation between the centre countries there need have been no serious problem but without it the result was chaos. The great variability of the various countries' ratios of exchange holdings to gold meant that reserve funds were liable to move erratically from one country to another. Each centre became potentially subject to confidence scares and capital flight. Again, when a country like France had pretences of becoming a gold centre herself, then these difficulties were further compounded. Under such circumstances it is hardly possible to argue that a gold standard could have any inherent quality commanding confidence.<sup>40</sup>

### 3.5 Conclusion.

It was with great foresight that the Genoa Conference in 1922 laid down strict conditions for the "successful maintenance of a gold standard." The debacle of 1929-31 can now be seen as the failure to adhere to these conditions. The important question of realistic parities was unable to be solved satisfactorily and this was a major factor in preventing an efficient adjustment mechanism. Again there was no provision made for the stability of the standard of value, namely, gold. Lastly, the international co-operation which had been expected in 1922 did not materialise despite the "front" of a surfeit of international conferences. Under these conditions the collapse of the gold standard in the inter-war period is no surprise.

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<sup>40</sup>League of Nations, International Currency Experience (Geneva, 1944), p. 46.

#### 4. CONCLUSION - IS HISTORY REPEATING ITSELF IN 1968?

It is now apparent that the lessons of the first breakdown of the gold standard after the outbreak of the Great War could not prevent the disruption of the new system. One question that could legitimately be raised is: Are the theory and practice of an international monetary system based on gold so far apart as to always make such a system unstable?

At the time of writing, the international monetary system is again at crisis point. The interesting feature of the present situation is the degree of resemblance to that of 1928:

##### (a) There is still no efficient adjustment mechanism.

1. Recent years have seen balance of payments disequilibria of a deficit variety in the United Kingdom and the U.S. So far deflation and devaluation have not made much impact on the United Kingdom's deficit. Up until the present, the U.S. has been reluctant to deflate.

11. Surpluses have been building up in many continental West European countries, especially Germany and France. These countries seem to be reluctant to inflate and are relatively unwilling to invest their surpluses overseas.

111. In the middle sixties, many primary commodity prices have reached their lowest point since the worst period of the inter-war years. Reduction of loans from the U.S. and the failure of other countries to provide liquidity could lead to a situation reminiscent of 1928.

1V. At present, interest rates in the world are extremely high. Also many countries have been forced into thinking about the possibilities of implementing tariff and restrictive trading policies.

##### (b) There is again a liquidity crisis.

1. The fact of disequilibrium again calls for a larger amount of liquidity in the world.

11. On top of this, there are extraordinary demands for liquidity with France re-enacting her historical role as villain of the piece.

111. Gold production is only increasing very slowly while in 1968 there is the additional problem of industrial uses increasing rapidly.

1V. All this has resulted in instability in the value of gold.

(c) There is a major confidence crisis.

1. The major paper currency of the world, the U.S. dollar, has this year suffered a confidence crisis not uncomparable to that of the pound sterling in 1928-31.

11. With lack of confidence in the value of paper currencies in the air and the instability of the value of gold, the world is fairly close to being without a world money.

111. Movements of "hot money" because of various degrees of gold backing of currencies and speculation on possible devaluations or revaluations of currencies and gold, continue to be disruptive.

1V. International co-operation vies for victory with international competition of a cut-throat variety. The spate of conferences of the twenties is being matched today. Whether the outcome of these international discussions will have more success today remains to be seen.

Of course, there are also very many dissimilarities between 1968 and 1928. For example, there are no problems of war-time dislocation and in particular reparations burdens. Also, the monetary system, although still a gold standard, does differ in that adjustment may be achieved "occasionally" by devaluation. However, even granted all this, there is no escaping from the fact that the basic problems of the world monetary system in 1928 - problems of adjustment, liquidity, confidence and control - are still the ones that have to be faced today.

The lessons of the inter-war period for the international economy are clear. Whether we have profited from these lessons forty years later, remains to be seen.

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STATISTICAL APPENDIX \*

BANK OF FRANCE—DISCOUNT RATE

Year and Month	Rate	Year and Month	Rate	Year and Month	Rate
1925	7	1928	3-5	1931	2
January	7	January	3-5	January	2
February	7	February	3-5	February	2
March	7	March	3-5	March	2
April	7	April	3-5	April	2
May	7	May	3-5	May	2
June	7	June	3-5	June	2
July	6	July	3-5	July	2
August	6	August	3-5	August	2
September	6	September	3-5	September	2
October	6	October	3-5	October	2-5
November	6	November	3-5	November	2-5
December	6	December	3-5	December	2-5
1926	6	1929	3-5	1932	2-5
January	6	January	3-5	January	2-5
February	6	February	3-5	February	2-5
March	6	March	3-5	March	2-5
April	6	April	3-5	April	2-5
May	6	May	3-5	May	2-5
June	6	June	3-5	June	2-5
July	7-5	July	3-5	July	2-5
August	7-5	August	3-5	August	2-5
September	7-5	September	3-5	September	2-5
October	7-5	October	3-5	October	2-5
November	7-5	November	3-5	November	2-5
December	6-5	December	3-5	December	2-5
1927	6-5	1930	3	1933	2-5
January	6-5	January	3	January	2-5
February	5-5	February	3	February	2-5
March	5-5	March	2-5	March	2-5
April	5	April	2-5	April	2-5
May	5	May	2-5	May	2-5
June	5	June	2-5	June	2-5
July	5	July	2-5	July	2-5
August	5	August	2-5	August	2-5
September	5	September	2-5	September	2-5
October	5	October	2-5	October	2-5
November	5	November	2-5	November	2-5
December	4	December	2-5	December	2-5

For the first three years, the rates given are monthly averages. Thereafter, they relate to the end of the month.

BANK OF ENGLAND—BANK RATE

Year and Month	Rate	Year and Month	Rate	Year and Month	Rate
1925	4	1928	4-5	1931	3
January	4	January	4-5	January	3
February	4	February	4-5	February	3
March	5	March	4-5	March	3
April	5	April	4-5	April	3
May	5	May	4-5	May	2-5
June	5	June	4-5	June	2-5
July	5	July	4-5	July	4-5 <sup>a</sup>
August	4-5	August	4-5	August	4-5
September	4-5	September	4-5	September	6
October	4	October	4-5	October	6
November	4	November	4-5	November	6
December	5	December	4-5	December	6
1926	5	1929	4-5	1932	6
January	5	January	4-5	January	6
February	5	February	5-5	February	5
March	5	March	5-5	March	3-5 <sup>b</sup>
April	5	April	5-5	April	3
May	5	May	5-5	May	3-5
June	5	June	5-5	June	2-5
July	5	July	5-5	July	2
August	5	August	5-5	August	2
September	5	September	6-5	September	2
October	5	October	6	October	2
November	5	November	5-5	November	2
December	5	December	5	December	2
1927	5	1930	5	1933	2
January	5	January	5	January	2
February	5	February	4-5	February	2
March	4-5	March	3-5 <sup>c</sup>	March	2
April	4-5	April	3-5	April	2
May	4-5	May	3	May	2
June	4-5	June	3	June	2
July	4-5	July	3	July	2
August	4-5	August	3	August	2
September	4-5	September	3	September	2
October	4-5	October	3	October	2
November	4-5	November	3	November	2
December	4-5	December	3	December	2

Monthly averages for the first three years, then end-of-the-month data—

- <sup>a</sup> From 6th to 16th March, 4 per cent.
- <sup>b</sup> From 23rd to 29th July, 3-5 per cent.
- <sup>c</sup> From 9th to 16th March, 4 per cent.

\* Source: *Robert Robinson: The Great Depression.*

NEW YORK FEDERAL RESERVE BANK

DISCOUNT RATE <sup>1</sup>

Year and Month	Rate	Year and Month	Rate	Year and Month	Rate
1925	3	1928	3-5	1931	2
January	3-5	January	4	January	2
February	3-5	February	4	February	2
March	3-5	March	4-5	March	2
April	3-5	April	5	April	2
May	3-5	May	5	May	1-5
June	3-5	June	5	June	1-5
July	3-5	July	5	July	1-5
August	3-5	August	5	August	1-5
September	3-5	September	5	September	1-5
October	3-5	October	5	October	3-5*
November	3-5	November	5	November	3-5
December	3-5	December	5	December	3-5
1926	4	1929	5	1932	3-5
January	4	January	5	January	3
February	4	February	5	February	3
March	4	March	5	March	3
April	3-5	April	5	April	3
May	3-5	May	5	May	2-5
June	3-5	June	5	June	2-5
July	3-5	July	5	July	2-5
August	4	August	5	August	2-5
September	4	September	5	September	2-5
October	4	October	5	October	2-5
November	4	November	4-5	November	2-5
December	4	December	4-5	December	2-5
1927	4	1930	4-5	1933	2-5
January	4	January	4	January	2-5
February	4	February	4	February	2-5
March	4	March	3-5	March	3-5
April	4	April	3-5	April	3
May	4	May	3	May	2-5
June	4	June	2-5	June	2-5
July	4	July	2-5	July	2-5
August	3-5	August	2-5	August	2-5
September	3-5	September	2-5	September	2-5
October	3-5	October	2-5	October	2
November	3-5	November	2-5	November	2
December	3-5	December	2	December	2

<sup>1</sup> Discount Rate for 60- to 90-day commercial paper. For the first three years the rates given are monthly averages. Thereafter, they relate to the end of the month.

\* From 8th to 14th October, 2-5 per cent.

GERMANY.

DISCOUNT RATE OF THE REICHSBANK

Year and Month	Rate	Year and Month	Rate	Year and Month	Rate
1925	10	1928	7	1931	5
January	9	January	7	January	5
February	9	February	7	February	5
March	9	March	7	March	5
April	9	April	7	April	5
May	9	May	7	May	5
June	9	June	7	June	5
July	9	July	7	July	7
August	9	August	7	August	10 <sup>1</sup>
September	9	September	7	September	10 <sup>1</sup>
October	9	October	7	October	8
November	9	November	7	November	8
December	9	December	7	December	8
1926	8	1929	6½	1932	7
January	8	January	6½	January	7
February	8	February	6½	February	7
March	7	March	6½	March	7
April	7	April	7	April	5
May	7	May	7	May	5
June	6½	June	7	June	5
July	6	July	7	July	5
August	6	August	7	August	5
September	6	September	7	September	5
October	6	October	7	October	4
November	6	November	7	November	4
December	6	December	7	December	4
1927	5	1930	6½	1933	4
January	5	January	6½	January	4
February	5	February	6	February	4
March	5	March	5	March	4
April	5	April	5	April	4
May	5	May	4½	May	4
June	6	June	4	June	4
July	6	July	4	July	4
August	6	August	4	August	4
September	6	September	4	September	4
October	7	October	4	October	4
November	7	November	5	November	4
December	7	December	5	December	4

The above data relate to the end of each month.

<sup>1</sup> The rate rose to 15 per cent during this month.