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**THE**  
**TWILIGHT**  
**OF GOLD** 1914  
1936





**THE  
TWILIGHT  
OF GOLD**  $\frac{1914}{1936}$

MYTHS AND REALITIES

**Melchior Palyi**

*Foreword by Donald L. Kemmerer*

**Henry Regnery Company • Chicago**

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I'm fed up with this endless How and When;  
Since there's no money, let's make it then.

*Faust, Part II*





# Contents

*Preface by Mrs. Melchior Palyi* xv

*Foreword by Donald L. Kemmerer* xvii

## **I The Classical Gold Standard in Perspective 1**

*Introduction* 1

A. The Gold Standard and the Economic Order  
2

B. The Triumph of Gold 6

C. The International Gold Standard 8

D. Alternatives of Policy 11

E. The Age of Central Banking 14

## **II The Postwar Climate 24**

*Introduction* 24

A. The Breaking Point in Monetary and Fiscal  
History 26

B. The Traumatic Experience 29

C. Central Banks Foundering on Political Rocks  
45

D. The Rediscovery of Money and the Rise of  
“Dirigism” 54

- E. The International Division of Labor in Jeopardy 61

### III Stabilization 68

#### *Introduction* 68

- A. Delayed Stabilizations 70
- B. The British Malaise 74
- C. Conflict of Ultimate Objectives—The Norman-Keynes Controversy 86
- D. The Mystique of Devaluation 96
- E. "Social Justice" versus Gold 101

### IV The New Gold Standard 112

#### *Introduction* 112

- A. The Role of the City 114
- B. The Gold Bullion Standard 121
- C. Gold Shortage 123
- D. Central Bank Solidarity: The Ideology 133
- E. Central Bank Cooperation: The Practice 142
- Addenda* 146

### V The Unstable Equilibrium of the 1920's 154

#### *Introduction* 154

- A. The Gold Exchange Standard 155
- B. Intergovernmental Debts 160
- C. The Disequilibrating Capital Flow 169
- D. Balance of Payments and Gold Distribution before the Crisis 179
- E. Gold Distribution: the Pre-Crisis Role of France 185

### VI Prelude to the Catastrophe: 1929–1931 196

#### *Introduction* 196

- A. Flaws in the International Credit Structure 197
- B. The American Debt Behemoth 208
- C. "Hand-to-Mouth"—into the Abyss 218

	D. The Commodity Dilemma and the Crisis Quandary	224
	E. Decaying Liquidity	229
	F. The Speculative Euphoria	235
<b>VII</b>	<b>The Crisis, 1931–1933</b>	<b>250</b>
	<i>Introduction</i>	250
	A. The Central European Crisis	251
	B. Britain in the Pillory	264
	C. The Dollar Debased	278
	D. The Demise of the “Gold Bloc”	283
<b>VIII</b>	<b>Monetary Analysis of Boom and Bust</b>	<b>296</b>
	<i>Introduction</i>	296
	A. When a Boom Is Not a Boom	298
	B. The Money Supply Approach	301
	C. The Frustrated Federal Reserve System	315
<b>IX</b>	<b>Some Final Reflections</b>	<b>328</b>
	<i>Introduction</i>	328
	A. The Monetary Revolution	329
	B. Was the Gold Standard Doomed?	336
	<i>Index</i>	345





# List of Tables

II-1	Comparison of Expansion in Currency with Price Levels	33
II-2	United States Bank Deposits, 1913–1919	36
II-3	Depreciation of Ten Principal Currencies, 1914–1925	38
II-4	General Index of Exchange Rates of Seventeen Principal Currencies Exclusive of the German Mark, 1918–1925	40
III-1	Balance of Payments, United Kingdom, 1907–1929	82
III-2	Compounded Annual Rate of Growth in Productivity Per Man-Hour in Manufacturing in Nine Nations, 1920–1938	85
III-3	The Balance of Payments of the United Kingdom on Income Account, 1924–1930	92
III-4	Cost of Living (Gold Basis) in United Kingdom and United States, 1922–1925	97
III-5	United Kingdom Net Deadweight Debt, 1914–1934	99
IV-1	Years Fifty-four Nations Were on the Gold Standard, 1919–1936	116
IV-2	French Investments Abroad, 1914	119
IV-3	The World's Gold Output, 1913–1939	124
IV-4	Consumption of Gold by India, China, and Egypt, 1915–1929	126

- IV-5 World Ratio of Gold Reserves to Sundry Liabilities, 1913–1928 127
- IV-6 Gold Movements to and from the Bank of England, 1925–1930 129
- IV-7 Assumed Production Growth and Actual Credit Growth of World, 1913–1928 131
- IV-8 Central Bank Foreign Exchange and Gold Reserves of Fifteen Sterling Area Countries, 1929–1938 141
- V-1 Total Indebtedness of Foreign Governments to the United States, March 1, 1935 163
- V-2 Germany's Balance of Payments, 1924–1932 165
- V-3 London Money Market, Short-Term Foreign Liabilities, 1927–1931 173
- V-4 German Money Supply and Prices, 1924–1932 176
- V-5 Gold Reserves of Central Banks and Governments, by Years, 1913–1935 181
- V-6 Net Gold Movements, 1919–1931, by Months (U.S.) 184
- V-7 French Balance of Trade, 1925–1930 185
- V-8 French Export Balance of Trade, 1925–1930 185
- V-9 Bank of France Gold and Foreign Exchange, 1928 186
- VI-1 Net Inward (+) or Outward (–) Capital Movement by Creditor Countries, Measured by Estimated Deficits or Surpluses of Goods, Services, and Gold, 1919–1938 198
- VI-2 Foreign Trade Balance, Foreign Debt and Debt-Servicing Payments, 1929–1932 201
- VI-3 Movement of Private Long-Term Investment Funds (Net), 1919–1934 (U.S.) 203
- VI-4 World Trade, Selected Years, 1913–1929 204
- VI-5 Net Public and Private Debt, End of Calendar Year, 1916–1933 210
- VI-6 Gross National Product and Total Net Debt, 1916–1929 212
- VI-7 Bond and Stock Flotations Showing Inflationary Rise, Culminating in 1929 213
- VI-8 Apparent Debt Position of All Reporting Corporations, Excluding Credit Institutions, December 31, 1930 215
- VI-9 Estimated Home Mortgage Debt by Types of Creditors, for Selected Years, 1925–1934 216

- VI-10    Relation of Agricultural Loans to Total Loans Held by  
         Banks in Stated Years, 1914–1934    216
- VI-11    World Wheat Carry-Over and Exports, 1927–1935    221
- VI-12    World Wholesale Prices of Individual Commodities, 1929–  
         1930    223
- VI-13    U.S. Bank Failures, 1921–1934    233
- VII-1    Total Savings Deposits in Sparkassen (Savings Banks) at End  
         of Year, 1925–1932    254
- VII-2    German Long-Term Foreign Indebtedness by Type of  
         Debtor, September 1932    257
- VII-3    German Short-Term Foreign Indebtedness by Type of  
         Debtor, September 1932    258
- VII-4    Gold Reserves of the Central Banks of the “Gold Bloc,”  
         1929–1936    285
- VII-5    World Distribution of Gold Reserves, 1913–1943: Reported  
         Central Bank Gold Reserves in U.S. Dollars at the Old Parity  
         of \$20.67 Per Ounce of Fine Gold    286
- VIII-1    Annual Physical Production in the United States Relative to  
         the Average for 1909–1913 as 100, 1880–1930    303
- VIII-2    Real Money and Principal Near-Money Assets Held by the  
         Public, 1920–1940    305
- VIII-3    Money Supply in the United Kingdom, 1913, 1924–1932  
         311
- VIII-4    French Money Supply, 1924–1932    312
- VIII-5    Gold Withdrawals under U.S. Gold Standard for the  
         Decade, 1923–1932    316
- VIII-6    Federal Reserve Bank Credit, 1914–1934    321
- IX-1    Foreign Exchange Rates in Seven Nations, 1931–1937    333





## Preface

THIS BOOK IS the culmination of Dr. Melchior Palyi's life-long interest in economics and finance. During his last years he devoted endless hours to organizing and writing it. It was his fervent wish to see the manuscript in book form and relish the comments, favorable and otherwise, that he expected it to elicit. That was not to be.

Although he had finished writing it by late spring 1970, there remained many loose ends to tie up and considerable editing and proofreading to do. I have had to rely on the expertise of two of his good friends in particular. The two are Professor Donald L. Kemmerer of the University of Illinois and Professor Carl Wiegand of Southern Illinois University.

Dr. Wiegand read the manuscript several times and made many valuable substantive and editorial suggestions, but most important, he wrote the succinct introductions to each of the nine chapters.

Professor Kemmerer has assisted in more ways than I can count. As chairman of a group of social scientists at the University of Illinois, calling themselves The Freedom Study Committee, he was largely responsible for inducing Dr. Palyi to undertake the work in the first place (see his Foreword). He read the manuscript many times, assisting with editing it both before and after Dr. Palyi died,

traced down elusive references, and made many of the difficult decisions that the author himself normally has to make. He has been careful not to alter the spirit and thrust of the writing yet he has sought to modify some statements he thought Dr. Palyi would have changed.

At an earlier stage of the writing, Mr. George Steve, now of New York City, assisted particularly with the statistical tables at which he was most helpful.

The Freedom Study Committee, under whose auspices the book was written, received its funds from two sources, the Lilly Endowment Inc. of Indianapolis, Indiana, and the Relm Foundation of Ann Arbor, Michigan. We are deeply appreciative of their interest in the project. We are also indebted to Frank Wetzel of the Lincoln Educational Foundation in New York for his assistance to The Freedom Study Committee during much of the period. And likewise I am grateful to the Committee for Monetary Research and Education (Dr. Palyi was one of its founders) for undertaking to distribute several hundred copies to specialists who have a particular interest in Dr. Palyi's analysis of those eventful financial changes that took place a third to a half century ago, and whose consequences are still so much with us.

Mrs. Melchior Palyi

# Foreword

DONALD L. KEMMERER

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THIS IS THE fourth of six books sponsored by the Freedom Study Committee, a group of social scientists organized at the University of Illinois in 1961. It was composed originally of Edgar Erickson in History, who died in 1968, Francis G. Wilson in Political Science, who resigned in 1963 and subsequently taught at C. W. Post University on Long Island, and Robert W. Mayer in Finance, who, with myself, are the only remaining active members. The Committee received its financial support largely from Lilly Endowment, Inc., of Indianapolis, but in later years, and notably for this particular study, had help from the Relm Foundation of Ann Arbor, Michigan.

The members of the Committee from the outset have been concerned with the danger to the freedom of the individual developing on all sides in our rapidly changing twentieth-century society. John Stuart Mill's phrase, "Whatever crushes individuality is despotism by whatever name it is called,"<sup>1</sup> epitomizes our viewpoint. The studies sponsored have covered a variety of topics. The first was Robert Huhn Jones' *The Road to Russia*, an account of \$11 billion of lend-lease sent to help save the Soviet Union during World War II and scarcely acknowledged by the world's major menace to man's freedom. Second was Robert Golembiewski's *Men, Management and Morality*, a study of the dangers to individual freedom characterizing

the hierarchy of command in large business firms. Third was Harold Breimyer's *Individual Freedom and the Economic Organization of Agriculture*, an analysis of the effects of mass production technology in agriculture on farm life.<sup>2</sup> In this fourth study, Dr. Palyi emphasizes the events that led several major nations to abandon the gold standard in the early 1930's and the faulty analysis of those occurrences that keeps them from returning to gold. These events and attitudes have deprived the world of fairly effective protection against inflation, itself a threat to savings and peace of mind. In short, the purpose of these studies is to make scholars and others aware of forces menacing some of their freedoms.

When the Committee decided to sponsor a study of the causes of the breakdown of the gold coin standard, the name of Dr. Melchior Palyi came to mind almost immediately. He had been virtually a witness. Born in Budapest in 1892 where his father was a newspaper publisher, he was educated in Hungary, Switzerland, and Germany before World War I and received his doctorate at the University of Munich in 1915. Between 1918 and 1933 he served successively on the faculties of three universities—Munich, Goettingen, and Kiel—and at Berlin's highly regarded School of Business (*Handelshochschule*). In 1928 he became chief economist for the Deutsche Bank, then the largest banking institution on the continent, and from 1931 to 1933 was advisor to the Reichsbank, Germany's central bank, as well as managing director of its Institute for Currency Research. All these responsibilities put him in close contact with the influential financial and political figures of the day and gave him a behind-the-scenes view of events. Adolf Hitler came to power on January 30, 1933, and Dr. Palyi left Germany in early March, spent a brief time in London as guest of the Midland Bank, and moved on to the United States. In this country he served as visiting professor and research economist successively also at three universities—Chicago, Wisconsin, and Northwestern—all the while writing many articles and several books.<sup>3</sup> In time the journalist blood in his veins drove him increasingly to write for financial journals and newspapers. Between 1961 and 1968 he had a weekly column in the *Chicago Tribune*, and he often wrote for New York's *Commercial and Financial Chronicle*. He was an especially keen analyst in the realm of foreign exchange and international finance. As part of his service to the *Chicago Tribune* he took annual trips to Europe to consult with leading bankers,



economists, and others. Fluent in four languages, a keen observer, possessing a sharp analytical mind, and with experience gained over sixty years in two world wars, Germany's postwar inflation, and the great depression of the 1930's, he was incredibly well suited for the assignment.

Dr. Palyi's task was to describe and analyze this turning point in the world's economic and especially financial history. If we put American economic history in perspective, we can see why this country, and others somewhat like it, were more likely to accept the dismantling of the gold standard at this juncture in history than a generation or so earlier. A brief discourse on the place of the 1914–1936 events in this broader setting is in order.

One of the basic principles of economics, the law of variable proportions, essentially says that of the three factors of production, viz. land, labor, and capital, man will use most sparingly the one that is scarcest, and most freely the one that is most plentiful. In our own colonial times, the factor land, which includes natural resources, was the most plentiful, whereas the other two, labor and capital, were scarce. Our forefathers, in their use and abuse of land, and in their legislative policies concerning it, were following this principle (unconsciously). In the nineteenth century labor became more plentiful but capital remained quite scarce. Those disposing of capital could ask and get a good price for its use and they wielded great influence in virtually every high council of the economy. The Conservation Movement under President Theodore Roosevelt about 1908 marks the public's realization that land and natural resources were rapidly becoming scarce and must be expended less lavishly than theretofore. The era of the New Deal, in particular, but the years since too, saw labor organize successfully to make itself scarcer than it otherwise would be. Unions, minimum wage laws, welfare programs, labor board and court decisions were some of the means. All this caused capital to slip from the top rung of the factor ladder to a lower position. Labor leaders today are as influential as capitalists, if not more so. Out of respect for labor's power, the government now emphasizes full employment. At the same time the laws, practices and personal values likely to enhance the accumulation of capital as well as to protect its owners in their enjoyment of it are less vigorously observed than formerly. Among the casualties have been teaching thrift to the young, expecting economies of governments—budg-



ets are chronically unbalanced—declining concern for the damages of inflation, and as one part of that last, little concern for the implications of the nation's departure from the gold coin standard in 1933. Formerly that institution, more than any other, obliged the federal government to live within its means. In the history of the relative respect accorded the three factors of production, those controlling the scarce factor generally overplay their hand, antagonize the others, and cause the plentiful factor to be wasted to such a degree that the consequences of their actions remain to haunt their progeny. Recent generations are paying a high price for the misuse of natural resources by their ancestors. Labor leaders are still exploiting the memory of harsh working conditions, low wages, and hopeless bargaining situations that were the lot of millions of workers less than a century ago. Will our children and grandchildren pay a similar price for our own cavalier treatment of capital reflected particularly in our reluctance to protect the value of the dollar? A nation that does not insure that its monetary unit remains a reliable store of value is taking a long step toward discouraging saving and investment, cornerstones of our high standard of living and world leadership.

Dr. Palyi is particularly concerned with the steps by which the Western world—the United States, Britain, and France, in particular—first drifted into the financial predicament which has confronted them more or less for a generation and from which they seem unable to extricate themselves. He begins by explaining the practicality of the prewar international gold standard and emphasizes the universal respect which it then enjoyed throughout the world. World War I, with its colossal financial costs and economic and political dislocations understandably created great changes. With peace signed there arose a strong desire to return to prewar methods and conditions, witness two international conferences in 1920 and 1922 calling for a general restoration of some kind of a gold standard, followed in the next few years by a parade of nations seemingly returning to it. They thought they had achieved their goals. The path was not a smooth one, as Dr. Palyi points out, and they had not. Yet they might have achieved them substantially, given time, if their analysis of the situation had been correct. It was their faulty thinking, abetted by untimely accidents and war-induced economic weaknesses leading to the Great Depression that brought on the dismantling of the interna-

tional gold standard. Since then a growing number of the country's leading economists have tended to accept what happened as inevitable and even desirable. Thus we keep repeating the old mistakes and compounding our troubles. A second world war and two Asiatic ones have contributed too.

In discussing the restored economies of the 1920's, Dr. Palyi contrasts the basic goals of Montagu Norman, governor of the Bank of England, and the renowned economist, John Maynard Keynes. Norman sought to "buy time," by encouraging the use of economical gold exchange standards, for Britain to regain her supremacy in international finance, whereas Keynes was a "little Englander" chiefly concerned with the nation's internal economy, especially with holding down unemployment.

Dr. Palyi dwells at length on basic weaknesses in the financial institutions and national economies of the 1920's. Six of his observations merit mention here. (1) The new gold exchange standard, unlike the prewar model, allowed a "satellite" central bank to expand its credit without restricting the "sun" central bank, thus permitting a substantial world credit expansion. (2) Central banks now had a larger instrumentarium of credit controls than before, which allegedly increased their power over money markets and balances of payments. But they used these controls primarily to escape the gold standard discipline of having to balance their international payments. (3) Whereas before 1914 governments gave central bank managers free rein in their operations, believing them to have the wisdom of seers, during the war finance ministers learned to tell central bankers how much credit the government needed. After the war treasuries continued this convenient practice. (4) Governments had learned from the war that it was not as disastrous as they thought for budgets to go unbalanced. (5) The establishment of new industries during the war for purposes of survival and regardless of production costs left the world with overcapacity in many lines and nations with products in whose trade they had no comparative advantage. Either these countries put up tariff walls to protect their weaklings or let them die a slow death. (6) Largely neglected in many analyses of the late 1920's and early 1930's is the overproduction in numerous world commodities, viz. sugar, rubber, coffee, and copper. Governments set up production control systems which had no more than short-run success. Dr. Palyi contends the collapse of the pro-

duce exchanges probably set off that of the New York stock markets.<sup>4</sup> These situations, and others too, were enough to jeopardize seriously the financial mechanisms of the postwar years.

On top of these structural weaknesses and uneconomic developments there were a number of mistaken beliefs that influenced policy decisions. One was that there was a serious shortage of new gold which might bring on a depression. Dr. Palyi points out that since 1914 a large amount had moved from Asiatic hoards to the West. Also, unlike in prewar years, central banks held most of it as legal reserves, thus using it more economically than ever before. He criticizes the gold shortage theory on other counts too. In the 1930's, of course, the gold shortage scare gave way to worry over gold's abundance.

He questions, too, the fear at the time that Britain had stabilized at too high a value for the pound (in dollars) and thus set the stage for serious labor problems plus grave difficulties in exporting her goods. The trade problems, he emphasizes, existed for reasons which a mild devaluation in 1925 could not possibly have solved. Indeed, Britain had no rational alternative to "going back" to gold at the 1914 parity. To do otherwise would jettison the international prestige of the pound and of the City as a world financial center. Britain needed to exploit these assets. Besides, he argues, if France could deflate her franc in 1926 from two cents to four cents in a few months' time, surely Britain could adjust to a 2 per cent deflation (\$4.76 to \$4.86). Dr. Palyi believes the financial history of the era is full of myths and he has set out to dispel a considerable number of them.

If Montagu Norman had not suffered from painful headaches, for which rest was the only cure, he would not have been out of the country in September 1931 and almost certainly would not have approved of Britain's "going off" gold. He was most upset on hearing of it. Dr. Palyi points out that events after the suspension strongly suggest that a few stern measures (actually taken after the suspension anyway) would have righted matters, avoided the suspension, and altered the whole course of financial history (at least up to the Second World War).<sup>5</sup>

But it is when Dr. Palyi deals with latter-day explanations of the causes of the depression, reasons for its severity, and criticisms of the "mistaken" concepts of financial leaders in the 1920's that he argues



most vigorously, and very persuasively. He is firmly convinced that the quantity theory, or monetarist, school has numerous erroneous beliefs and mistaken explanations of events of the period. He questions the view that there was no inflation in the 1920's, contending there were both credit inflation and price inflation. The credit inflation he attributed in part to the expansion of various forms of near-money, savings and loan deposits in particular, not included, for example, in the Friedman-Schwartz money supply estimates.<sup>6</sup> The price inflation was in real estate and stock shares. And he further doubts that if the Federal Reserve System had expanded the money supply, it could have prevented, or even appreciably moderated the depression. There were too many things wrong by this time with both the nation's and the world's economies. Businesses, at least responsible ones, were no longer in a mood to borrow. His approach to the 1929–1932 credit contraction is in sharp contrast to that of Professor Milton Friedman. Again and again he stresses that it is people with changing expectations, and often affected by recent experiences, whom the central banks would have to influence, not inanimate aggregates.

Essentially Dr. Palyi is pointing out that although the effects of the war were many and deep-seated, and the corrective measures of the 1920's were inadequate to cope with them all without going through a depression, still the situation did not call for abandoning the gold standard which had proven its worth in times past. The circumstances leading to its abandonment were of an accidental nature. Yet the result was to deprive the world's major nations of a monetary system they badly need under any combination of the factors of production. It has deprived all citizens, laborers, landlords, and capitalists of an important freedom. Since then any citizen distressed at his government's financial irresponsibility, has been unable to protect his savings by converting paper money or bank deposits into gold coin. He has lost his right to vote "no confidence," a ballot he could formerly cast any day, not just on election day (except during a major war), to warn Congress to live within the income it was willing to raise by taxes. The late Congressman Howard Buffett of Nebraska stressed in 1948 that what chiefly influences a Congressman's stand on an issue is his estimate of what most of his constituents want. Since that is where the election votes are, and he wants to be reelected, he tends to act accordingly. To continue, ". . . an

economy-minded Congressman under our printing-press money system is in the position of a fireman running into a burning building with a hose that is not connected with the water plug. His courage may be commendable, but he is not hooked up right at the other end of the line . . . with the taxpayers to give him strength. When the people's right to restrain public spending by demanding gold coin was taken from them, the automatic flow of a strength from the grass-roots to enforce economy in Washington was disconnected."<sup>7</sup>

Dr. Palyi's book has strong present-day implications. We are operating under a weak monetary standard bequeathed us in the 1930's. It is small wonder that our government has had budgetary deficits in at least fifteen of the past twenty-five years (even more on the traditional basis) since the close of World War II, that the dollar will buy only 65 per cent of what it did in 1947, that union demands for pay raises become steadily more numerous and excessive in relation to productivity increases, that we have lost half the gold reserve we had in 1958, and that inflation is so chronic that prices continue to rise even during our recessions. In short, a monetary philosophy that has not worked any better than the present one has over the past twenty-five years or longer should be re-examined, especially when the record of its predecessor, the gold coin standard before World War I,—and even during the 1920's,—is obviously superior. Dr. Palyi's study shows that the rationale that the gold standard is "a barbarous relic," is doomed, or is impractical in the twentieth century does not stand up under careful analysis.

### Notes to the Foreword

1. *On Liberty*, chap. 3.
2. Jones, *Russia*, (University of Oklahoma Press, 1969); Robert Golembiewski, *Management* (New York: McGraw-Hill, 1965); Harold Breimyer, *Agriculture* (University of Illinois Press, 1965).
3. Among a dozen he has authored in German or English are: *The Chicago Credit Market* (Chicago: University of Chicago Press, 1937); *Managed Money at the Crossroads: The European Experience* (University of Notre Dame Press, 1958); *A Lesson in French—Inflation* (New York: Economists' National Committee on Monetary Policy, 1959.)
4. See chap. 6, sec. D, below.
5. See chap. 7, sec. B, below, especially p. 269 and notes 40 and 55.
6. See chap. 8, sec. B, below.
7. "Human Freedom Rests on Gold Redeemable Money," *Commercial and Financial Chronicle*, May 6, 1948.



**THE  
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## *The Classical Gold Standard in Perspective*

### Introduction

THE PUBLIC ATTITUDE toward money has changed so fundamentally during the past half-century that it is hard for us to appreciate that only a generation or two ago public policy was actually influenced, if not determined, by monetary restraints. Wars were avoided, or terminated, because governments did not have the necessary funds, namely gold, to finance the military expenditures. The immensity of the First World War, and the intensity of the feeling on both sides, forced most of the governments to disregard monetary restraints, and to finance the war through credit inflation. But as soon as the hostilities ended, victors and vanquished alike strove to restore, as soon as possible, a stable international monetary system linked to gold. Even John Maynard Keynes, in the early 1920's, advocated at times the return to gold.

The world-wide rapid economic development between the 1870's and 1914, and the attempts between 1918 and 1931 to restore the international economic equilibrium, can be understood only in terms of the widespread faith in the inherent soundness of the international gold standard. Once this faith began to falter during the great depression of the 1930's, and the restraints on public and private spending, which the gold standard had exercised for more than sixty years, were more and more openly circumvented, a new socio-economic

philosophy spread throughout the world. Public and private spending, supposedly, no longer had to be determined by the available income and savings, but by whatever the people might desire, be it wars, welfare, or affluence, to be financed through the printing press. The result has been chronic world-wide inflation for more than thirty years, punctuated by periodic and increasingly serious monetary crises.

And as the world's monetary systems deteriorated, the freedom of the people declined. The decades preceding the First World War were characterized by a degree of economic and personal freedom rarely, if ever, experienced in the history of mankind. An essential part of this system was the gold standard, linked closely with a system of politically independent central banks, whose task it was to assure the smooth functioning of the gold standard. (G. C. Wiegand)

### A. Gold Standard and the Economic Order

“This war cannot last longer than a few months” was a widely held conviction at the outset of World War I. All involved would go “bankrupt” shortly and be forced to come to terms, perhaps without a decision, on the battle fields. The belligerents would simply cease to be credit-worthy. Such was the frame of the European mind in 1914; the idea that credit and the printing press might be substituted for genuine savings was “unthinkable.” “Sound money” ruled supreme, supported by the logic of the free market. The majority accepted the Ricardian viewpoint, that tinkering with the metal content of a currency amounted to defrauding the creditor. In Western Europe, at any rate, the rank and file of businessmen, economists, and politicians shared these convictions. It was part and parcel of the social philosophy that permeated the thinking of advanced nations—a belief in the validity of economic laws, valid, that is, in the sense of irresistible forces that could not be violated without inviting “retribution.” This “classical” approach was so firmly established as to be a major determinant of a whole range of domestic and foreign policies, and to some extent even of decisions affecting war and peace.

An abundance of examples could be cited. In 1905, Japan, in the war with Russia, had been advancing in Manchuria; influential political factions wanted to continue the war for further territorial gain. But Japan's finances were strained, in contrast to those of the Czar;

and Tokyo, therefore, felt impelled to follow British advice, and came to terms with Russia. In early July 1914 the chief of staff of the Austro-Hungarian army objected to a general mobilization *unless* war was unavoidable. He argued that on top of two calls to the colors during two preceding Balkan wars, a third mobilization would ruin the monarchy's finances and the gold standard.<sup>1</sup> Even after World War I, a distinguished continental expert, Felix Somary, asserted that "if all British gold were held in the Bank of England, the occupation of London would end a war." And, it was widely believed by German sociologists and historians—and especially those of Marxist leaning—that in view of "the imperatives of capitalist economy," meaning financial considerations, future wars would have to be short.<sup>2</sup>

Rising living standards of a rapidly growing world population, tremendous capital accumulation, accelerated technological progress, a vastly broadening area of well-organized international trade and finance, of political democracy and individual freedom—all these were the hallmarks of growth in the century between Waterloo and Sarajevo, and of its second half in particular. Toward the end of that period, and for a while thereafter, there was little doubt in the minds of most contemporary observers that such phenomenal developments as the skyrocketing of foreign long-term investments from under \$6 billion in 1864 to over \$70 billion just before World War I was closely related to the basic monetary institution of the age, the gold standard, which assured stability through the automatic self-adjustment of the balance of payments.

Respect for the gold standard was to survive World War I. Throughout that war the United States, the European neutrals, and, to a lesser extent, even the other belligerents preserved, or at least endeavored to preserve, some basic features of the gold standard, albeit with deviations from its conventional mode of operation. All deviations (the more serious ones were in the belligerent countries) from the traditional pattern were considered by influential contemporaries as dangerous to the currencies' health and to be corrected at the earliest opportunity. Indeed, it had been "officially" accepted as the imperative of sound monetary policy. Two international conferences of the Supreme Allied Council, one in Brussels in 1920, the other in Genoa in 1922, agreed that currencies which had departed from the safe harbor of the gold standard should return as soon as



politically feasible to where they had been moored in 1914. This meant restoring: (a) the redeemability of all monies in gold at a fixed price, i.e., permitting exchange rate fluctuations only within the narrow confines of the upper and lower gold points, depending on the cost of shipping and handling gold; (b) the free flow of gold and of funds across national borders. There were significant differences of opinion as to the rate at which a depreciated currency should become convertible, but the postulate of returning to gold, at a permanently fixed price in domestic currency units, was to win the day until 1931, notwithstanding some opposition. Perhaps no one gave a more succinct expression of the fundamental belief in the virtues of the gold standard as the ultimate financial regulator than economist John Maynard Keynes, who wrote in 1922:

If gold standards could be reintroduced throughout Europe, we all agree that this would promote, as nothing else can, the revival not only of trade and production, but of international credit and the movement of capital to where it is needed most. One of the greatest elements of uncertainty would be lifted. One of the most vital parts of pre-war organization would be restored. And one of the most subtle temptations to improvident national finance would be removed; for if a national currency had once been stabilized on gold basis, it would be harder (because so much more openly disgraceful) for a Finance Minister so to act as to destroy this gold basis.<sup>3</sup>

Keynes was, however, in the words of his biographer, Sir Roy Harrod, a man of “expedients.” Less than two years after the above statement was published in the *Guardian*, in November 1923 his *Tract on Monetary Reform* appeared in the book shops, throwing doubts on the feasibility of the gold standard. He “killed it almost singlehanded,” according to Sir Roy.<sup>4</sup> In the same year, he began agitating against sterling’s return to the gold parity and in favor of fluctuating exchange rates. Yet, in 1930, as a member of the Macmillan Committee, he stood up against sterling’s devaluation—proving his respect for the “dead” gold standard. Only after the sterling devaluation in September 1931 did Keynes become a vociferous critic, not only of the gold standard, meaning the equivalence of gold and money at a fixed rate, but also of the use of gold as the monetary base in any form.

For still another, belated testimony on behalf of the gold standard,



Hjalmar H. G. Schacht may be quoted. As president of the German Reichsbank, he wrote in early May 1928 to his French counterpart, Emile Moreau: “Nothing could be more favorably greeted than the fact that one country after another emerges out of the confusion and quagmire of the monetary disorders following the war and one after the other returns to the sound and solid principles which were generally recognized before the war.”<sup>5</sup> This was the same Dr. Schacht who, under Adolf Hitler, was to become the chief architect of a monetary system that had little more in common with the gold standard than the name.

The gold standard was “sacrosanct” to the generations brought up on the Adam Smith ideals of free markets, free from arbitrary and discriminatory interventions by governmental powers. Indeed, it was an essential instrument of economic freedom. It protected the individual against arbitrary measures of the government by offering a convenient hedge against “confiscatory” taxation, as well as against the depreciation or devaluation of the currency. It was an instrument of “mobility” within and beyond national borders. Above all, it raised a mighty barrier against authoritarian interferences with the economic process. “That insidious and crafty animal, vulgarly called a statesman or politician, whose councils are directed by the momentary fluctuations of affairs” (Adam Smith), had to keep the national budget in good order. Authoritarians of all denominations had to keep their inflationary propensities under control and to refrain from excessive taxation in order to forestall the loss of people’s confidence in the currency, the breakdown of the standard. The public purse had to be held tight. The business community had to learn to live with the salutary realization that illiquidity caused by short-sighted overinvestment and irrational speculation would be penalized by loss of gold and an “automatic” tightening of the money supply, as well as a rise in the price of money.

The gold standard in the classical sense was part and parcel of an economic order. It was a keystone of the system of public law, social customs and institutions, called “capitalism”—the term coined by Karl Marx—a system that rested on what appears in perspective as virtually unlimited freedom of consumer choice, business enterprise, and markets.

Once more the biographer of Keynes—a merciless opponent of the gold standard himself—may be quoted: “For generations there had

been economists who held that the gold standard was not the best possible form of money. . . . Yet on the whole it seemed that this kind of advocacy was confined [before World War I] to cranks and very academic economists. Its [the gold standard's] . . . desirability was not a live issue."<sup>6</sup>

The awe in which the gold standard and the central banks were held was vividly illustrated by an episode of the French Commune. In 1871, during their brief reign, the French Communards in Paris took over all public and private institutions except one, the Bank of France, which they left virtually to its own devices, its gold and silver reserve untouched.<sup>7</sup>

### B. The Triumph of Gold

The vital role of the full-fledged gold standard in the world-wide expansion of modern capitalism between 1871 and 1914 was due to its adaptability for universal use. It provided an internationally valid unit of account and medium of payment. Without such a uniformity in currency arrangements, the late nineteenth century's development in trade and finance would have been greatly hindered. "The international gold standard was thus, historically, one of the most important adjuncts to the opening of the world to settlement and development and, whatever may be said by those who never look at the woods because of the trees, this *creation of a world economy* constituted one of the great (and beneficial) turning-points in the history of mankind."<sup>8</sup>

The meaning of the gold standard—with its unrestrained and uncontrolled private ownership of gold—cannot be appreciated in isolation from the institutional and psychological background that characterized the civilized world in the decades before 1914. "The outstanding feature" of that period was the unity of the economic world, as has not been achieved at any other time.

" . . . there was freedom of travel without passports, freedom of migration, and freedom from exchange control and other monetary restrictions. Citizenship was freely granted to immigrants . . . capital would move unsupervised in any direction, and these movements could take any form"

In the period under review . . . "International trade had to overcome tariffs, but . . . they were exceedingly low. There were hardly

any quantitative restrictions on international trade (quotas, import prohibitions, etc.) . . . it was a world of which recently many . . . would have been inclined to assert that it could not be created because it could never work . . .”

It was a world of relatively low nominal wages and prices, and almost nominal taxes, a world in which virtual freedom of enterprise, “workable” competition, and highly flexible wage-price structures prevailed—one in which private property and contractual rights were enforced. Defaulting governments had to face boycott, or worse.

It was a world of balanced national budgets wherein public debts had to be amortized as a matter of course, just as private ones had to be repaid, and fiat money was anathema. Essential public expenditures (investments) were financed by the sale of long-term bonds, not by debt monetization.

Above all, it was an industrial world of steady *real* growth—at an average annual rate of about 3 per cent during the six decades before 1914—with rising living standards for the masses, and with “security” provided by the protection of savings.

Most fiat money experiments of the Revolutionary and Napoleonic era terminated fairly soon after Waterloo. The Bank of England resumed specie (gold coin) payments in 1821 and the minting of gold coins on private account. The greenbacks of the American Civil War became convertible by 1879. But it took the better part of a century to stabilize the currencies of Imperial Russia and of the Austro-Hungarian Monarchy on a gold basis. By 1914, depreciated paper money remained in circulation only on the periphery of what was at the time the industrial world, notably in Spain, Greece, Brazil, Chile.

Stabilization also presupposed elimination of the silver standard and of bimetallism. Until the mid-1870’s, Britain was the one major “hard-money” country in which the free import of silver had been suspended as early as in the 1770’s. As international trade expanded, gold became the uncontested global standard of value, the universal monetary base, the one payment instrument and store of “liquidity” on which the national currencies had to rely for basic convertibility. This triumph was made possible by mining developments, beginning in 1848 in California, then in Australia, and later in South Africa,



North America, and Russia. Economies in the use of gold and increasing production eliminated the frequently alleged threat of an inadequate supply of gold, which was the more important since for several reasons gold was technically the more suitable of the two precious metals, the one that had been historically preferred even by late medieval city-states with their growing wealth. Decisive for the general choice was the fact that gold had been adopted by Britain, the leading industrial and commercial nation, the world's financial center. Between 1867 and 1874, silver was demonetized in Germany, the United States, Sweden, Norway, the Netherlands, and Japan, and by closing the mints to its free coinage, in the five countries of the Latin Monetary Union (1884) and in India (1893). With huge quantities of demonetized metal thrown on the markets in the 1870's, silver's role as a monetary standard was definitely ended.

### C. The International Gold Standard

The almost continuous decline of the price of silver after 1874 wrote finis to a long chapter in monetary history. The dramatic story of silver's demonetization, except for fractional coins, has often been told. "In 1873 there were some nine countries on the gold standard; in 1890, 22 countries; in 1900, 29 countries; and in 1912, 49 countries."<sup>10</sup> By 1914, few people questioned that the gold standard, as they knew it, was here to stay; it was the epitome of monetary wisdom. It had been accepted wherever financial order had been established. Only convulsion-ridden China, Ethiopia, Persia, Honduras, and San Salvador were clinging to the gray metal. The global scope of the gold standard meant the expectation of a permanent exchange rate stability; fluctuations within the "gold points" were nominal for most practical purposes. "Surviving" fiat money advocates were considered as eccentrics; and in the United States the silver movement had been withering away since the failure of William Jennings Bryan's famous oratorical efforts in the 1890's. By 1910, academic thinking and business opinion were virtually unanimous that nothing could be substituted for a monetary system in which gold could be freely minted and melted for private use and at no cost to the owner, and where full freedom of its circulation within and without each country obtained, and all non-gold money was redeemable in gold at a fixed "parity." The system was international

in scope, outlook, and operation. Not only was the flow of goods and capital greatly fostered by the stability of exchange rates, but, the system being international, brought about world-wide price level and business cycle adjustments. With gold the common currency base, the money and credit supply of each country could be expected to adjust itself, except for short-term fluctuations, to the international flow of gold, and vice versa. In each country, interest rates, the flow of capital into investments, money incomes, and price levels were affected in the long run by the flow of gold. This "automatism" of the gold standard was perhaps its most significant feature. Money supplies and the national trends of business activity were essentially interdependent and "synchronized," due to the "discipline" of the balance of payments—that is, the necessity, under the gold standard, of adjusting the domestic money supply and interest rates to the flow of gold. Discipline meant, in analytical terms, a quasi-automatic system that eliminated all but very short-term disequilibria in the balance of payments. This was the functional essence of the gold standard. Such discipline distinguishes the gold standard from every type of inconvertible and quasi-convertible system in which the money supply can be "isolated" more or less from the impact of the underlying imbalance of international payments.<sup>11</sup>

The role of the gold standard in unifying the economy of the civilized world can scarcely be overestimated. It was the condition *sine qua non* of the international capital flow, both short-term and long-term, a basic instrument in "opening up" the world to economic progress, and diffusing modern civilization. And the capital flow under the gold standard operated with a minimum of actual gold transfers and with relatively modest gold reserves.

In order to function smoothly, the gold standard presupposes a high degree of freedom in foreign trade, which helps debtor nations liquidate their debts by exports to the creditors. The gold standard, to repeat, was international in its *modus operandi*, as well as in its scope. This assumed a general readiness to convert national currencies into gold, with no evasive strategy, either open or camouflaged, for any length of time. It also assumed an absence of political barriers and of insuperable price-wage rigidities, which would impede the quasi-automatic balancing of international payments. These conditions were realized, or nearly so, in Britain. For a century a free gold market flourished with absolute freedom to export and import gold

and capital. The unquestioned legal protection of contracts and the assured convertibility of all claims on sterling into gold vested London with world-wide confidence and made it the prime depository for funds stemming from five continents.

The monetary stability of sterling, supported in no small measure by the commercial leadership and the high “moral” reputation of London’s financial center, “the City,” not only attracted foreign funds but also promoted sterling to the rank of an international currency, as a convenient substitute for gold. The consequent accumulation of domestic savings and foreign short-term funds enabled the City in turn to become the world’s financial center, where legitimate short-term credit was nearly always available at reasonable cost, and capital was provided for long-term ventures within and beyond the British Empire. Thus, the gold standard was broadened into a world-wide system of closely interwoven credit relations. This credit structure, with tentacles of global radius, provided the international liquidity which served to finance trade and development on a world-wide scale and reduced to a minimum the actual use of gold in the settlement of transactions. Although London was the chief, it was by no means the only focal center. Growing competition—by Berlin, Paris, Amsterdam, Brussels, and New York—strengthened the system as a whole by fortifying the “liquidity” which rested on the “marginal” support of the great central banks.<sup>12</sup>

The gold standard was *international* in more than one sense. With the national money supplies dependent to a high degree on gold movements, as mentioned above, the resulting “automatic” adjustments of the economic variables brought about a relative uniformity, coordination, and integration of the respective national price level trends, sustaining a degree of world-wide stability that was unparalleled before or since. As the British Macmillan *Report* of 1931 put it: “The primary object of the international gold standard is to maintain a parity of the foreign exchanges within narrow limits; this has the effect of securing a certain measure of correspondence in the level of prices ruling all over the gold standard area.”<sup>13</sup> And the same *Report* added that long-term overseas investments were instrumental in extending the gold standard’s radius of action in all directions, as long as the leading nations “played the game” according to its rules, that is, as long as they abided by the discipline of the balance of payments.



It was an international “game,” with only occasional and *ad hoc* “central bank cooperation.” True, individual central banks helped each other in acute emergencies, but for short periods only.<sup>14</sup> Governments in some creditor countries—France in particular—interfered by fostering or inhibiting the issuance of foreign bonds on their domestic security markets. Moreover, what is virtually forgotten, central banks accepted the securities of credit-worthy foreign governments as collateral for loans to domestic borrowers. Yet, commercial and investment banks, engaged in international business, “cooperated” in their own individualistic fashion. Each nation had to look after its own balance of payments, but, in the main, the necessary adjustments were made through the basic mechanism of interest rate and foreign exchange arbitrage, and at times price level changes. No country could count on foreign aid for sustained indulgence in credit expansion. Each had to be amenable to monetary discipline, and to rely on the enlightened long-range self-interest of all participants in the “game,” including the vested interests of note-issuing institutions in protecting their own solvency.

#### **D. Alternatives of Policy**

The student of the pre-1914 era cannot help but be impressed by the almost complete unanimity of the leading economists of the “classical,” the historical, and every other school (including the Marxists!) in the belief that it was mandatory to organize and to stabilize the monetary system of a market economy on a fixed monometallic base. It was taken for granted in the industrially advanced world that stability was the prime requirement of money, stability assured by a fixed price for a precious metal that was acceptable to mankind as a “store of value.” Bimetallism had been acceptable only as long as the market price ratio of the two metals remained reasonably constant. What, after all, were the alternatives to the gold standard? On the continent rather than in England, some consideration had been given before 1914 to the potentialities of enlarging the range between the gold points—a gold standard with exchange rates variable within a somewhat broadened, but still limited, range. The Bank of France and the German Reichsbank occasionally resorted to such practices in order to minimize the outflow of gold. It was a temporizing

palliative to avoid, or at least to postpone, boosting the official exchange rate.

If it had been considered practical, a nonconvertible paper money with “freely” fluctuating exchange rates would have eliminated the pressure exerted on prices by the outflow of gold. International payments would then have been balanced by exchange rate fluctuations, with delayed effects on domestic prices. But such a system was never seriously discussed. Its implications had been brought home by nineteenth-century experiences with nonconvertible currencies.<sup>15</sup>

Actually, only the ignorant or dull-witted could be unaware that foreign exchange rates would hardly ever be as free from governmental interventions in the sense of a free market as were potatoes. The international value even of a totally unpegged currency to some degree depended on the country’s policies with respect to money supply, interest rates, and so on, and also on the politics of foreign governments. If country A left the exchange value of its fiat money to the completely free play of market forces, policies of countries B and C would become the determining forces. Fluctuating—variable or flexible—exchange rates negate the discipline of the balance of payments, which restrains the special interests seeking inflation. It was the generally accepted conviction that if money were “freed” from the gold standard’s “shackles,” the money supply would be at the mercy of the demagogues.<sup>16</sup> Nor did it escape the attention of late nineteenth-century economists that under a system of fluctuating exchange rates, “temptation for overt depreciation for the sake of competitive advantage” may develop, in the words of a latter-day monetary analyst. Indeed, the real objective of a destabilized (fiat money) system is to “free” the national economy from the pressure of international competition and to manipulate the trade balance. This negates rational foreign trade policy, whereas the gold standard is a most significant adjunct of free trade or a low tariff policy. Nor was a destabilized standard compatible with the deep-seated conviction of the age that voluntary savings, rather than the “forced” kind, were the royal road to progress and that this road had to be paved with a currency which safeguarded the “productive” saver and discouraged the “unproductive” speculator and hoarder.

There was no doubt, either on theoretical or on empirical grounds, that flexible and fluctuating exchange rates invited wasteful, disequilibrium-generating speculation, capital flight, and distorted interest

rates, to say nothing of the perverse impact which major foreign exchange fluctuations would have on domestic price and income structures. Once on gold, no government, before 1914, intended any change. There was general awareness of the relative simplicity of the gold standard. "A great advantage of the Gold Standard is that it provides automatically answers to so many questions raised by international payments."<sup>17</sup> It avoids exposing the security and commodity exchanges to the currencies' speculative vagaries, thereby minimizing the need, or pretext, for authoritarian interventions.<sup>18</sup>

As early as the 1820's, concern over another aspect of monetary stability, or instability, began to attract public attention. A century-long—and still raging—debate got under way about the problem of price level stability. Actually, at the end of the nineteenth-century the average of staple commodity prices was back where it had stood eighty years earlier. But in the intervening period, such wholesale prices moved in "long waves," with amplitudes as broad as 40-odd per cent up or down, and often reflecting cyclical changes. The cost of living in industrial countries was less affected but even so, embarrassing questions were raised in the protracted depression of the 1870's and again in the early 1890's.<sup>19</sup> Was not shortage of gold at the root of this trouble? Was it rational to let the price system depend on the vagaries of gold mining? The gold standard's "automatism" itself came under the fire of critics. Objections were raised to the recurrent heavy pressures on business activities due to rising interest rates and constricted money supplies in the wake of gold outflows. The rapidly increasing use of credit money and of substitute payment instruments in lieu of gold, together with the growing sensitivity of commerce and of investments to interest rate changes, tremendously intensified the operational effects of the gold standard "mechanism."

The industrial revolution had its monetary counterpart: that was the proliferation of credit money and other credit instruments that paralleled the thrust of the machine. Of great significance was the change which the rapid growth of credit had wrought in the texture of the gold standard, with attendant problems of policy bequeathed to the 1920's.

The rapid expansion in the use of bank notes in lieu of, and in addition to, gold coins, followed by the even more significant spreading use of bank deposits and other credit instruments, multiplied the inflationary and deflationary potential of gold movements.



The mechanism of the balance of payments continued to work, albeit now with an *unwelcome* efficacy, aggravating seasonal and cyclical swings of prices, profits, and employment, if not actually inducing such swings. How could it have done otherwise as long as there was no organism available to moderate the impact of the gold flow and of its multiple monetization and “demonetization?”

Holding exchange rates fixed had, of course, salutary internal effects by limiting economic fluctuations. Rising interest rates, in the upturn, served as signals to warn the unwary and acted as penalties to eliminate the inefficient. But, would the “rules of the game” be enforced and the signals followed if doing so involved going through a vicious disequilibrium? The ultimate correction of excesses by the self-regulating mechanism offered scant consolation for the intervening upheavals and resource misallocations.

The problem now arose whether or not the decision over the price and availability of money was to be left to the quasi-automatic operation of the balance of payments, and the cycles were to be permitted to take their course. To do this was consonant with the ideal of absolute economic freedom, but at social costs that seemed to go at times beyond the limits of the “tolerable.” To remain acceptable, the gold standard now had to adapt itself to additional objectives but without losing sight of its basic purposes. External stability could not be wholly divorced from the problem of relative internal stability.

### E. The Age of Central Banking

Central banking, like the gold standard, was no one's invention. It developed by force of circumstances. As London became a world commercial center, the Bank of England, vested with the local monopoly of note issue, became the number one central banking institution. It served as a model for Napoleon's Bank of France (1800), the National Bank of Belgium (1862), and the Netherlands Bank (1863). Beginning in the early 1870's, central banks proliferated with the spread of the gold standard. By the outbreak of World War I, the institution was securely established in a score of countries. The Federal Reserve System had passed the legislative hurdle and was to open for business on November 16, 1914.

Generally, note-issuing institutions started as commercial banks, pure and simple. The legal or *de facto* monopoly of note issue vested

them with extraordinary money-creating powers. Power implies responsibility, although it was very much against the grain of contemporary thinking when Walter Bagehot brought it forcefully home (1872) that “money does not manage itself.” Indeed, the central bank as the one and only source of “cash,” other than gold and token currency, as the holder of the nation’s largest if not its sole gold reserve, as the banker of the central government, and as the “lender of last resort,” carried a unique responsibility which even transcended the normally legitimate goal of satisfactory dividends for its shareholders.

Throughout the nineteenth-century most major central banks were supposed to observe two sets of not always consistent rules. They were to conduct themselves as financial enterprises—that is, to earn profits—and yet they were to “suffer” the impact of gold flows, rather than to influence them. They were to observe the same cash (gold) reserve and asset quality requirements as did well-managed deposit banks, only more so. In fact, they had to be more liquid than the other banks, which relied increasingly on the central institution for protection in the “last resort.” Yet, the latter was supposed to act in a quasi-mechanical fashion, avoiding discretionary interference with the automatism of the gold standard. Two lines of rationalization supported this approach in the nineteenth-century.

The “banking school” argued that no authoritarian control or discretionary power was needed to sustain the balance between the production of salable goods and the creation of credit money. Enlightened self-interest would compel the central bank to maintain the liquidity of its earning assets, which were to consist of “real bills”—that is, short-term, self-liquidating commercial paper, growing out of the actual sale of goods. To maintain this asset liquidity, it would put up whatever barrier was needed against excessive credit expansion.

The “currency school,” on the other hand, doubted that stability could be guaranteed by asset liquidity rules, which banks notoriously violated when they most needed to observe them—that is, at times of business upturn and rising prices. The adherents of this school believed that the money-creating power of the central bank was the crux of the situation, and insisted on curtailing this power by requiring 100 per cent gold reserve for bank notes. The idea was to preserve the automatism of the gold standard by putting the central bank in



a straitjacket; the volume of outstanding currency (cash) would then expand and contract in exact proportion to the inflow and outflow of gold.

The currency school won a Pyrrhic victory in 1844. By Peel's Act, the Bank of England was obligated to maintain at all times a 100 per cent gold reserve for its outstanding notes, beyond a modest amount. In practice, the Bank endeavored, with varying success, to maintain a ratio of about one to three between its gold reserve and its total liabilities. This minimum gold reserve requirement for note issues was thereafter accepted almost everywhere. But, the necessity of suspending the issue limitations of Peel's Act—although not the convertibility rule!—in three money panics (1846, 1858, 1867) showed that tying the Bank of England to a formula was a senseless undertaking. Not only had the 1844 Act omitted extending the 100 per cent reserve requirement to the Bank's deposit liabilities—which grew thereafter faster than its note issues—but it had tied the central bank's hands behind its back and left the problems of policy unresolved. Unless it exercised some amount of discretion, the central bank could neither restrain a boom nor soften the hardships of a depression. It could not even come to the rescue of the financial community in an acute panic.

The problems at stake had been thoroughly discussed in both the hearings and reports of several British parliamentary committees, beginning with the inquiry into Irish banking conditions in 1802, and through the famous Bullion Committee *Report* of 1810 and its successors in the nineteenth century. Between 1918 and 1931 three parliamentary committees re-examined the pre-1914 gold standard's records. Similar studies were made by the French Banque-Enquête of the 1860's and especially by the United States Congress prior to founding the Federal Reserve System. The latter, the National Monetary Commission reports, produced a vast amount of penetrating information on the subject. Based on these sources, a large literature flourished, dealing with the problems and policies of central banking under the classical gold standard.<sup>20</sup> We can offer here no more than "highlights" of a practice which was of basic significance for the successful operation of the gold standard.

Until about 1870, the prevailing approach of central banks consisted in following the trend of the money market rather than in trying to influence it—in brief, taking no initiative whatsoever. The

absence of an active policy was justified by the alleged inability of central bank managements to resist the market forces. Dissatisfaction with this comfortable abstinence, which fostered cyclical excesses, was spelled out repeatedly in English parliamentary reports, and also by Adolph Thiers in his testimony before the French Banque-Enquête:

If one had the courage to intervene at the outset of the speculation's acceleration, I would understand the usefulness of the brake [by raising the discount]. But as a rule the speculation is virulent at the beginning, investments are rising in value, and the Bank that dared to destroy this fever condition would encounter hostility. When the speculation goes wrong and the general restlessness permits the bank managers to display their posthumous wisdom, then the raising of the discount rate is no longer a brake. It turns into an executioner's axe.<sup>21</sup>

A long list of blunders could be compiled, blunders committed by English central bankers before the 1880's, occasionally even thereafter, and by their continental colleagues. As late as 1908, Gustav Cassel could take the Swedish Riksbank, the oldest central bank, to task for having "misjudged developments in the most incredible fashion." It kept the discount rate too low for too long, before the "crisis" of 1907–1908, and then kept it too high for too long after the crisis.

A new approach developed under the leadership of the Bank of England in the late 1860's and early 1870's. The self-correcting mechanism of international payments remained the foundation of the gold standard "game," with the gold reserve ratio the "ultimate" guide post. But, as the Macmillan Committee of 1931 formulated it: "The gold standard is automatic only as an indicator of the need for action and of the end to be achieved."<sup>22</sup> The practice of central banking had now evolved to the use of discretionary measures—that is, as far as "control" over short-term fluctuations in the balance of payments and in domestic credit conditions was concerned. Managerial discretion was essential to decide, for example, when and how to intervene in a panic by granting liberal credit at high interest rates in order to forestall forced liquidation of otherwise sound assets. Yet, the basic objective of discretionary policy was to try to *prevent* panics and dangerous gold drains and to be able to counteract them if they occurred. Hence the necessity for taking the long

view in holding appreciable gold reserves as “buffers” resorting to “defensive” measures whenever the ratio of gold to actual or foreseeable liabilities sank to a level that was considered unsafe. It was mandatory, in short, that the note-issuing institution should exercise a measure of control over the availability and price, as well as over the “quality,” of credit.

The apparent conflicts between “fixed rules” and “discretionary powers” were, for all practical purposes, eventually resolved. In appearance, the central banks’ freedom of action was unlimited. In reality, they had “automatic” limitations. Even the Bank of England, which was far more actively—in fact, almost continuously—engaged in interventions, changing its discount rate as often as 24 times in 1873 and 202 times between 1855 and 1874, adapted major changes of policy to the requirements of the balance of payments. Discretionary action was applied to short-term problems, primarily directed toward maintaining “stable” conditions on the domestic money market. Discretion or no discretion, however, the fixed gold value of the currency had to be safeguarded. On the whole, central banks strove to stay aloof, doing so by keeping their discount rates above the market rates. As long as conditions did not threaten to deteriorate, the policy consisted largely in giving rein to the market forces. But, when an active policy line was chosen, it became mandatory to induce the financial community, the commercial banks in particular, to coordinate their credit practices with those of the central bank.

Central bankers had to learn their profession: not only the quasi-mechanical rules of the game, but also the techniques of adapting them to immediate control objectives. Contrary to the concept of the purely automatic adjustment of money supplies to the inflow and outflow of gold, central bank holdings of domestic assets often rose when gold flowed out and fell with a rising gold reserve. This was not as “irrational” as some critics have termed it.<sup>23</sup> Such criticism of the pre-1914 gold standard misses the point, namely that marginal changes of the gold reserve were considered irrelevant, being easily corrected by discount rate changes or by operations on the forward exchange market—a technique developed by the Austro-Hungarian National Bank—without calling for hefty changes in the volume of the domestic money supply. Besides, central banks could and did attract, or discourage, gold flows by lowering and raising, respectively, the volume of domestic assets in their portfolios. As long as



the gold reserve was not in jeopardy, policies served to level out cyclical and other swings and to guide the money market, rather than to be at its mercy. The success or failure of this combination of formal rules and discretionary interventions depended, first, on the “strength” of the central bank in terms of its relative gold reserves and of its earning-asset liquidity; second, on its ability and determination to make its discount rate “effective” by inducing the money market to follow its lead, by resorting to open market operations and other pressures. The central banks endeavored to channel the flow of short-term funds into short-term outlets in order to maintain their own earning assets, as well as to keep the banking system in a flexible condition, to provide an “elastic” currency adjusted to the ebb and flow of commerce, and to counteract or moderate speculative excesses on the commodity and security markets. The idea was, in short, that the central bank carried a public responsibility, one that was consonant with its own and the banking fraternity’s long-term financial security.

Summing up, the general line of policy, emerging after the late 1860’s, rested on three practical propositions. First, the central bank should not merely follow the market trend of interest rates, but preferably anticipate it through a policy of actively fostering the expansion of investments or restraining them. Second, gold movements were the ultimate guide posts of policy, but not in a mechanical sense, unless they persisted in one direction or another. Third, qualitative credit controls, or their relaxation, were mandatory, depending on the liquidity status of the banking system.

The result was a degree of financial stability in the three decades before World War I which compares favorably with any previous or subsequent “long-term” period. In those thirty years, no major central bank was subject to a run; and no banking system, except one, was exposed to a panic. The exception was, of course, the American one which lacked a central bank! The instability of the world’s most rapidly growing and most speculation-prone economy was an international destabilizing factor due to the intimate commercial and financial entanglements crisscrossing the Atlantic. It is noteworthy that in Europe, outside Britain and Belgium, agriculture was still a leading and often the most important segment of the economy. Uncontrollable variations in farm crops and prices deeply affected business conditions.<sup>24</sup> The damage caused in France in the 1880’s by a

phylloxera epidemic in the vineyards could neither be foreseen nor averted by money management. With over 40 per cent of her population still living on farms, France suffered, also from the depression of 1900–1902, due largely to the combination of crop failures in wheat and low prices for wine.

Moreover, in the period under review, one political crisis after another, minor wars and major threats of war, darkened Europe's "cyclical" horizon. Yet, the gold standard, under the guidance of the conservatively managed central banks, provided the foundation for a financial structure that enabled the European economies to withstand very severe tests without "catastrophic" crises or prolonged periods of stagnation.

The contrary impression is conveyed by the semantics in recent literature dealing with past business cycles. More often than not, cyclical downturns of the pre-1914 decades have been catalogued as "crises" and "depressions," whereas more recent occurrences of similar intensity have been presented as only "recessions" or "set-backs." In reality, the annual index of manufacturing production even in cyclically vulnerable United States, going back to 1860, never showed a decline of as much as 20 per cent until 1920–1922!<sup>25</sup> Under the tutelage of the "bankers' banks," prices, as well as incomes, were flexible to a high degree. Combined with the relative mobility of labor and capital and the comparative absence of trade impediments, these conditions were most helpful in adapting the respective economies to the pressures of international competition and in making possible the prompt enforcement of central bank objectives. Most noteworthy in this context is the fact, already mentioned, that the problem of "international liquidity" did not exist. None of the major central banks was at any time, after the mid-1870's, in danger of being driven off the metallic standard. Acute money-market crises were due to *a shortage, not an excess, of domestic currency* (bank notes). The Bank of England, the Banque de France, and the Reichsbank were successful to a remarkable degree in reducing the frequency of such "crises" or cushioning their impact. The inherent strength of this money-credit system was such that it took a cataclysmic event to sabotage it, such as World War I and the subsequent upheavals.

It is customary to speak of the gold standard as a "game" which was to be played according to its rules. It would be more correct to speak of guide posts for the "good behavior" of central banks, which



evolved in the pre-1914 era as the result of a spontaneous development. They were accepted by the monetary authorities as rules of thumb. If a few paid only lip service to these rules, even that lip service indicated some belief in their validity. Essentially they were variations on one theme: that the central bank should use its authority and market power only to maintain the financial system in a "liquid" and flexible condition, capable of meeting emergencies. By 1914:

Monetary standards in most countries were firmly established on gold and no economic crisis occurred that would have given rise to the belief that a country might be "pushed off gold" by badly functioning price systems. Doubts about the gold standard came only from . . . political propaganda . . . but not from a belief that the gold standard mechanism could not cope with whatever difficulties one was accustomed to foresee. Neither was there the notion—at least not in Europe—that this monetary system imposed restraints or hardships upon the various economies such that they would be unable to shake off depressions.<sup>26</sup>

It was in this respect more than in almost any other that World War I initiated policy changes, destined to write a new chapter in the Occident's financial and social history. It was a double-pronged revolution, monetary and fiscal.

## Notes to Chapter One

1. Hugo Hantsch, *Leopold Graf Berchtold* vol. 2 (Graz: Verlag Styria, 1963), pp. 601–607. A
2. Eckert Kehr, *Der Primat der Innenpolitik* (Berlin: W. de Gruyter, 1965), p. 6.
3. *Manchester Guardian*, April 20, 1922.
4. R. F. Harrod, *The Life of John Maynard Keynes* (London: Macmillan & Co., 1951), pp. 164, 340.
5. Emile Moreau, *Souvenirs d'un Gouverneur de la Banque de France* (Paris: Librairie de Medicis, 1956), pp. 554–555.
6. Harrod, *Keynes*, p. 339.
7. R. Sedillot, *Le Franc* (Paris: Recueil Sirey, 1953), p. 201.
8. T. E. Gregory, *The Gold Standard and Its Future* (New York: Dutton, 1931), p. 10. B
9. Oskar Morgenstern, *International Financial Transactions and Business Cycles* (New York: National Bureau of Economic Research, 1957), pp. 17–19.
10. D. L. Kemmerer, "The Gold Standard in Historical Perspective," *Commercial and Financial Chronicle* (New York), August 5, 1954. C
11. See chap. 3, Sec. C, below.
12. "London became the international center because *sterling* was always useful and *sterling*

- was always obtainable." (Italics supplied.) (R. S. Sayers, *Modern Banking*, 7th ed. [Oxford: Clarendon Press, 1967], p. 137.) See B. Tew, "Sterling as an International Currency," *Economic Record*, June 1948; E. V. Morgan, *Theory and Practice of Central Banking, 1797–1913* (Cambridge University Press, 1943). The German banks operated in the international money market largely via their London branches.
13. Committee on Finance and Industry, *Report* (hereafter cited as the *Macmillan Report*) (London: His Majesty's Stationery Office, 1931), p. 19.
  14. About pre-World War I central bank cooperation, see the thorough study by F. A. Linville *Central Bank Cooperation* (Ph.D. diss, University of Chicago, 1937); A. I. Bloomfield, *Monetary Policy under the International Gold Standard, 1880–1914* (New York: Federal Reserve Bank, 1959); N. E. Weil, *Solidarität der Geldmärkte* (Frankfurt, 1903); C. H. Kisch and W. A. Elkin, *Central Banks* (London: Macmillan & Co., 1928); P. H. Lindert, *Currencies and Gold* (Princeton: Princeton University Press, 1965).
  15. In Italy, Austria, Spain, and especially in Argentina. See A. G. Ford, "Flexible Rates and Argentina, 1885–1900," *Oxford Economics Papers*, October 1958; J. H. Williams, *Argentina International Trade under Inconvertible Paper Money* (Cambridge: Harvard University Press, 1920).
  16. By returning to gold at the old parity in 1925, Winston Churchill was to say that he had "shackled [sterling] to reality." (P. J. Grigg, *Prejudice and Judgement* [London: J. Cope, 1948], p. 183.) For further discussion of flexible exchange rates, see chap. 3, sec. C, and chap. 9, sec. A, below.
  17. Sir Henry Clay, *Lord Norman*, (New York: Macmillan, 1957) p. 414.
  18. The "rationale" of the gold standard has been frequently analyzed—since its "failure," especially in the early 1930's. See A. Kemp, *The Role of Gold* (Washington, D.C.: American Enterprise Institute, 1963); E. W. Kemmerer, *Gold and the Gold Standard* (New York: Macmillan Co., 1944); W. E. Spahr, *The Case for the Gold Standard* (New York: Economists' National Committee on Monetary Policy, 1940); M. Palyi, *Managed Money at the Crossroads* (South Bend: University of Notre Dame Press, 1958); W. Redelmeier, *The Gold Standard* (Toronto: MacLeon, 1941); K. Helfferich, *Das Geld* (Leipzig: Hirschfeld, 1903); O. Veit, *Grundriss der Währungspolitik* (Frankfurt: Knapp, 1958).
  19. Notwithstanding an annual average 1.3 per cent decline of prices, the period 1865–1896 as a whole was one of tremendous economic growth! Gustav Cassel estimated the world-wide annual average rate of production growth in that period to be 3 per cent.
  20. For a succinct presentation of European central bank policies and their evolution—with emphasis on the managerial points of view rather than on principles—see Felix Somary, *Bankpolitik* (Tübingen: Mohr, 1915; 3rd ed., 1934). On pre-World War I problems and developments of Bank of England policies, see W. E. Beach, *International Gold Movements and Bank of England Policy, 1881–1913* (Cambridge: Harvard University Press, 1935); Jacob Viner, *Studies in the Theory of International Trade* (New York: Harper, 1937); L. W. Mints, *History of Banking Theory* (Chicago: University of Chicago Press, 1945); E. Wood, *English Theories of Central Banking* (Cambridge: Harvard University Press, 1939); T. E. Gregory, ed., *Select Statutes, Documents and Reports Relating to British Banking, 1832–1928*, 2 vols. (London: H. Milford, 1929); R. H. Palgrave, *Bank Rate and the Money Market . . . 1884–1900* (London: Murray, 1903); A. Andreades, *History of the Bank of England* (London: P. S. King, 1909); Frank W. Fetter, *Development of British Monetary Orthodoxy 1797–1875* (Cambridge: Harvard University Press, 1965); and, especially, R. S. Sayers, *Central Banking after Bagehot* (Oxford: Clarendon Press, 1957); J. H. Clapham, *Bank of England: A History* (Cambridge University Press, 1944). On the money concept controversy between the Banking School and the Currency School, see chap. 8, sec. B, below.

21. Quoted by Somary, *Bankpolitik*, p. 94.
22. Macmillan *Report*, p. 21. See note 4, above.
23. See Viner, *International Trade*, chap. 7; Bloomfield, *Gold Standard*, chap. 5.
24. About farm cycles, see D. H. Robertson, *A Study of Industrial Fluctuations* (London: P. S. King, 1915); A. P. Andrews, "The Influence of Crop Failures upon Business in America," *Quarterly Journal of Economics*, May 1906.
25. See Warren M. Persons, *Forecasting Business Cycles* (New York: John Wiley, 1931), pp. 170–171; M. Friedman and A. J. Schwartz, *A Monetary History of the United States, 1867–1960* (Princeton: Princeton University Press for the National Bureau of Economic Research, 1963), p. 232.
26. Morgenstern, *Financial Transactions*, p. 17.

## *The Postwar Climate*

### Introduction

DESPITE THE DESIRE of the people and the efforts of the governments to return to prewar “normalcy” and stability, the eleven years between the end of the First World War and the onset of the Great Depression were a period of never-ending tensions. In retrospect, it seems obvious that despite the outward prosperity of the 1920’s, especially in the United States, the world never fully recovered from the dislocations resulting from the costliest of all wars up to that time.

Century-old social and political institutions had crumbled within a few years; the infinitely complex fabric of international economic relations, which had grown slowly over a period of more than a century, had been torn beyond repair; and the vast amount of paper money and public debts created to finance the war resulted at first in the short-lived postwar boom of 1919–1920 and then the acute collapse of 1920–1921.

Most important, however, was the change in attitude of the people, especially in Europe. The faith in the self-equilibrating forces of the economy, and the belief in the ability of the individual to shape his own destiny, had been severely shaken by the cataclysmic events of the war and immediate postwar years. The acute inflation-deflation cycle, occurring as it did within the short span of three or four years, produced both a traumatic shock and a widespread demand on both



sides of the Atlantic for greater economic stability. If governments could raise and spend billions to finance the war, why should they not be able to use their power to assure greater postwar prosperity for all! Quite imperceptibly the emphasis of monetary policy shifted from protecting international—and thus indirectly domestic monetary stability, to an attempt to assure domestic prosperity.

The war had undermined the nineteenth-century faith in the inviolability of the rules of the gold standard and the political independence of central banks. During the war, governments had generally disregarded the principles of the gold standard. Although central banks outwardly retained their legal independence, political pressures and the necessity for managing the huge public debts made it increasingly difficult for them to pursue rational monetary policies. Repeated errors in timing further undermined earlier confidence in the wisdom and power of the Bank of England and of the Federal Reserve System.

By the mid-1920's, a schizophrenic mentality had developed. In their search for greater stability, the larger nations, at least, strove to return to the prewar gold standard system. Yet, no nation seemed willing to abandon the economic inflexibilities which had developed during the war and which impeded the functioning of the gold standard. Powerful vested interests prevented any major reduction in the vastly expanded agricultural and industrial productive capacity, which had been built up to meet the exigencies of the war, and which could be sustained only through subsidies and import restrictions once the excessive wartime demand had ended. The public, and most politicians, too, preferred inflation, "within reasonable bounds," to dismantling the uneconomical wartime ventures with the resulting financial losses and increase in unemployment. This popular demand for an artificial, inflation-supported prosperity in effect prevented a meaningful return to the more or less automatic economic forces of the prewar gold standard.

The results were tensions and compromises, of which the gold exchange standard was an outstanding example. The fact that the major currencies were again tied to gold, even if only indirectly, seemed to provide the assurance of greater stability; while the supplementary use of key currencies as monetary reserves permitted maintenance of the inflated wartime price level and retention of the excess productive capacity.

The "rediscovery" of the quantity theory of money, which had



been in limbo for two or three generations, and which was now presented in a highly popularized, and as such largely meaningless, form, seemed to bolster the widespread belief that governments possessed the tools to control the level of economic activities, of prices and employment, through proper manipulation of the supply for money and credit. This popular notion was based largely on misconceptions, which developed during the 1920's and exploded into an almost universally accepted new creed during the troubled 1930's.

(G. C. Wiegand)

### A. The Breaking Point in Monetary and Fiscal History

"The Fluctuations in the value of money since 1914," Keynes wrote in 1922, "have been on a scale so great as to constitute, with all that they involve, one of the most significant events in the economic history of the modern world. The fluctuation of the standard, whether gold, silver, or paper, has not only been of unprecedented violence, but has been visited on a society of which the economic organization is more dependent than that of any earlier epoch on the assumption that the standard of value would be moderately stable."<sup>1</sup>

For two centuries after 1715, the period of 1797–1820 aside, the pound sterling had been "hard money." For 94 years the convertibility of Bank of England notes was not in danger, even during three crises in which Peel's Bank Act of 1844 was suspended. The Bank of France was forced off gold only twice, by "acts of God"—the Revolution of 1848 and the military debacle of 1870—but there never was any doubt about the eventual return to gold at the Napoleonic parity of the franc. And even with convertibility suspended, the "automatism" of the gold standard remained operative. The French war indemnity payments (1871–1875), as an example, were facilitated, not only by a modest temporary depreciation of the franc, but also by adjusting the central bank's outstanding credit volume to gold losses and the consequent improvement of the country's trade balance. Rain or shine, the monetary thinking of the nineteenth century was unequivocally bound to the rules of hard money.

The sense of relative financial security that Europe had enjoyed in the Victorian Age was shaken to its foundations by World War I. The upheavals it generated led to "revolutionary" financial practices

and ideologies and, in the end, to the “breakdown” of the gold standard in the 1930’s.

The Austro-Hungarian ultimatum to Serbia in 1914 sparked a world-wide crisis. Sterling ceased at once to function as “international liquidity.” The demand for gold skyrocketed. Debtors could not pay; creditors could not collect. Clearance of claims and debts through the international banking center, the City of London, the largest and heretofore the one completely free market for gold and short-term credit, came to a standstill. “On the 31st [of July, 1914], the [London Stock] Exchange was closed, for the first time in its history . . . The London discount market had ceased to function, London acceptance houses having refused to grant new credits . . . The world-wide credit system of which London was the center assumed and depended on peace.”<sup>2</sup> Militarily, most European countries were well prepared for a great war—although a short one—but their central banks were not prepared at all, except the German Reichsbank. A branch of the Reichsbank, formed for this purpose, issued and accumulated in advance special “credit notes,” that is, fiat money.<sup>3</sup> The money markets of the world were verging on unprecedented panics, even those of neutral countries. Actual panics occurred in Brussels, Vienna, and Budapest. Financial transactions with foreign countries were stopped, for the first time in modern history, several days before the outbreak of hostilities. Yet, calm was soon restored and major panics averted by a “liberal” creation of means of payment. Britain set the pattern. A general moratorium (with central bank guarantees of ultimate payment) permitted the orderly liquidation or postponement and consolidation of international debts. Some proved to be uncollectible, as in the case of two Austrian banks, with the Bank of England ultimately bearing the losses.<sup>4</sup> Liberal credit-granting by the central banks on “sound assets”—with the British official discount rate raised within two days from 3 per cent to 10 per cent—provided liquid funds within the limits of each monetary authority’s power. And what could be “sounder” than the national governments’ promise to pay so long as the excess cash did not return to the issuing institutions in order to be converted into gold? This threat was averted by the legal or *de facto* suspension of gold convertibility of bank notes. *Ad hoc* created paper money, such as German “credit notes” and the British currency notes, was inconvertible as a matter of course. But, then the

temptation to finance the war (and defense preparations in neutral lands) by recourse to printing-press money—almost wholly in Germany, in Central Europe, in Russia, and even in France, or to the extent of 40 per cent to 60 per cent in most other Allied countries—became “irresistible.” For the first time since the Napoleonic wars, deficit financing became institutionalized in Europe.

“Of course the crux of our [Britain’s] position was the question of gold exports,” observed Montagu Norman in September 1914.<sup>5</sup> That was the case of the world’s leading creditor country. Debtor countries were up against the same pressures to an even greater degree. All were anxious to attract gold from abroad, discourage its domestic circulation, and prohibit its export. A problem of “gold shortage” was born, of an intensity unknown heretofore in the history of industrial society, due to a fundamental and *lasting disequilibrium* of the system of international payments.

In Germany, as elsewhere, appeals to the citizens’ patriotism succeeded for a while in cajoling the public to surrender its gold coins and ornaments. Thus, the deliberate policy of concentrating the national gold reserves in the central banks (intimated by David Ricardo a century earlier) got under way.<sup>6</sup> And a long-forgotten point was demonstrated. The demand, the “scramble,” for gold, the monetary as well as the private hoarding demand, increases greatly when the currencies are “off gold,” as indeed they were throughout the war and beyond as long as the monetary insecurity continued.

During the war, gold convertibility was nominally maintained in the United States, Switzerland, Spain, and the Scandinavian countries, although behind the protective screens of gold export embargoes and other restrictions. (Sweden had a short-lived gold import embargo.) American assistance, in the form of foreign exchange pegging operations, and “mild” foreign exchange controls helped to preserve during the war the appearance of a gold standard in Britain, Italy, and France. But the war had practically destroyed its substance, the self-regulating mechanism of the balance of payments. Equilibrium in foreign payments was maintained by official gold exports and by credit operations, if not by exchange rate depreciation and the imposition of restraints on trade and on the outflow of capital. Thus an entirely different pattern emerged, albeit rough-hewn and scarcely viable, one of a “*managed money*” system—arbitrary money manipulations in the framework of de-liberalized



“dirigist” policies. The totality of the departure—partly a retreat into “mercantilist” practices—was largely ignored at the outset. Indeed, it took several years before the public grasped the causal link between the rising note circulation—well over fivefold in the United Kingdom, for example—and the price inflation, and ceased to put the blame on physical shortages, alleged or real, or on the ubiquitous “speculators.”

A more significant repercussion to these monetary changes was increased monetary thinking in terms of gold. From a secondary problem, the gold supply became a problem of prime eminence. Would it suffice to sustain the credit superstructure on which the inflated prices rested, was one question that plagued most monetary managements. The attempt to find substitutes for gold became an obsession; and lacking adequate gold reserves, the search for a substitute for the gold coin standard itself became mandatory. Inadequacy of the gold supply (in Britain) was to be the consequence of the money supply’s emphysema, brought about by the inflationary financing of the war and the postwar “reconstruction.” The reason, of course, was simply the reluctance or political inability of the respective authorities to adopt deflationary policies.<sup>7</sup>

## **B. The Traumatic Experience**

The economic thinking of the 1920’s was profoundly affected by monetary and fiscal events sparked by the war and its immediate aftermath. The violent shifts in price and income levels, and in the gold value of most European currencies within a few years, were far more confusing than any comparable monetary experience in modern times. Economic evolution was interrupted and distorted by sudden, “revolutionary” changes in prices and in income and wealth distribution. The sense of insecurity generated by “boom and bust” (1915–1921) in a society that had been acclimatized to the relative stability of the late Victorian and Edwardian days was further exacerbated by a subsequent short cycle (1922–1924) of rising and falling prices. The markets did not begin to stabilize until the reparations question had been settled at least temporarily in 1924, and Britain, the leading European power, had returned to the gold standard in 1925, preceded by Germany, Sweden, and Holland, and fol-



lowed by France, Italy, and Belgium. In fact, it was not until 1928 that Europe's financial stability was apparently regained.

Between 1850 and 1873, the index of British wholesale prices, the bellwether of the world markets, rose from 100 to 144; it fell by 45 per cent between 1873 and 1896, while the index of retail food prices declined from 100 to 67. Between 1896 and 1913, the wholesale price indices rose by about 55 per cent. These were the controversial long-term waves, supposedly generated by the ups and downs of gold production. But the *annual average* of price level changes throughout each "trend" rarely amounted to more than 2 per cent to 3 per cent—a "creeping" rate of inflation or deflation. It had been accepted by people in all walks of life, although not without protest, as a price to be paid for the benefits of freedom and progress. By contrast, the violence of the price developments of 1915–1921 constituted a traumatic experience. Price averages doubled and trebled within six years, and were cut by as much as one-third, from the top levels, in the following fourteen months.<sup>8</sup> The swings in both directions meant totally unexpected shocks to investors, business communities, and consumers. The process, upward as well as downward, was virtually uninterrupted (the pre-1914 "long" trends had been discontinuous), thus creating each time the illusion of permanence. The central banks were unprepared for these near-cataclysms, and were unable to cope with them.

During the war, governments gave scant thought to the monetary aftermath. They had conscripted the central banks into the service of their respective treasuries to provide them with "cash" and to manage the national debt. Debt management meant manipulating the capital markets in order to facilitate placing government bonds issued in unprecedented volume. The main objective was to keep interest rates down. With convertibility suspended, *de facto* if not *de jure*, the discipline of the gold standard—that is, of the balance of payments and of the operation of the gold points—removed, much of the penalty of having a budget deficit vanished. The partial or near-partial monetization of government obligations became an accepted technique of war finance. This break with the most respected fiscal and monetary traditions came about suddenly. There was practically no resistance. Laws limiting the extension of central bank credit through the monetization of government bonds were either canceled, as in Italy, or disregarded, if not circumvented. The notes

of the Bank of England remained nominally convertible, but the Bank was empowered to issue a new legal tender, called currency notes, covered by government bonds; they were fiat money.<sup>9</sup> War-drunk politicians ignored the warnings of the few economists and central bankers who saw the dangers ahead. "Cassandra-like warnings from Threadneedle Street [meaning the Bank of England] were unlikely to have any effect on a Cabinet flushed with the heavy wine of victory and eager to spend more lavishly still on gathering its imaginary fruits."<sup>10</sup>

The intellectual confusion in monetary and fiscal matters was particularly great in France. As late as in the winter of 1923–1924, after nine and a half years of fiat money inflation, a fresh wave of franc depreciation on the foreign exchange markets was explained even by the reputable Parisian press in paramilitary terms: a battle of good but indolent Frenchmen versus the "wicked" (foreign) speculators.<sup>11</sup> Articles in the *Echo de Paris*, *Le Temps*, *Le Journal*, signed by financial experts, called on their compatriots to fight the "conspiracy" of the franc's invisible enemy with the same spirit of self-sacrifice that had stopped the German invaders at the Marne. But the inflation profiteers understood what served their interest: the leading newspaper of the Riviera, the *Courier de Nice*, came out in favor of the franc's depreciation: it would be a boon to the tourist trade. French prices were lagging behind the external depreciation of the franc and French wages behind prices. But prices were edging upward as French exports rose sharply and foreign tourists flooded the country.

The technique of inflating the money supply during the war and after had been fairly simple. In Germany, for example, the Imperial Treasury issued 5 per cent long-term "war loans," which were sold to the public and to the banks. Soon, the public as well as the banks rid themselves of the bonds by putting them up as collateral for 5 per cent loans from the Reichsbank, which then became the chief holder of the skyrocketing national debt. Some central banks indulged in open market purchases as well.

The wartime practices of the Bank of England have been ably summarized by Benjamin M. Anderson, Jr.:

*The Government first borrowed from the Bank of England on Ways and Means Bills, and the Bank bought short term Treasury Bills also.*

This had the double purpose of giving the Government the cash it immediately needed, and of putting additional deposit balances with the Bank of England into the hands of the Joint Stock Banks. As the Government drew against its balances with the Bank of England, they were promptly transferred to customers of the Joint Stock banks, and thence to the Joint Stock banks themselves. *This increased the volume of reserve money for the banking community and made money easy, permitting an expansion of general bank credit which enabled the banks to buy Treasury Bills and Government bonds, and to finance the community in buying Government bonds.* The London money market appears not to have understood the operation fully at the beginning of the war, and it is not entirely certain that the Government of the Bank of England did [!] . . . the exigencies of war justified everything, and the making of an easy money market . . . became a recognized institution.

Speedily, too, the British financial authorities learned the process of regulating outside money markets in which they wished to borrow . . . especially, the New York money market. If an issue of bonds of the Allies . . . was to be placed in our [U.S.] market, it was preceded by the export of a large volume of gold, accurately timed, to increase surplus reserves in the New York banks and to facilitate an expansion of credit in the United States which would make it easy for us to absorb the foreign loan.<sup>12</sup>

Two points in Anderson's summary call for comment. One is his remark that at first even the British Exchequer and the Bank of England may not have understood the inflationary implications of their wartime policies. This could be said with even more truth of other monetary authorities, such as those of France, Russia, Germany, Austria, and Italy.<sup>13</sup>

The other point is the curious fact that the central bank of one country was allowed to manipulate the money market of another. That was the opening salvo of a new kind of central bank cooperation, foreshadowing very significant developments. Quite possibly it was this wartime (1917–1919) experience that later inspired the "cooperative" efforts of Governor Montagu Norman.<sup>14</sup>

The central banks, even those of the neutral countries, underwrote the inflationary financing of war or defense preparation, as well as of the subsequent "reconstruction," by purchasing government bonds or accepting them as collateral, usually at relatively low inter-



TABLE II-1  
Comparison of Expansion in Currency with Price Levels

Country	Money Supply <sup>a</sup> 1913=100	Wholesale prices 1913=100	Retail price of food 1914=100
United States (May 1919)	173	206.0	181
Japan (May 1919)	223	214.6	—
Switzerland (June 1919)	230	—	250
Denmark (July 1919)	240	—	212
United Kingdom (August 1919)	244	257.2	217
Netherlands (September 1919)	270	—	203
Sweden (April 1919)	275	339.0	336
Norway (May 1919)	305	—	271
France (June 1919)	365	330.0	Paris 263 Other cities 293
Italy (April 1919)	440	329.9	281
Spain (September 1919) <sup>b</sup>	185	199.4	—
Germany (December 1919) <sup>c</sup>	826	803	—

SOURCE: League of Nations, *Currencies after the War* (London: Harrison and Sons, 1920), appendix 3, p. 252, except Spain and Germany.

<sup>a</sup>Currency in circulation plus demand deposits, i.e., the “narrow” concept of money supply. See chap. 4, sec. B, below.

<sup>b</sup>J. Tinbergen (ed.), *International Abstract of Economic Statistics* (London, 1934), p. 180.

<sup>c</sup>C. Bresciani-Turroni, *The Economics of Inflation* (London: Allen & Unwin, 1937), table 19, p. 162.

est rates and in whatever volume they were tendered. Not so the Federal Reserve Banks. Throughout the war, their bond portfolios never totaled more than \$330 million, a fraction of the gold reserve. The reserves needed to support the increase in commercial bank deposits, which rose 70 per cent in five and a half years to mid-1919, were made available by the wartime inflow of gold (\$1,900 million), by direct credits to member banks, and by relatively low reserve requirements. The banks were thus enabled to absorb the short-dated promissory notes issued by the federal government. Their deposits expanded accordingly. The Federal Reserve System itself did not enter the bond market until after the war when its management “discovered” the technique of open market operations. But during the war, it “relied on lending to banks to ensure the success of the Treasury’s [deficit] financing and to create the additional funds de-



manded for bank reserves and currency in circulation.”<sup>15</sup> Moreover, the wartime inflation was greatly facilitated by the design of the then new Federal Reserve System.

Before November 1914, the national banks in the two central reserve cities (New York and Chicago) had to carry 25 per cent reserves in legal money, mainly in gold, for demand deposits and the same for time deposits. The requirements were lower for some fifty reserve city banks and all other national banks, called “country banks,” which could count a major portion of their balances held with reserve city banks as part of the legal requirements. Thereafter, the reserve requirements of the banking system as a whole were cut in a spectacular fashion.

An idea of the extent of the reductions in legal reserves of national banks since 1913 can be obtained by assuming three national banks, each having \$1,200,000 demand deposits, \$300,000 of time deposits, and \$100,000 of national bank notes outstanding, one bank being in a central reserve city, one in a reserve city, and one in a “country bank” city, and asking ourselves what ultimate legal cash reserves would have been held against these deposits in 1913 and in 1920, respectively. The answer is given in the following table:

Bank	Required Reserves			
	In 1913		In 1920	
	Per Cent	Amount	Per Cent	Amount
Central Reserve City	25.0	\$375,000.00	4.18	\$62,750
Reserve City	15.6	234,375.00	3.34	50,150
“Country”	7.4	111,093.75	2.50	37,550

Here is a reduction for central reserve cities of from 25 per cent to 4.18 per cent, for reserve cities from 15.6 per cent to 3.34 per cent, and for country bank cities from 7.4 per cent to 2.50 per cent; giving a reduction for all three banks of 79 per cent.<sup>16</sup>

The inflationary bias thus written into the Federal Reserve System should be obvious. Actually, *total deposits more than doubled* be-

tween 1913 and 1919, as shown in Table II-2.<sup>17</sup> The cash liquidity of the banking system declined accordingly, despite the wartime influx of gold, and when, in 1919, a portion of the previously gained gold left the country, the institutions' liquidity status worsened further, since the vastly expanded volume of deposits did not shrink proportionately.<sup>18</sup> *The chief source of the wartime inflationary finance in the United States was the man-made enlargement of the credit base, rather than the gold influx.*<sup>19</sup>

Under wartime circumstances, it was "mandatory" for belligerents and neutrals alike to control the international flow of capital, gold, and merchandise in order to protect the balance of payments and the official gold reserves, even though doing so shattered the whole prewar system of commercial treaties. As living costs started to rise, governments imposed rent controls and generally followed them with commodity price controls and "limping" resource allocation policies. All of this was done halfheartedly in the West, with a guilty conscience, as it were, for violating Economic Law. But in Germany, the economy became engulfed in administrative regulations; her planned economy concentrated on the war effort with General Erich Ludendorff's single-mindedness. Unwittingly, the German general, guided by the "technocrat," Walter Rathenau, drew up the first blueprint for mobilizing the national resources in the service of centralized planning. The blueprint was to become the first organizational pattern for the Bolshevik over-all economic program.<sup>20</sup>

On the Continent, depreciation of the currencies' domestic purchasing power was preceded by deterioration of their foreign exchange values. But the French franc and British sterling were pegged from early 1917 until March 1919 to the dollar with the aid of American loans. The ghosts of inter-allied debts were to haunt Europe thereafter.<sup>21</sup> With the termination of hostilities and of pegging operations, "the dam broke." Few countries were spared violent foreign exchange fluctuations (see Tables II-3 and II-4) deeply affecting international trade, as well as domestic prices. The average rate of depreciation between 1919 and 1925 of seventeen leading currencies, excluding the German mark, varied between 30 per cent and 40 per cent of the respective parities. It is noteworthy that in the United States, as well as in continental countries, "inflation" became identified with foreign exchange depreciation. Rising prices were consid-

TABLE II-2  
United States Bank Deposits, 1913-1919  
(amounts in \$ millions)

Year	Deposits in National Banks <sup>a</sup>		Deposits in State Banks and Trust Cos. <sup>b</sup>		Gov't Deposits in Federal Reserve Banks <sup>c</sup>		Total Deposits	
	Amount	Index Numbers	Amount	Index Numbers			Amount	Index Numbers
1913	6,020	100	6,658	100			12,678	100
1914	6,248	104	7,182	108			13,430	106
1915	6,912	115	7,499	113			14,411	114
1916	8,288	128	9,504	143	48		17,840	141
1917	9,923	165	11,194	168	156		21,273	168
1918	11,540	192	12,099	182	132		23,771	188
1919	13,113	218	14,708	221	107		27,928	220

SOURCE: E. W. Kemmerer, *High Prices and Deflation* (Princeton: Princeton University Press, 1921), p. 27. See E. R. Wicker, *Federal Reserve Monetary Policy, 1917-1933* (New York: Random House, 1966), chaps. 1 and 2.

<sup>a</sup>Average for dates of five or six Comptroller's calls each year.

<sup>b</sup>Computed from figures published each year by the Comptroller of the Currency and referring to a date about June 30.

<sup>c</sup>Figures are averages for the government deposits on the approximate dates of the Comptroller's calls for national banks each year so as to correspond as nearly as possible to the figures for deposits of national banks given in the first column.



ered a delayed side effect.<sup>22</sup> In “galloping” and “runaway” inflations, especially, the sequence from depreciation of the currency’s external value to the decline of its domestic purchasing power was the common experience. It was this experience, perhaps, more than anything else, that accounted for the popular demand in the 1920’s for a return to fixed exchange rates, the gold standard, and for the abhorrence of budget deficits, which were considered the fountainheads of inflation.

Demobilization was expected to bring on deflation. Instead, an extraordinary boom developed, stimulated by feverish attempts at industrial reconstruction and social improvements. The pent-up demand of the war years, armed with a volume of money as never before, burst on the markets. It generated (in the Allied and neutral countries) an economic optimism without historic parallel. With commercial credit expansion to finance the revival of business investment and consumer spending added to continued government deficit financing, domestic price inflations and external currency depreciations became intertwined aspects of the “transition” from war to peace. Beside them were the fantastic runaway inflations in Austria, Hungary, Poland, and Germany.<sup>23</sup> As was to be expected, the profit inflation, for prices usually rose ahead of wage rates, was accompanied by speculative excesses on the stock exchanges and, what is often ignored, on the commodity markets. Real estate values, at first laggards, rose in 1919 and after.

In the United States, as elsewhere, the continuous rise in the money supply and incomes sparked a more or less corresponding inflation of prices, even after the armistice, notwithstanding the great expansion of raw material and manufacturing production. Despite some apprehension over the economies’ capability to readjust themselves, in both the victorious and neutral countries, there was overwhelming consensus, until the crisis of 1920, that the demand for goods of all sorts would outstrip the supply. The public was sold on the idea of a glorious age of reconstruction, with skyrocketing demand sustaining unbounded progress, an idea that was to survive the crisis of 1920–1921, and to grow in intensity. Accordingly, private spending and investing accelerated at a breathtaking pace, and so did the inflation of prices and wages. The British wholesale price index rose from 100 in 1913 to 325 in April 1920,<sup>24</sup> although by mid-1919 the Bank of England had started to restrict credits. Nowhere did prices, both consumer and wholesale, rise by less than about 125 per



TABLE II-3  
Depreciation of Ten Principal Currencies, 1914-1925  
(in percentages of 1914 gold parity)

	Switzerland	USA	Great Britain	Belgium	France	Japan	Germany	Sweden	Netherlands	Italy
1914										
Feb.	999	1.000	998		1.000	991	998		1.001	997
Aug.	1.059	1.000	1.039		1.031	993	1.011		1.029	1.047
1915										
Feb.	959	1.000	990		982	984	889	919	996	925
Aug.	964	1.000	964		866	977	856	963	1.000	813
1916										
Feb.	995	1.000	978		882	1.001	790	1.042	1.051	771
Aug.	979	1.000	978		880	1.009	749	1.067	1.026	800
1917										
Feb.	1.034	1.000	977		888	1.013	723	1.101	1.009	705
Aug.	1.183	1.000	977		909	1.018	592	1.236	1.043	703
1918										
Feb.	1.153	1.000	977		909	1.023	809	1.227	1.113	600
Aug.	1.271	1.000	977		942	1.036	692	1.325	1.291	731
1919										
Feb.	1.063	1.000	979		951	1.034	461	1.053	1.029	816
Aug.	919	1.000	878		642	1.923	223	921	926	563
1920										
Feb.	853	1.000	695	375	365	974	44	694	928	286
Aug.	863	1.000	744	397	372	1.035	88	768	818	253



TABLE II-4  
General Index of Exchange Rates of Seventeen  
Principal Currencies Exclusive of the German Mark<sup>a</sup>, 1918-1925:  
Noon Buying Rates for Cable Transfers in New York  
(percentage of par)

Month	1918	1919	1920	1921	1922	1923	1924	1925
January	—	96	72	60	65	68	59	64
February	—	97	65	62	69	66	58	64
March	—	95	67	62	70	67	58	63
April	—	91	65	63	72	67	63	63
May	—	90	68	66	72	66	62	—
June	—	91	71	63	71	65	60	—
July	—	88	71	62	70	63	59	—
August	—	85	66	60	69	62	61	—
September	—	83	63	60	68	63	61	—
October	—	83	61	61	67	63	61	—
November	96	80	58	61	67	61	61	—
December	97	75	57	64	70	60	62	—

<sup>a</sup>Federal Reserve Board Index. The rates are weighted on the basis of trade in the previous twelve months with the countries involved.

cent within six years, distorting the structure of commodity and capital values all around. The situation was "characterized by an unprecedented orgy of extravagance, a mania for speculation, over-extended business in nearly all lines and in every section of the country, and general demoralization of the agencies of production and distribution."<sup>25</sup>

Central bank policies were singularly inept in restraining the excesses of the postwar boom. In both the United States and the United Kingdom, the "money printing presses" were kept running throughout 1919 and a good part of 1920, with the official discount rates held too low for too long. The Bank of England went through most of the war with a discount rate first varying between 5½ per cent and 6 per cent but finally fixed at 5 per cent in April 1917. Not until November 6, 1919, was it raised back to 6 per cent. The Bank waited until April 15, 1920, by which time the boom had advanced too far, before

raising it to 7 per cent. It was also slow in adjusting the rate to the "bust" that began in the late summer of 1920. The Bank grudgingly lowered the discount to 6½ per cent in April 1921 and gradually to 3 per cent by July 1922, by which time the trough of the depression was long past. In short, there was belated restraint in the boom and retarded relaxation in the depression, contrary, apparently, to the "rules of the game."

The record of the Federal Reserve System was even more remarkable.<sup>26</sup> It had set its rate at 6 per cent in November 1914 and proceeded in the following month to lower it, for the sake of "debt management," until it came down to 3 per cent in September 1916, in the "war-baby" industry boom. Fifteen months later, in December 1917, the system embarked on a series of very gradual escalations, belatedly reaching 7 per cent in June 1920. Then, again, it took almost a year before the first reduction to 6½ per cent, followed by several further reductions, down to 4 per cent in June 1922. By that time a new upturn was well under way.

Having failed in moderating the post-armistice boom, the central banks resorted to fairly drastic measures that aggravated the downturn. In both directions, the timing was helpful to critics of the gold standard. Overspeculation and overexpansion had been fostered: the brakes were applied too late, and then too long. That was how the contemporaries saw it.<sup>27</sup>

The 1920–1921 crisis was the logical follow-up of the "wild" boom that had been sustained by a continuous expansion of the credit supply. The depression lasted less than two years, although for most countries it was the fiercest on record. In the United States, it was the sharpest contraction since 1879, dropping 13.7 per cent in terms of a composite index of transaction indices.<sup>28</sup> The political and economic "climate" had been further tainted instead of being cleared.

It was foreseeable, and foreseen, that this "greatest" inflationary boom of a world-wide scope must subside, sooner or later. No one seems to have anticipated, however, that it would be followed by the most painful setback on record. Even German prices, driven as they were by a relentless outpouring of fiat money, came briefly to a halt. In the United States, the cost of living index for thirty-four large cities (1935–1939 = 100) fell from a high of 243.0 in mid-1920 to a low of 119.7 in 1922.<sup>29</sup> The decline of American wholesale prices was even more precipitous; the index of forty basic commodities



(1910–1914) = 100) fell within a single year from 243 to 132.<sup>30</sup>

Short-lived as this postwar crisis was, it had very far-reaching repercussions. It was especially apparent that being “off gold” and letting the foreign exchange value of the currency fluctuate was not conducive to over-all stability. The “sweet” fruits of an inflation-generated prosperity were spoiled by the subsequent deflation that entailed a severe shrinkage of inflated common stock and real estate values, too.

This double experience, inflation followed by deflation, both on an extraordinary scale and packed into a few years, strengthened the sentiment for a return to the gold standard—as a matter of expediency, rather than of principle. The gold standard, along with the annually balanced budget, had ceased to be regarded by the “man on the street” as “sacrosanct” institutions; experience had shown that the standard was a man-made contraption, not a “natural” thing. The mystique was gone; the door was open for innovations, and these were eagerly sought. If the monetary arrangements and fiscal policies could be manipulated at will, as they apparently had been, why not manipulate them for the benefit of a “well-deserving” nation? And since the central banks were the “strategic fountain-heads” of the money systems, they became the natural targets at which reform proposals were aimed.

Throughout the early postwar years, international trade had been distorted, disorganized, and even disrupted by fluctuations in foreign exchange rates.<sup>31</sup> They obliterated business and investment calculations and impeded the revival of international flow of long-term capital. Maintaining a balance of payments came to depend on speculative capital movements in large volumes (control techniques were absent or ineffectual), their direction hinging on guesses and rumors about the positive or negative stabilization prospects of individual currencies, rather than on relative price levels or on interest rates.<sup>32</sup> All this not only delayed European reconstruction but also generated a speculative mentality that was to have a profound influence on economic developments in the later 1920's and even beyond.

Under a regime of “floating” exchange rates (before the German, British, and French stabilizations), rational monetary policy was severely handicapped by foreign exchange fluctuations. Discount rate changes and open market operations of the central banks lost their “punch” when they were offset, or magnified, by unforeseeable

exchange rate vagaries. Foreign trade policies were stymied; tariffs and tariff concessions, even export subsidies were frequently overshadowed by exchange rate movements which robbed "free trade" and most favored nations' clauses of their meaning. Under such conditions, the central banks' regulatory powers were effectively curtailed, despite a broadening of their "instrumentarium." The crucial aspect of broadly fluctuating exchange rates was the fact that they failed to fulfill the function assigned to them in monetary theory—to bring about an automatic adjustment of the respective countries' international accounts. In this respect, the experience of the early 1920's, and also of the 1930's, produced conclusive evidence. It was ably summarized by a Norwegian economist, Ragnar Nurske, in a study published by the League of Nations' Economic, Financial, and Transit Department:

Anticipatory purchases of foreign exchange tend to produce or at any rate to hasten the anticipated fall in the exchange value of the national currency, and the actual fall may set up or strengthen expectations of a further fall. The dangers of such cumulative and *self-aggravating movements under a regime of freely fluctuating exchanges are clearly demonstrated by the French experience of 1922–26*. Exchange rates in such circumstances are bound to become highly unstable, and the influence of psychological factors may at times be overwhelming. French economists were so much impressed by this experience that they developed a special "psychological theory" of exchange fluctuations, stressing the indeterminate character of exchange rates when left to find their own level in a market swayed by speculative anticipations. But the phenomenon of disequilibrating capital movements under conditions of fluctuating exchanges was by no means confined to France. . . . it affected in varying degrees most of the other depreciated currencies in Europe in the early 'twenties, once it was realized that a return to par could not be taken for granted.<sup>33</sup> (Italics supplied.)

Leaving the external aspect of that boom-and-bust episode aside, it was a full cycle that culminated in the 1920–1921 crisis, the greatest American monetary contraction since 1873–1879. It had a profound psychological shock effect. It generated deflation anxieties on top of existing inflation anxieties. But two traumatic experiences of opposite directions do not add up to a balanced mind. Driven by a pathetic conflict of contradictory concepts, the *homo occidentalis*

took refuge in a no-man's-land of eternal prosperity that offered relief from both kinds of anxieties, the dream of a gold standard with price stability.

The realities were more prosaic, of course. Social conflicts of great intensity had arisen. One was a conflict of creditor and debtor interests, which severely complicated the choice of a new stabilized gold price for depreciated currencies. In Germany, the literal wiping-out of the savers had been legalized by the 1923–1924 stabilization, under which one new mark was to equal 1 trillion old paper marks. A 10 per cent “revaluation” of mortgage claims that had matured after a specific date in 1921 was a concession, more nominal than real, made to the creditors. And when it came to compensating for Germany's foreign assets, confiscated by the Allies under the terms of the Versailles Treaty, totaling an estimated 5 billion gold marks (\$1.2 billion gold dollars), the rulers of the Weimar Republic continued what Keynes was to propagate later, the “euthanasia of the rentier”; it discriminated against individual owners of foreign assets in favor of big business owning direct investments abroad.<sup>34</sup>

Nowhere did it take long for a class of inflation profiteers to develop, bitterly opposed to “deflationary” (stabilization) measures. The cynical disregard of contractual rights turned into a righteous clamor for the “benefits” of inflation. Similar symptoms of social disintegration arose in other Central European countries which had carried the inflation to the point of confiscating all savings without compensation. The moral breakdown found a “bloody” expression in Czechoslovakia, the first European nation to attempt, in 1919, to stabilize a disrupted currency by deflationary policies. Dr. Alois Rasin, the Minister of Finance, who was responsible for initiating that stabilization, paid with his life for his courage and integrity.<sup>35</sup>

One of the more important among the effects of the early postwar monetary turmoils was a warping of income distribution. It was distorted even within the labor class.

In a few [American] cities men in [some] trades have received wage increases since 1913 apparently more than sufficient to compensate for the rise in the cost of living. In Baltimore, for example, the rate for boilermakers increased from 30.6 cents per hour in 1913 to 80 cents in 1919, an increase of 161 per cent; while in Charleston, South Carolina, the rate for bricklayers increased from 40 cents per hour in



1913 to 75 cents in 1919, an increase of 88 per cent. On the other hand, the rate for boilermakers in Chicago, which was 40 cents an hour in 1913, was only 42 cents in 1917, 52 cents in 1918 and 60 cents in 1919.<sup>36</sup>

The inequities became greater and more widespread as the price inflation proceeded. Millions of people, impoverished through no fault of their own, unable to adjust their earnings and savings to the monetary upheavals, were the human "backwash" of the major inflations. In progressively self-democratizing political societies, these "disinherited" masses became the carriers of revolutionary movements of an antiliberal, irrational kind.

### C. Central Banks Foundering on Political Rocks

The full meaning of the change in "monetary thinking," which had been sparked by the war, was scarcely realized at the time. "Landmarks are usually more conspicuous at a distance than close at hand; turning points rarely show any abrupt change."<sup>37</sup>

Briefly, monetary policy ceased to be a purely financial or technical matter dependent on "automatic" processes; instead it became a prime object of politics, subject to arbitrariness. Thereafter major decisions affecting the drift and measure of central banking action either emanated from political authorities or were deeply affected by the "invisible" pressure of public opinion.

At the end of the war . . . Federal Reserve officials faced the problem of regaining control from the Treasury and of developing peacetime policies, doing so under the most unfamiliar and perplexing conditions. At home they faced first inflation and then deflation, both of extraordinary amplitude, creating *discontent so serious as to imperil the System* that was supposed to eliminate, or reduce, major cyclical swings. And the world's economic and monetary systems had undergone *revolutionary* changes.

Under these unfamiliar and swiftly changing conditions, the prewar rules of central banking were of little use. The old rules of the international gold standard game were irrelevant, for there was no international gold standard. Strong and his colleagues could not look to London for international leadership, for London had lost, at least temporarily, the monetary power necessary to that function. At least



until such time as an international gold standard might be re-established, they had to develop and use radically new guides to policy and new methods of control.<sup>38</sup>

The foregoing quotation from the authoritative biography of Benjamin Strong, the first governor of the New York Federal Reserve Bank, aptly described the experts', and the public's, bewilderment in the crucial period of war and postwar transition. The confusion had been confounded by several factors. Competent or otherwise, the central bankers felt obliged to be subservient to the respective treasuries during the war and partly so even longer, especially whenever large-scale national debt operations were pending or under way. Thereafter, this conflict became part and parcel of the established order—or disorder.

The history of the Federal Reserve System [in the 1920's] has been one of encroachment by the national government upon the functions of banking and gradual determination by that government to use the Reserve Banks as its instrumentalities for the political control of credit.<sup>39</sup>

The difficulties of the central bankers with the political authorities did not end with the return to "normalcy." Even the question of who is to determine changes in the discount rate, traditionally the chief policy instrument of central banks, became time and again a matter of controversy between them and the politicians. In Western Europe, such controversy would scarcely have been "thinkable" before 1914; governmental intervention in this area of policy would have been considered tantamount to violating basic economic principles. But during the war, as Benjamin Strong's biographer notes, "The Treasury . . . determined within narrow limits Federal Reserve discount rates."<sup>40</sup> This surrender to the politicians was due, in part, to the organization of the Federal Reserve System. It had been constructed as a decentralized body, leaving ample space for disagreements between the Board in Washington, with the Secretary of the Treasury as chairman, and the twelve individual Reserve Banks. The Board itself, a multiheaded body, was split on major issues.

Another factor was the shortage of competent and purposeful leadership, especially in the early years of the Reserve System. The System as a whole had become the leading central bank, holding over two fifths of the world's "visible" gold reserve, even before its man-

agement had time to learn the routine of central banking or to straighten out its hazy ideas about its own powers, objectives, and techniques.<sup>41</sup> (At the outset, only two men among its top-level officers were familiar with the intricacies of international finance. These were a banker, Paul Warburg, who soon resigned from the Board, and New York's Benjamin Strong.)<sup>42</sup> All too frequent frictions between the Board in Washington and the New York Bank, as well as within the Board, were not helpful, either. The history of the Federal Reserve System in the interwar period offers glaring illustrations of the fact that a gold reserve, however ample, is no substitute for managerial competence. On the other hand, in the case of the Bank of England, managerial talent had been frustrated when monetary objectives had to be subordinated time and again to the political or welfarist point of view without regard to the gold reserve limitations.

At that, the men in charge had to steer monetary policies through uncharted waters. Most of them were unprepared for the task. And they had scant help from academic authorities.<sup>43</sup> The central bankers were facing a new situation that grew out of the war: the *de facto* loss, to a large extent, of their independence.<sup>44</sup> Even so, personalities played an appreciable role. An "old-fashioned" Prussian bureaucrat like Rudolph Havenstein, the president of the German Reichsbank (1912–1923), seemingly remained true to his standards of strict obedience to the Emperor, even under the Republic. In reality, the Reichsbank was "trapped" before 1924 in the convulsive fluctuations typical of a system of *uncontrolled*, i.e., "freely" floating, foreign exchange rates. Every decline of the mark's foreign exchange value sparked the expectation of further declines, thus stimulating domestic price wage increases, enhancing the budget deficit, and further boosting the public, as well as the private, demand for credit. The currency's depreciation progressed in a self-inflammatory fashion.<sup>45</sup> Besides, Havenstein conceived his unrestrained "cooperation" with the government of the day as a patriotic duty—to help shake off reparations by "proving" to the world Germany's inability to pay. "I can not let my government down," was his (privately uttered) reaction to Montagu Norman's advice in 1922, that he should restrict credits to his government.<sup>46</sup> He went on printing bank notes, literally any amount requested by the government (and after 1922 lent to business as well), taking government bonds as collateral in unlimited volume. He did so at the fixed rate of 5 per cent after the

market rates of interest had skyrocketed. All of this was, of course, a continuation of wartime practices in Germany. So were similar practices in France in 1924–1926, although to a far more moderate degree.

As long as central bank credit was forthcoming to finance the inflation of British government expenditures, fiscal policy was “a more important influence on both the volume of money available for investment or speculation and on business activity than any action of the [central] bank.”<sup>47</sup> That was the situation in France, too, for several years after the armistice. The Bank of France (previous to mid-1926) was a captive of government spending policies and of boomeranging “free” exchange rates.

In Italy, under Mussolini, a “conservative” in money matters, the government’s desires also determined central bank policy. The bank’s management became a part of the subdued bureaucracy; Signor Stringher, the governor of the National Bank of Italy, complained privately to his French *confrère* about the stabilization deal his government forced him to accept.<sup>48</sup> Similar situations developed in other Central European countries—excepting those under the effective financial control of the League of Nations (until 1931).

Yet under a parliamentary regime, a strong personality, ready to resign, such as Emile Moreau of the Bank of France from 1926 to 1930, with a flair for political maneuvering, could carry his full weight even against a mighty politician like Raymond Poincaré, with whom he shared, however, a similar basic philosophy in monetary and international matters. Moreau also carried his weight with the press and the business leaders. The strength of Moreau’s position was due, furthermore, to the fact that by mid-1926 the French public at large was anxiously awaiting the stabilization of the franc. Acting from strength, Moreau had squarely refused Poincaré’s and the Parliament’s request, coming a month before the franc’s legal stabilization, to give the government fresh loans totaling 4 billion francs, a demand that came in spite of an agreement to rid the central bank’s portfolio of all government paper.<sup>49</sup>

No central bank governor could altogether extricate himself from the arms of his government, not even after the “top-level” Genoa Conference of April 1922 had postulated the independence of central banks; their “freedom from political pressure” was set forth as a categorical imperative. The Bank of England had made an energetic



attempt back in 1917 to assert its independence; Lord Cunliffe, the Governor, tactlessly challenged Bonar Law, the Chancellor of the Exchequer, on a jurisdictional matter. As a result, Prime Minister Lloyd George threatened to nationalize the Bank. Cunliffe had to sign a statement promising to subordinate his policies to those of the government. This was meant for the period only, but the precedent had far-reaching significance.<sup>50</sup>

Montagu C. Norman, governor of the Bank of England from 1920 to 1944,<sup>51</sup> was successful in gaining the confidence of the City but not of some top politicians. Winston Churchill, as Chancellor of the Exchequer from 1925 to 1929, was outright hostile to Norman. The great statesman was a dilettante in financial matters. On at least one occasion, in 1926, Churchill “actually ordered the Governor to suspend a rise of the [discount] rate.”<sup>52</sup> The clashes between the Exchequer and the Bank were to become a weekly occurrence throughout the second half of the 1920’s.<sup>53</sup> The plea for “a little inflation” was raised on at least one occasion by a junior member of the Cabinet.<sup>54</sup> From the outset, Norman’s repeated attempts to free himself from the “pure creation of credit,” as he called it, were frustrated time and again. A formal letter of protest, dated February 28, 1919, to the Exchequer “was withdrawn after a talk with [Lord] Bradbury.” “No good crying for the moon,” Norman commented.<sup>55</sup> In July of the same year he wanted to raise the discount rate but “could not move the Chancellor.”<sup>56</sup> As late as 1929 he had to use his powers of persuasion to convince Philip Snowden, the Labor Chancellor, that he “must now leave the bank rate to the Governor.”<sup>57</sup>

When Labor came into power in 1924, Montagu Norman remarked, according to Ernest Skinner, his private secretary:

“This means the beginning of the end of all the work we have been doing.” It was not [Skinner wrote] a political utterance, for I never heard him express any political opinions. He was, in my judgment, referring to his work of preserving the City as a body whose independent judgment should be respected by reason of its manifest integrity.<sup>58</sup>

Actually, Norman had less trouble with Philip Snowden (1929–1931), an arch-conservative in financial matters, than with his “conservative” predecessor, Churchill, and with public opinion. When, in



1927, Moreau suggested to Norman that the latter raise his discount rate to protect his gold reserve, Norman refused, saying that this would cause “riots.”<sup>59</sup>

The central banks’ position was temporarily strengthened in countries in which monetary stabilization had been brought about under the aegis of the League of Nations. A reconstruction loan to Austria in 1922 set the pattern.<sup>60</sup> Complete independence of the central bank was written into the international treaty as a condition for granting a stabilization loan. The Dawes Plan followed this same pattern at the German government’s own request.

But no statute or treaty could stop a politically appointed central banker from turning politician. Dr. Hjalmar H. G. Schacht, during his first tenure at the helm of the Reichsbank (1924–1930), was a prototype of the “technocrat” gone politician. He was “independent,” indeed, vis-à-vis the government, but carried on his own private “politicking,” allying himself with the two strongest pressure groups, “big business” and the quasi-feudal agrarian interests. Schacht’s share of responsibility for the breakdown of the German banking system belongs in another chapter.<sup>61</sup> His interim successor, Hans Luther (1930–1933), was an excellent administrator, loyal to Chancellor Heinrich Brüning, who, in turn, followed his advice but was without banking experience. By that time the Young Plan had eliminated the international guarantee of the Reichsbank’s formal independence legalized by the Dawes Plan.

Let us hasten to add that bank note-issuing institutions have for a long time been subject to government regulation. Practically everywhere central bank governors were appointed by their respective governments; the Bank of England was the outstanding exception. But, the need for public regulation was limited under the genuine gold standard. The obligation to maintain the gold convertibility of the central banks’ liabilities, even if diluted, was the quasi-automatic “regulator.” With convertibility suspended, the gauge was eliminated; policy became a matter of largely arbitrary decisions, in which governments had a vital interest. Then, too, central banks had to some degree been business enterprises and as such enjoyed immunity from official encroachment. After the war, they acquired the status, informally, of government departments, operating “for public benefit rather than for profit.” And of course the government claimed to represent the “public interest.”

Another change was even more important. Under the gold standard, central banks' portfolios carried few, if any, public securities; nor was there a special need for "debt management" when budgets were balanced, or practically so. After the war, overgrown national debts were the rule with recourse to the monetary "base," namely the central bank, the last, or the first, refuge of financially hard-pressed parliaments and cabinets.

Once the national budget was balanced, the central bank's chances for regaining a degree of independence were greatly enhanced. At the end of 1919, Strong rebelled against the Treasury. So, in effect, did the Bank of France in 1928, by refusing Poincaré's credit requests, as mentioned above. In 1927, Schacht lectured the German cabinet in an insulting fashion. The overhanging short-term government debt nevertheless posed the most difficult problem. When month after month, or even week after week, large amounts of Treasury bills had to be "rolled over," the situation thwarted central bank policy. Time and again the Bank of England was up against this problem, notwithstanding Montagu Norman's efforts to have some of the £1.2 billion Treasury bills outstanding in July 1921 consolidated, preferably, he suggested, by a forced loan. "So long as a government has . . . a large floating debt, I wonder if any government can leave the Central Bank . . . really free to manage affairs from a purely financial standpoint," he wrote to Strong in May 1921.<sup>62</sup> The central banker had to take care of his chief customer, the State. "Week by week he [Norman] had to ensure that the market would take up the Treasury Bills which he had to offer on behalf of the Government."<sup>63</sup> Central bankers had to keep, or were forced to keep, their discount rates at levels that suited the respective treasuries—and "the bankers." The latter were the chief obstacle to raising the discount rate of the Bank of England in March 1921. "Low rates will ruin us some day," lamented Norman. And central banks were up against "bad habits," which the commercial bankers had also acquired in the inflationary years. One was the habit of extending credit freely on pure "finance papers," meaning bills which did not originate in genuine commodity transactions.<sup>64</sup>

Still another development that started during World War I shifted the balance of financial power in favor of the political powers. Treasuries found themselves in control of huge funds, as never before, due to the accumulation of vast tax revenues and bond issue proceeds.

The subsequent rise of social insurance and similar funds helped, too.<sup>65</sup> And Treasury chiefs not only came to control funds in volumes that enabled them, in the short run, to influence money market policies in a decisive fashion, but also they could draw credit from banks in volumes over which central banks had no control.

His [Norman's] pre-war experience was that the attraction (or repulsion) of short-term funds was sufficient, usually, before any actual movement of gold took place, to correct the exchanges, and industry was seriously affected only by a large and prolonged restriction (or expansion) of credit in the Money Market. Since 1914 he had found that *the volume of Government expenditure, at home and abroad, and the extent to which it was financed by inflation of bank credit, was a more important influence both on the volume of money available for investment or speculation and on business activity than any action of the Bank.*<sup>66</sup> (Italics supplied.)

No critical appraisal of responsibilities would be justified without taking into consideration the political "climate" of the period. Monetary policy became subjected, not only to fiscal, but also to "welfarist" points of view. The central bank's radius of action became circumscribed as never before by the cooperation, or lack of cooperation, of political authorities who were in a commanding position over the respective money markets, their eyes fixed on the vagaries of public opinion, rather than on the logic of the monetary situation.<sup>67</sup> Almost unnoticed at the time was the change of emphasis in the popular choice of *basic monetary objectives*. Primacy of a stable external value of the currency had been the traditional imperative. Now its validity was gradually being eroded, so far as public opinion was concerned. The traditional gold standard had ceased to be "sacrosanct," as noted above. Events proved, supposedly, that mankind could prosper without it. People were in favor of fixed exchange rates but disliked "making a fetish of them," meaning that other objectives should be recognized as equally, if not more, significant guidelines of policy.<sup>68</sup> Similarly, the Gladstonian postulate of an annually balanced budget, indeed overbalanced for debt amortization, lost much of its attractiveness. Attention focused on the great swings in money's purchasing power and on the business cycles. Stability of price levels and of employment hit closer to home than the gold standard and the budgetary balance, directly affecting, as they did, people's



aspirations for a better life. These aspirations were founded on extremely optimistic expectations that soon were to be disappointed.

Even before the bloody holocaust had ended, the industrial world was engulfed by the longing for a New Era of boundless wealth creation and “just” redistribution. People expected to be remunerated for their wartime sacrifices:

The men and women of these islands [Britain] had been promised that their courage and endurance would be rewarded by a fuller, more secure and happier life—and they were determined that these promises should be kept. . . . The intentions . . . were good ones—and they paved the road to hell. Whatever efforts were made, the harvest was somehow always scanty and blighted . . . the disappointed hopes of the multitude led here as elsewhere to the most rancorous of political and industrial struggles.<sup>69</sup>

An outstanding political historian’s comment is equally pertinent:

After the armistice there was [in Britain] a runaway boom in the confident hope that the world was crying out for British goods. . . . The war had shown that *there was no limit to national resources. Therefore* Great Britain could afford extensive *social reform*. Wealth would again flow of itself, once the controls were removed.<sup>70</sup> (Italics supplied.)

The naïve optimism of the war winners was soon matched by the emotional bitterness of the losers. The latter’s disillusion was political as well as economic. Their ranks included, not only Germany and her allies, but also countries like Italy, whose inflated nationalism had been frustrated. Vicious labor strife and anarchistic tendencies were facts of the general disillusionment and discouragement. Throughout the civilized world, rising economic “insularity” reflected this sense of disappointment. A most attractive feature of managed, i.e., nonconvertible, money was, in the public eye, the fact that it implied breaking away from the “internationalism,” as well as the “restrictiveness,” of the gold standard.

The tremendous wartime effort of resource mobilization convinced people that there was virtually no limit to expansion once economic energies were released and financial inhibitions eliminated. That traditional central banking was the chief impediment to this release of energy became “obvious” as soon as the central bankers started, reluctantly, in 1920 to restrain the credit flood. Everywhere



the public had been opposed to inflation, but it became even more dissatisfied with the onset of the postwar deflation. This emotional ambivalence found its expression in a critical attitude toward the alleged monetary barriers to “progress,” to the gold standard and its managers, the central banks. Time and again, the latter appeared in the popular press as the villains responsible for the failure of the utopian expectations.

The submissiveness of the central banks to the requirements of war finance had boomeranged, with a vengeance. Central banks had never been “popular,” due to the secretiveness and complexity of their operations, but at least they had enjoyed general respect and even admiration. With their weakness in relation to political power laid bare, and their managerial shortcomings widely recognized, the aura of central bank infallibility faded away.<sup>71</sup> Throughout the 1920’s they had to spend a great deal of effort on defensive political maneuvering and on “public relations,” a novel concept then itself, in order to accomplish their objective, the return to “normalcy.” But, despite stabilization on gold, “normalcy” kept evading most of them. The American “discovery” of money supply regulation by open market operations (1922) made a mighty impression and fostered the concept that the central bank should be capable of controlling the cycle either within the framework of the gold standard or without.

Overwhelmingly, the pressure was exerted in favor of cheap money in copious supply, rarely in the opposite direction, although this did happen occasionally in Czechoslovakia, France, Germany, and even the United States. The substitution of socio-political ideals for the “technical” money market and foreign exchange orientation of the prewar days contributed to weakening the self-regulating “automatism” of the restored gold standards. Restored, after a fashion, they were, but the change that had taken place in the economic philosophy of the *homo occidentalis*—in the emotional and utopian attitude toward money and credit—could not be ignored, let alone suppressed. The money managers themselves tended to succumb to the lures of unrealistic, wishful concepts that had a popular appeal.<sup>72</sup>

#### D. The Rediscovery of Money and the Rise of “Dirigism”

In early 1916, Benjamin Strong went to Europe to arrange for foreign agencies or correspondents for the New York Federal Re-

serve Bank. "On January 18 he met Montagu Norman for the first time," Strong noted in his diary:

We spent the evening discussing the position of affairs . . . As to the English position, and the Government's short borrowings, and the currency note issues, he expressed very much the same feeling that I have felt—that the ease with which this *great mass of Government short loans and currency note issues had been absorbed in circulation would lead to a lot of political quackery and financial heresies*, especially with regard to fiat currency or silver issues.<sup>73</sup> (Italics supplied.)

This, indeed, was to be the crux of the money problem—the short-run success of unorthodox practices. A fundamental fact of life was a widespread change in outlook—from a belief in the "law of supply and demand" to a conviction that its operation could be regulated by fiat, if not suspended altogether. This was the "*dirigist*" mentality that had been fostered by the novel experience with economic management practiced during the war.

It has been said that a basic difference between the pre- and the post-1914 mentality was one of "timing." The former put the emphasis on long-term considerations, the latter on immediate results. Indeed, an impatient "new generation," uprooted by the repercussions of the greatest war up to that time and the inequities of its aftermath, was deeply dissatisfied with the world it had inherited. Political unrest expressed the dissatisfaction. Putting the blame on the economic system was the next step. That was emotional, rather than logical, and the stock-in-trade of Bolshevik propaganda. But Bolshevism did not exert a great deal of direct influence in the 1920's except for a short while, in Germany, Hungary, and Italy.<sup>74</sup> Anticapitalistic sentiment and arguments, however, were rampant in Europe during and after the war—the natural correlates to the wartime planning ideologies which remained a powerful undercurrent.<sup>75</sup> Their most moderate manifestation was concentrated on the cyclical aspects of the economic process, especially the rapid succession of inflation and deflation, each of unprecedented vigor.

This double experience stimulated a tremendous upsurge of public interest in business cycles and a widespread desire to "control" them. If the economic process, money and credit in particular, could be manipulated, why not manipulate them for the benefit of mankind, for creating and maintaining prosperity? "Eternal prosperity" be-

came the prime goal of wishful, though at first inarticulate, thinking that resulted in upsetting the hierarchy of monetary policy objectives and criteria. Money and credit were the most “easily” accessible objects for the “dirigists’ ” approach. Yet, stabilization on gold was still widely recognized as desirable, to serve as armor to protect the economy against an inflation of the German type that had deeply impressed their contemporaries. But it was not because they were opposed to inflation on principle or to its causes. All those who had benefited from the inflation and reaped windfall profits by exchange rate fluctuations were even less impressed by the dangers of inflationary policies. But, the insecurity generated by price level changes of extraordinary intensity found its expression in a new orientation of policy ideals—in a longing for a utopia of stable prices and incomes.

As long as they do not turn into the “runaway” variety, inflations beget substantial vested interests in their continuation. Held within “reasonable” bounds, their income and price effects may appear to be overwhelmingly favorable to the most active and influential strata of a “capitalistic” (free) society. The stimulating effect of a rapidly growing money supply has been known for centuries. So, too, has been the fact that relief for debtors and incentives for debt-incurring may be powerful factors in sparking entrepreneurial incentives, although not always of the most desirable kind. The relative popularity of “moderate” inflationary policies was enhanced when offered as an alternative to actual or threatening unemployment. In most industrial countries, burdened with high taxes and huge public debts, an expansion of the money (credit) supply—beyond the limitations that would have been imposed by the old-fashioned gold standard—appeared as “the way out” of serious dilemmas. To many people, moreover, among them some distinguished economists,<sup>76</sup> “gently” rising prices appeared a more practical alternative than forced conversion of the public debt or outright national default.

Vested interests in ideologies were alarmed by the short and sharp setback of 1920–1921. The house of utopian cards seemed to collapse. The widespread fear of inflation was supplemented, if not replaced, by the shock of an unexpected deflation. The inflation-deflation syndrome was instrumental in attracting attention to long-neglected monetary problems and in fostering the popularity of monetary reform projects.

In the late nineteenth century, after the vehement and inconclusive



debates between the currency and banking schools, as well as the controversy about silver, had subsided, public and even scientific interest in the “theory” of money declined markedly. Although business cycles attracted growing attention before World War I, they were scarcely discussed in terms of monetary interpretation. Disregarding “money cranks” and purely empirical research and attempts at developing techniques of measurement for forecasting purposes, the better known pre-1918 business-cycle theorists, Joseph Clement Juglar, Albert E. F. Schaeffle, Stanley Jevons, Mikhail I. Tugan-Baranovsky, Mentor Bouniatian, and the Marxians emphasized such hypotheses as overproduction, underconsumption, overcapitalization, shifts in the “structure” of (real) capital and even sunspots (Jevons). “Psychological” explanations, like those of Albert Aftalion, Jean Lescure, and Arthur C. Pigou, were in vogue in the first decade of the 1900’s. Joseph Schumpeter’s monumental work, *Business Cycles* (1939), based though it was on a novel approach, still reflected the “late Victorian” attitude by relegating monetary forces to an insignificant role in generating major business cycles. The self-effacement of the monetary economists did not go as far in the English-speaking world as on the Continent. Overwhelmingly, monetary science itself became preoccupied with technical problems of the credit markets. It was symptomatic of the “spirit” of the age that an outstanding German scholar of the Historical School, Georg Friedrich Knapp, could stir up wide interest with his state theory of money (1906), asserting that modern money was a purely “chartal” unit, fixed by the State in relation to sterling, then the leading currency, but unrelated to any metal, its “purchasing power” a mere statistical concept, of no relevance for the price-making process and to problems of policy.<sup>77</sup>

By 1918 the outlook had changed. Passionate preoccupation with shifts in the general level of prices and their correlation with the quantity and value of money became an intellectual earmark of the postwar era. The resurrected quantity theory equation provided the basic “model” underlying influential monetary reform plans. Their common objective was price stability, considered by many money reformers as the self-evident guarantor of the Good Society.<sup>78</sup>

The “discovery”—under inconvertible money—of the crucial influence of money volume and interest rates on prices was accompanied by what amounted to a rediscovery: namely, that the com-

mercial banks, indeed all banks, “create” purchasing power and that the bank loan is the father of the bank deposit, not the other way around.<sup>79</sup> The novelty of this approach is indicated by the fact that as late as around 1910 a leading English economist, Professor Edwin R. Cannan, could deprecate “the curious belief that the power of the banks’ creditors to deposit is derived from the sums lent to the borrowers . . .”<sup>80</sup> The revival of the long-dormant “quantity theory,” reducing the problems of monetary policy to a simple arithmetic formula, was consonant with methodological standards borrowed from the physical sciences. It was presented as providing an infallible guide post for managing or “directing” the monetary system. The reverse side of this monolithic approach was the tendency (to be discussed later) to neglect, or actually negate, the qualitative aspects of credit—the problems of “liquidity”—and of the demand for credit.<sup>81</sup>

To carry conviction with mass audiences, especially in the English-speaking countries, the formulas had to be dressed up preferably as truisms. The fallacy of this methodology can be briefly stated by means of the remark of Professor Frank H. Knight (applied in a different context), that it endeavored “to take the vastly simplified postulates that are legitimate and necessary for the first stage of economic analysis—but which should never have been taken as describing reality, and still less as normative—and treat them as universal ideals.”<sup>82</sup>

The famous adage of Taine’s about Jean-Jacques Rousseau’s *Contrat Social*, that it reduced political science to the strict application of an elementary axiom and rendered further study unnecessary,<sup>83</sup> could as well be applied in the field of monetary science to the quantity theory of Gustav Cassel, Irving Fisher, J. M. Keynes, Lauchlin Currie, *et al.*, and to the more recent derivatives of that theory. Such doctrines are seductive because they supply simply keys to the economic universe and make everybody feel “capable of judging for himself the most difficult problems.”<sup>84</sup> The quantity theory of money was tailor-made to be misused for “government by formula,” due to its fitness for algebraic formulation, and because it superficially resembled scientific truth. The semi-educated popular mind is inclined to identify mechanical analogies, preferably abbreviated into a simple equation, with “pure science”—even if the equation expresses nothing more than an identity, and the postulated

causal relationships between its components are arbitrary assumptions. And the "beauty" of this approach is its apparent logical consistency, provided the underlying assumptions are accepted and any nonfitting facts disregarded. Unwittingly, the quantity theory school followed the dictum of Friedrich Hegel, who had claimed that his philosophy of history was substantiated if he could show, as he could indeed, that his conclusions were logically deduced from his assumptions.

The influence of "ideologists" (*les terribles simplificateurs*) on the developments leading to the crisis of the gold standard will become apparent as our narrative unfolds. At this juncture, it is appropriate to point out some "fundamental" changes in the intellectual "climate" of the 1920's that eventually affected monetary policies. What made perhaps the deepest impression on contemporary thinking was that some of the most solidly entrenched, centuries-old institutions crumbled "overnight." Never before had Europe witnessed so many and such profound convulsions as now occurred within the short span of a few years. Three empires, every one a military might of the first order, collapsed. No less than eight newly formed sovereign countries, and currencies, emerged on the European scene, lengthening the international, tariff-protected, borderlines by well over 10,000 miles. From the outset most of these new nations became involved in vicious conflicts. Destablilizing psychological and political reflexes accompanied the virtual separation of the greatest land block, Russia, from Western civilization and the entrance of the United States into the Power Concert—followed by America's assumption of an economic position virtually equivalent to that occupied only a few years earlier by Britain, France, and Germany combined.

It was a revolutionary period; but in contrast to the great revolutions of the previous two or three centuries, this one was characterized by sharply destructive, even nihilistic, tendencies, culminating in the rise of Bolshevik and Fascist dictatorships. They represented the breakdown of the traditional legal, political, and moral patterns of public life. All of this was not conducive to maintaining respect for the institutions and standards of the nineteenth century or belief in their permanence. They appeared to have been damaged to their roots, perhaps irreparably. At any rate, one institutional foundation after another of the "capitalist" free enterprise system had been badly battered.



The “success” of Bolshevism, with its emphasis on no unemployment in one major country, could not fail to impress, even before the Great Depression, the working classes and the socialistically inclined sectors of the intelligentsia all over Europe. It seemed to confirm what domestic experience had already indicated: that one can abuse the “laws” of the market place, and get away with violating “dogmas,” such as the sanctity of private property and of contractual rights. The demoralizing impact of wealth redistribution and price level manipulation by political fiat could hardly be overestimated.

Perhaps nothing was more damaging to the economic “morality” than the inflationary expropriation, without compensation, of the creditors. The cynicism generated in countries in which an inflation had wiped out whole strata of savers was to boomerang later in devastating eruptions of discontent. Henceforth, no institution of the “capitalistic” society was an easier target for criticism and for reform nostrums than the monetary system, notably the gold standard. Yet, at first, the criticism backfired. The crisis of 1920–1921, followed by ups and downs of the cycle between 1921 and 1926, provided a mighty argument for abandoning the practice of fluctuating exchange rates. To most people, brought up under the gold standard, monetary stability appeared as a prime requirement for restoring economic stability. The hopeful assumption was that once in operation, the gold standard itself would somehow overcome the impediments to its effective functioning. Impediments were created, especially, by the revival of mercantilist (nationalistic) trade policies and by government-fostered wage-price *inflexibilities*.<sup>85</sup>

In the 1920's the monetary policy of the leading nations, Britain in particular, was burdened with still another emotional mortgage. People expected the gold standard to accomplish something that was contrary to its very essence. Virtually perfect stability of foreign exchange rates is not compatible with a guaranteed stability of price and income levels. But in the 1920's the popular desire was to achieve both. The result speaks for itself.

Numerous currencies had to be, in the course of the nineteenth century, brought into the fold of the gold standard. But after World War I, the problem of returning to “normalcy,” and staying there, was burdened with complications and pitfalls that few people foresaw at the outset.

## E. The International Division of Labor in Jeopardy

The war solved few problems; but it generated many new ones, some “unsolvable,” requiring sacrifices which men were not willing to make. Public and private finances were upset, the savings of generations destroyed, the political order of Europe as a whole and also of individual countries turned upside down, and the moral fiber of society and its coherence profoundly damaged. A scarcely understood outcome of the 1914–1920 war-generated boom, more responsible than any other single cause for the crisis of 1929–1933, was the insidious destruction of what is known to the student as the *international division of labor*.

This was a system of myriad trade, service and financial interrelationships, covering the globe. Highly complex, yet closely integrated, it operated with a smoothness that the human mind could scarcely envisage. Its functioning has been described with masterly clarity and brevity by an (anonymous) Australian economist:

The pre-war international trading system was, indeed, the most complex and sensitive network of trading relationships which the world had ever seen. It was based upon the difference in the physical capacities of the different parts of the world, each specializing to a considerable extent in the output of goods for which it was adapted by nature. But on top of this had been built a series of further specializations, arising from the standards of living, the industrial experience and the financial and economic policies of the different countries. These were not static things fixed by nature . . . They showed a capacity to change as knowledge developed and population expanded. The whole system was sufficiently flexible to insure that initiative and enterprise, aiming at the introduction of new methods or at shifting existing channels of trade, would have a reasonable chance of success. The expanding population and the free and increasing movements of capital . . . kept the whole system both dynamic and elastic. Each successive generation could look back in wonder at the standard of life that had seemed luxurious to its predecessor.<sup>86</sup>

The war and its aftermath wrought havoc to this delicate international economic system.

The effects of the war upon a system so delicate and so complex were necessarily catastrophic. The mere fact of the outbreak of hostilities made sheer compelling necessity instead of economic reason the

basis of trade. The belligerents did not purchase goods because to do so would be profitable and because their people could afford to pay for them out of their available income—[rather] demand was based instead upon military necessity and was regardless of the ultimate consequences. Trade of the old kind practically disappeared.

The belligerents, who were for the most part the industrial countries, were too fully occupied in fighting to produce the exports which were needed to pay for the imports which they had to obtain. Instead *they built up enormous debts*, notably to America.

The primary producing countries which were not so directly engaged in the war, but which sent men and raw materials, found themselves *deprived of part of the imports* which they had obtained in previous years *from the industrial countries*. They saw the prices of these goods rise as a result of their scarcity caused by the war, and these higher prices encouraged them to *start local production*. In many parts of the world a temporary interruption of supply of this kind caused after about two years of war the *replacement of imports by locally produced goods*. In the belligerent countries themselves the same sort of thing occurred.

Germany and industrial Europe, cut off from supplies of British coal, further developed their own mining and encouraged the use of fuel substitutes. Unable to obtain special types of hard steel, previously imported from the United Kingdom, Germany was compelled to improve her local production. Britain, deprived of supplies of optical goods, dye-stuffs and chemicals previously purchased from Germany, was similarly obliged to develop rapidly new types and kinds of production.

And all over the world these *changes* had to take place practically *without reference to economic considerations*. There was practically *no thought of costs and no thought as to how ultimate payments were to be made*. The system could only be carried on at all by *financial methods which involved a greater or less degree of inflation*. Different inflationary methods were adopted in each country with the result that the different *national price levels*, which before the war had moved in close harmony with one another, *had become widely divergent*, and the resulting *chaos in the foreign exchange markets* made trade largely a gamble.

Not the wisdom of Solomon would have sufficed at the end of the war to sort out the tangled skein into which the delicate tissue of the international trading system had thus been twisted. There were *no accurate data about costs, about price levels, about international indebtedness; there was nothing except the resolution of the governments*



*whose trading structure had been most seriously damaged to get back as quickly as possible what they had lost, and the resolution of those countries which had increased their production during the war to cling to the markets which they had gained. And for ten years from 1919 to 1929 this fundamental conflict of interests continued until it culminated in the great world depression.*<sup>87</sup> (Italics supplied.)

This debacle of the international division of labor has to be borne in mind in order to understand the subsequent developments dealt with in the following chapters, namely the nationalistic trade policies, the price and wage rigidities, the “creaks and groans” of the economic system, the subordination of central bank policies to political “necessities”—in brief, the impairment of the restored gold standard and the inefficacy of central bank policies.<sup>88</sup>

## Notes to Chapter Two

1. J. M. Keynes, *A Tract on Monetary Reform* (London: Macmillan & Co., 1923), p. 2.
2. Clay, *Lord Norman*, p. 77.
3. See Veit, *Grundriss der Währungspolitik*, pp. 487 ff.
4. Clay, *Lord Norman*, pp. 179 ff.
5. “From there on the main concern [of the Bank of England] was with gold” (J. Giuseppi, *The Bank of England* [Chicago: Regnery, 1966], p. 147); that was true, too, for the entire interwar period. “Throughout the war . . . it has been the policy of the [U.S.] Treasury to conserve gold and discourage its circulation. This continued to be the policy . . . and was ‘highly successful.’ ” (Lester V. Chandler, *Benjamin Strong, Central Banker* [Washington: D.C.: Brookings, 1958], pp. 103–104.)
6. About the gold problem of the 1920’s, see chap. 4, sec. B and sec. C, below.
7. Only a dictator like Mussolini would apply a policy of “deliberate deflation”: Benjamin Strong, quoted by Chandler, *Benjamin Strong*, p. 387. Actually, a democracy like Czechoslovakia applied it, too.
8. The largest decline in purchasing power that sterling had ever suffered before was 49 per cent between 1797 and 1814, during the Napoleonic wars. See N. F. Silberling, “British Financial Experience,” *Review of Economic Statistics* (1919), pp. 286–289.
9. “Currency and Bank Notes Acts of 1914” (4 and 5 Geo. V. c 14, c 72).
10. Andrew Boyle, *Montagu Norman—A Biography* (London: Cassell, 1967), p. 124.
11. Alfred Sauvy, *Histoire Economique de la France entre les Deux Guerres* vol. 2 (Paris: Fayard, 1967), pp. 45–50; J. M. Perrot, *La Monnaie et l’Opinion Publique en France et en Angleterre, 1924–1936* (Paris: Colin, 1955).
12. Benjamin M. Anderson, Jr., in *Chase Economic Bulletin* (New York Chase National Bank), September 29, 1930.
13. In the fall of 1916, this writer, fresh out of college, was sent to Zurich by Dr. Popovich, then president of the Austro-Hungarian National Bank, to find the reason for the depreciation of the krone—an irredeemable currency in excessive supply! Popovich had surmised some sort of Allied conspiracy.

14. See chap. 4, sec. D and sec. E, below.
15. Table II-1 supplies comparative data about the wartime development of currency volumes and prices in the United States, Japan, and European countries. More will be said about the expansion of money supplies in chap. 8, sec. B, below.
16. E. W. Kemmerer, *High Prices and Deflation* (Princeton: Princeton University Press, 1921), p. 16. See "The History of Reserve Requirements for the Banks in the United States," *Federal Reserve Bulletin*, November 1938.
17. Further inflationary momentum was provided by the 70 per cent increase of the gold reserve, due to rapidly rising commodity exports. See Chandler, *Benjamin Strong*, p. 63.
18. The total net debt, public and private, in the United States rose by \$53.3 billion (from \$82.1 billion to \$135.4 billion) between 1916 and the end of 1920, then increased in 1921 by a bare \$.4 billion, but started to climb again in the following year. See chap. 6, sec. D, below.
19. As pointed out by Phillip Cagan, *Determinants and Effects of Changes in the Stock of Money, 1875–1960* (New York: National Bureau of Economic Research, 1965), passim.
20. See E. K. Winter, "The Rise and Fall of Austrian Labor," *Social Research* (1938), p. 323.
21. Inter-Allied debts will be discussed in chap. 5, sec. B, below.
22. Russell C. Leffingwell, Undersecretary of the Treasury (1918–1920), denied the existence of inflation in the United States, contending the dollar had not depreciated against gold. He was backed by W. G. McAdoo, the Secretary, but soon changed his monetary "mind."
23. See Arnold G. Dana, "*Prosperity*" *Problems* (New Haven: Yale University Press, 1931), p. 319, for vivid details of the 1919–1920 boom.
24. Clay, *Lord Norman*, p. 135.
25. Federal Reserve Board, *Annual Report* (1920), p. 1.
26. Friedman and Schwartz, *U.S. Monetary History*, p. 235.
27. In December 1920, Strong and Norman agreed that "the policy of making money dearer had been successful, though it would have been better six months earlier. They agreed, too, that deflation must be gradual; it was becoming now too rapid and they favored a small reduction in rates both in London and New York" (Clay, *Lord Norman*, p. 132). They did not realize, although Norman did have an inkling, that *the deflation had not gone far enough*; the inflated money supply remained essentially untouched in Britain as well as in the United States (see chap. 8, sec. C, below). Yet "within two years the [Federal Reserve] System was to be charged with two major blunders in policy, first of encouraging inflation and the high cost of living, and second, of plunging the country into ruinous deflation" (Chandler, *Benjamin Strong*, p. 135) without, let us hasten to add, effectively deflating the overextended money supply.
28. A. F. Burns and W. C. Mitchell, *Measuring Business Cycles*, (New York: National Bureau of Economic Research, 1946), p. 403.
29. Annual average of monthly averages. Source: U.S. Department of Labor, *Changes in Cost of Living in Large Cities in the United States, 1913–1941*, Bulletin no. 699 (Washington, D.C.: Bureau of Labor Statistics, 1941).
30. United Nations, *Growth and Stagnation in the European Economy* (Geneva, 1954), p. 234.
31. See sec. E, below.
32. See chap. 5, sec. B, below.
33. League of Nations, *International Currency Experience: Lessons of the Interwar Period* (Geneva, 1944; reprint 1947). See also Clay, *Lord Norman*, p. 460.
34. M. J. Bonn, *Das Schicksal des Deutschen Kapitalismus* (Berlin: S. Fischer, 1929), predicted dire consequences and they materialized. The German "middle class" turned violently "anti-Weimar," and ultimately pro-Hitler.
35. On April 10, 1919, 25 per cent of all outstanding bank notes were canceled out, bank deposits frozen, and the Czechoslovakian crown (Kc) defined in terms of gold. Stabilization

- was completed in 1922. See *Ten Years of the Nationalbank of Czechoslovakia* (Prague: National Bank of Czechoslovakia, 1937), pp. 38 ff.
36. Kemmerer, *High Prices and Deflation*, pp. 50–51.
37. Norman Gash, *Politics in the Age of Peel* (New York: Longmans Green, 1953), p. x
38. Chandler, *Benjamin Strong*, pp. 16–17.
39. H. Parker Willis, *The Theory and Practice of Central Banking*, (New York: Harper, 1936), p. 91. See also the analysis of C. O. Hardy, *Credit Policies of the Federal Reserve System* (Washington, D.C.: Brookings, 1932), chap. 14 on Federal Reserve-Treasury relations; E. R. Wicker, *Federal Reserve Monetary Policy, 1917–1933* (New York: Random House, 1966), passim.
40. Chandler, *Benjamin Strong*, p. 117.
41. See chap. 8, sec. C, below.
42. In 1927, a leading commercial banker of Chicago remarked to this writer that “no banker worth his salt would go into the Federal Reserve where he could make no money.” Money was, however, not a prime consideration for a man like Strong, nor for the economist member of the Board, Adolph Miller (1914–1936).
43. Especially so in Germany, where Gustav Schmoller’s nationalistic branch of the Historical School ruled over most universities. A protégé of Schmoller’s, Professor H. Schumacher (Berlin), defended the runaway inflation with the timeworn argument that “the money remains in the country.” Another product of the Historical School, Karl Helfferich, argued in the midst of the greatest inflation (late 1922) that Germany suffered from a money shortage; the gold value of the circulating money volume had shrunk, as indeed it had.
44. Contemporary observers like H. Parker Willis and Paul Warburg were aware of the problem of political encroachment—sometimes overlooked by critics of Federal Reserve policies; Friedman and Schwartz, *Monetary History of the United States*, is an example. The official records have been presented by A. J. Clifford, *The Independence of the Federal Reserve System* (Philadelphia: University of Pennsylvania Press, 1965).
45. See F. Hesse, *Die Deutsche Wirtschaftslage von 1914 bis 1923* (Jena: Fischer, 1938), pp. 262 ff.; C. Bresciani-Turroni, *Inductive Verification of the Theory of International Payments*, no. 1 (Egyptian University, Publications of the Faculty of Law), s.a.
46. Clay (*Lord Norman*, p. 201) mentions Norman’s advice to Havenstein.
47. *Ibid.*, p. 166. This experience was at the roots of the deficit-finance approach that was to flourish in the Great Depression and thereafter.
48. Moreau, *Souvenirs*, p. 601. Be “independent,” was Strong’s advice to Moreau (*ibid.*, p. 35).
49. *Ibid.*, pp. 599–600. This refusal may have been welcome to Poincaré. It permitted him to appear subservient to the wishes of the Parliament and to put the blame for noncompliance on the Bank of France.
50. See Robert Blake, *The Unknown Prime Minister* (London: Eyre and Spottiswood, 1955); Clapham, *Bank of England*, passim; Boyle, *Montagu Norman*, pp. 116–120.
51. Norman was deputy governor from 1918 to 1920.
52. Grigg, *Prejudice and Judgment*, p. 193. Grigg was Churchill’s “private secretary.” Churchill’s hostility to the Governor endured to the end of their lives. At times it took grotesque forms, according to Boyle, whose biography of Norman is biased against Norman.
53. After 1925 the Bank was “frequently” under pressure to “moderate” its policies. Clay, *Lord Norman*, pp. 293–295.
54. *Ibid.*, p. 139.
55. *Ibid.*, p. 116.
56. *Ibid.*, p. 129. Chancellor of the Exchequer
57. *Ibid.*, p. 297.
58. Boyle, *Montagu Norman*, p. 166. See Sir Theodore Gregory, “Lord Norman: A New



- Interpretation," *Lloyds Monthly*, April 1968, p. 41. About pressures on Norman, and similarly on Strong, "for the relaxation of monetary policy," see S. V. O. Clarke, in *Central Bank Cooperation, 1924–31* (New York Federal Reserve Bank, 1927), pp. 99–100.
59. Moreau, *Souvenirs*, passim.
60. See chap. 4, sec. E, below.
61. See chap. 5, sec. B, below.
62. Clay, *Lord Norman*, p. 163.
63. *Ibid.*, p. 296.
64. *Ibid.*, pp. 125–126. In 1928 the Bank of France succeeded in ridding itself of government paper.
65. Before World War I the German Social Insurance System, the world's oldest, invested its funds in mortgage bonds issued by officially controlled mortgage banks.
66. Clay, *Lord Norman*, p. 166.
67. *Ibid.*, passim.
68. There is nothing in the Federal Reserve Act to require the Federal Reserve Board to maintain the gold standard.
69. J. Giuseppe, *Bank of England*.
70. A. J. P. Taylor, *English History, 1914–1945* (Oxford University Press, 1965), p. 139.
71. Like diplomacy, central banking came to be subjected to the popular demand for "open" activity.
72. Late in 1919, call loan rates at one time reached 30 per cent. (*Federal Reserve Bulletin*, 1920, p. 942.) "These high rates on the Stock Exchange came as a revelation to the financial world, which had been led to believe that, under the operation of the Federal Reserve System, extreme rates for money such as had often prevailed on the Stock Exchange before the establishment of that System would never again be possible. The notion, of course, was preposterous. But from the start the idea had been sedulously cultivated—and by no one more persistently than the Federal Reserve authorities themselves—that the *possibilities of credit expansion and loan accommodation under the Reserve System were limitless*." ("The First Year after World War I," reprint from the *Commercial and Financial Chronicle* [New York], January 20, 1944, pp. 13–15.) (Italics supplied.) See chap. 6, sec. F, below.
73. Chandler, *Benjamin Strong*, pp. 94–95.
74. As Bonn (*Das Schicksal des Deutschen Kapitalismus*) has pointed out, it was organized labor allied with the Social Democratic Party that had turned back the Bolshevik wave threatening to engulf Germany in 1918–1919.
75. See P. E. Barton Johnson, *Land Fit for Heroes: the Planning of British Reconstruction, 1916–1919* (Chicago: University of Chicago Press, 1968).
76. Dennis H. Robertson, for one.
77. Knapp's approach has to be understood in its setting—in the framework of the internationally entrenched gold standard, considered at the time as "immutable." That a modern currency, the British pound in particular, may become irredeemable was beyond the professor's conception. See Charles Rist, *Histoire des Doctrines Relatives au Crédit et à la Monnaie* (Paris: Recueil Sirey, 1938), pp. 361 ff.; M. Palyi, *Die Staatliche Theorie des Geldes* (Munich: Duncker & Humblot, 1921).
78. See M. DeValette, *Stabilisation de la Valeur de la Monnaie* (Paris, 1924); Irving Fisher, *Stable Money* (New York: Adelphi, 1934); Rist, *Histoire des Doctrines*, pp. 380 ff.; M. N. Rothbard, *America's Great Depression* (Princeton: Van Nostrand, 1963), chap. 6.
79. Chester Arthur Philipps, among American economists, is credited with having attracted attention (in 1920) to this aspect of commercial banking, almost forgotten for the better half of a century. See B. P. Beckwith, *Contemporary English and American Theories Concerning the Effect of Commercial Banking on the Supply of Physical Capital* (University of Southern California, 1935).
80. Edwin R. Cannan, *Money*, 5th ed. (Westminster: P. S. King, 1926), pp. 81–85.

81. In chap. 6, sec. E, and chap. 8, sec. A and sec. B, below.
82. F. H. Knight, "Abstract Economics as Absolute Ethics," *Ethics*, April 1966, p. 177.
83. Hippolyte A. Taine, *La Révolution*, vol. 1 (Paris: Hachette, 1888), chap. 4.
84. We are availing ourselves of the well-chosen words in J. B. Bury's *Idea of Progress* (New York: Macmillan Co., 1932), chap. 11.
85. Wage price "rigidities" were blamed by many economists for lengthening the subsequent depression. See A. D. Gayer, *Monetary Policy and Economic Stabilization* (London: A. and C. Black, 1935). See chap. 6, sec. C, below.
86. *World Trade*, (circular), Bank of New South Wales, August 2, 1937.
87. *Ibid.*
88. See Intro., above; also chap. 6, sec. C, and chap. 9, sec. A, below.

## *Stabilization*

### **Introduction**

THE ECONOMIC STABILIZATION which the world achieved during the 1920's rested on insecure foundations. Outwardly, there was a return—at least a halfhearted return—to the pre-1914 international monetary and economic order, but the character of a period is not determined by social, economic, and legal institutions alone, but by the spirit in which men interpret and use these institutions. In the end, it is the nonquantifiable spirit of the time, rather than concrete laws and observable institutions, which shape the fate of nations. Despite many efforts during the 1920's to restore the prewar socio-economic order, including the gold standard, the end was failure, because the spirit of the time had undergone a profound change. The gold standard which emerged in the mid-1920's outwardly resembled the pre-1914 system, but it lacked the all-important semi-automatic features, and it was operated in a basically different spirit.

This was particularly true with regard to Britain.

The country's dominant prewar position as the world's foremost banker and merchant had been seriously weakened, and the hope that Britain would eventually regain her prewar role gradually faded. The British of 1926 somehow were not the same as the British of the turn of the century. The will to exercise world leadership had given



way to a desire for security and “social justice,” within the tight little island. The Empire, and the City, as the world’s financial center, outwardly differed little from prewar days, but the substance was draining away.

The economic problems which faced Britain during the postwar years were no doubt formidable. A substantial segment of the economy, especially those industries which before the war had provided the bulk of Britain’s exports—textiles, coal, steel, shipbuilding, machinery—had become obsolete and found it difficult to compete in world markets. Some industries, especially coal, suffered from excess capacity developed during the war. The transportation system was in bad shape; traditional export markets had been lost, either to new competitors or because other nations had begun to develop their own industries behind tariff walls; and capital funds, which should have been used to rebuild Britain’s foreign investments, were, in part at least, needed at home. Yet Britain’s problems were no greater than those of other countries, many of whom had actually suffered far more severe physical losses than Britain, whose problems were clearly not insurmountable from a purely economic point of view. Yet many of them, in the end, proved politically and psychologically incurable. The refusal of private enterprise, especially in the case of the depressed older industries, to meet the requirements of the day through aggressive modernization; the rigidity and belligerency of labor, which opposed changes and all temporary sacrifices; the activities of intellectuals and politicians, supported by powerful newspapers, in representing Britain’s ills as the result of a conspiracy of “reactionaries” and “international capitalists”—all these forces combined to prevent Britain from regaining her prewar economic position.

Since sterling had held the key position in the prewar international monetary and economic system, and the world somehow expected Britain to regain her traditional role, her efforts and ultimate failure had a profound effect upon economic developments throughout the world, as the inflation-fed prosperity of the 1920’s gave way to the depression of the 1930’s.

Britain’s failure was not, as has often been argued by Keynesian economists, the result of a mistaken monetary policy, the stabilization of sterling on the basis of the prewar parity of \$4.86, rather than on one of \$4.40, as Keynes had recommended. The role of the City

in Britain's economy was very important, and its prestige could have been endangered through a devaluation of sterling, especially since British price levels differed little from world price levels. Three sterling devaluations since 1925 have not restored Britain's position in world markets, nor prosperity at home. It was a failure of the will of a large segment of the British people—industry, labor, the press, and the politicians—to conquer the obstacles, which finally produced the country's economic decline. (G. C. Wiegand)

### A. Delayed Stabilizations

With the termination of the war, currency pegging operations were abandoned. Each currency was left to its own resources. In most nations the gold reserves had risen little, if at all, whereas the money supplies had greatly increased between mid-1914 and the mid-1920's. In most European Allied countries, the ratio of gold to central bank liabilities had fallen by 1919 to about one half of the average pre-1914 level.<sup>1</sup> The respective countries' holdings of American and Scandinavian securities had been largely liquidated. In Central Europe, the official gold reserves had almost vanished. The "scramble" for gold was intensified by the post-armistice expansion of fiat money issues and the urge to build up reserves in preparation for stabilizing the currencies. As might be expected, both the monetary and the private (hoarding) demand for gold had been intensified under inconvertible, fiduciary standards (fiat money). Only stabilized currencies could hope to operate, albeit precariously, on moderate reserves relative to the liabilities of the respective central banks.

Return to the gold standard was a foregone conclusion after the war, the accepted imperative of monetary policy. With a return to gold, all anomalies created by the wartime and postwar inflations were expected to fade away. Once specie payments were resumed, the world would start afresh from where it had left off in 1914, as if nothing had happened in the intervening years. For years, however, uncertain prospects—with the date of stabilization and the price of gold left to the speculator's imagination—kept both the foreign exchange and staple commodity markets in near-constant turmoil. It should have been advisable to proceed with dispatch, but several circumstances militated against early action. Most important, perhaps, was the "gold famine" in the war-torn countries. It was essen-

tial to underpin the new gold standard with reserves large enough to inspire confidence and to withstand potential drains, once free convertibility had been established.<sup>2</sup> The alternatives were either recourse to foreign loans, which were less available the more the particular currency had been eroded, or a deflation of the money supply so intensive as to be impolitic.

Even the United States and Switzerland, the two countries whose currencies had suffered only moderate damage—in terms of gold—during the years 1914–1919, hesitated almost a year before eliminating their embargo on gold exports and resuming full convertibility. Next, the countries in which runaway inflations had generated intolerable conditions had to take steps to restore order. Monetary chaos reigned, literally, in Austria, Hungary, Poland, and Germany, to say nothing of Russia. The Polish currency reform of 1925–1926 misfired, due to a relapse into paper money inflation, aggravated by the overissue of fractional currency. A second stabilization (1928) became necessary.<sup>3</sup> The Austrian schilling and the Hungarian pengoe were stabilized in 1922 with the aid of foreign loans, sponsored, but not guaranteed, by the League of Nations.<sup>4</sup> Germany's postwar runaway inflation terminated in November 1923 with the virtual repudiation of the mark. It was replaced successively by the Rentenmark, the gold mark, and the gold-convertible Reichsmark (RM).

These were the most urgent cases. It took six and a half years after Armistice Day until, in April 1925, the British authorities were ready to return to gold. Full freedom to export gold was restored nine months later, at the end of 1925. Many nations waited for Britain's decision. Holland preceded her in early 1925; the Union of South Africa and Sweden already in 1924; Italy, Belgium, Peru, and Uruguay followed in 1926, as did France *de facto*. But France's *de jure* return to the gold standard was postponed until July 1928. Some Central European countries, from the Baltics to the Balkans, also Portugal, hesitated even longer. The *de jure* stabilization of the Yugoslav dinar closed the procession, in 1931. Spain never completed her attempt to stabilize the peseta.<sup>5</sup>

Several circumstances were responsible for delaying these stabilizations. In France, for example, preparations for reinstating the gold standard were under way in 1924, but had to be shelved because renewed deficit spending put the franc in jeopardy.<sup>6</sup> In most coun-



tries, anxiety about the central banks' ability to maintain the restored convertibility of their liabilities militated against early stabilization. After all, success depended on monetary reserves, the current balance of payments, the availability of foreign loans, and the state of public finances. Controversies about the new parities to be chosen delayed decisions, too. Choice of the gold price was the most significant and indeed the most difficult question, the difficulty being greatly enhanced by the fact that it had become a political and "moral" issue of overriding significance.

Balancing budgets and consolidating large volumes of floating debt were essential preliminaries, but they too involved time-consuming political disputes. International controversies complicated matters still further. Foreign creditors who were supposed to supply stabilization loans to Central European money authorities expected to exercise some control over the debtor central banks, but these were frequently reluctant to concede such powers to foreigners. In several instances, rivalry between the Bank of England and the Banque de France caused the delay. In Roumania, for example, the two great central banks were vying for the "privilege" of serving as sponsors for a stabilization loan (the bulk of it to be raised in the United States), thereby to gain financial and political predominance in Bucharest. "Sterling diplomacy" was seeking "beachheads" in order to enlarge the radius of the gold exchange standard, with London as the center. This British policy of monetary "infiltration" in Central Europe, and beyond, was suspect to the French, especially after the Roumanian foreign minister complained in Paris that Montagu Norman had been pressuring Roumania, (a member of the French-led Little Entente) to make political concessions to Hungary.<sup>7</sup>

Another reason for delay was the overhanging problem of inter-Allied debts and German reparations. The British authorities, and at first the French, too, did not consider it feasible to resume full convertibility until and unless they first settled this problem of political capital flows, at least in a tentative fashion. Some European governments, even some wartime neutrals, were reluctant to commit themselves to a fixed gold price without being assured about the course of sterling, as mentioned before. London must "cut the ice," the Governor of Sweden's Riksbank told Norman. Thus, while Britain was waiting for political solutions, the Continent was expecting Britain to make up her mind.

To moderate, in the short run, the potentially deflationary impact of returning to old gold parities, some countries with depreciated currencies resorted to raising their respective foreign exchange values in a piecemeal fashion. But stretching out the process apparently did more harm than good; the expectation of impending deflation had a stultifying effect on domestic spending and production. This was the case in Norway and Denmark in 1924–1928. In both countries a “depression” reigned—in the midst of a world-wide boom—in contrast to neighboring Sweden and Finland. The latter had opted for devaluation and rising prices, the former for restoring the prewar parity at once.<sup>8</sup> In all four Scandinavian countries the industrial interests, “socialist” Labor, and a majority of academic economists favored devaluation, whereas the central banks, the financial communities, and the urban middle class, namely the “savers,” took the opposite stand. In both Denmark and Norway the “parity depression” had more than one cause, but it seems that temporary maladjustments were generated in the Danish and Norwegian price and income structures by the planned “gradual” rise of their currencies’ foreign exchange values. The speculators “discounted” the official plans and drove the currencies abruptly upward. Something the posthumous advocates of devaluation prefer to leave unsung should be noted, however: namely, that the two “deflating” countries, Norway and Denmark, entered the crisis of 1929 in far better financial shape, and with a relatively less expanded industrial superstructure, than either Finland that had devalued, or Sweden that had not. *Having missed the boom proved to be a blessing in disguise.* Also, the losses which Swedish banks suffered in connection with the Ivar Kreuger affair were “bypassed” by their Danish and Norwegian counterparts.<sup>9</sup>

Actually, a strong case could be made that sterling should have been stabilized much earlier—in early 1922, preferably, as the Czech koruna had been—when the gold price question was not even controversial. Besides avoiding public controversy, such an “early” action might have forestalled the consolidation of vested interests in “money tinkering.”

The choice of *stabilization rate* was a crucial problem. It was commonly assumed in the 1920’s—following the unwritten gold standard tradition—that:

- a) Currencies which had depreciated (or had been *de facto* de-

valued) by no more than about 60 per cent could be brought back to the prewar parity. This was the case in the Netherlands, Britain, the three Scandinavian countries, South Africa, and India, for example.

b) Currencies which had depreciated by more than 60 per cent but by no more than 90 per cent could be stabilized on a level substantially increased from the low point of actual depreciation. The value of the French franc, as an example, was virtually doubled from its low of 240.25 to the pound on July 20, 1926, to 122.25 on December 22 of that same year. The rate of up-valuation was even “better” in Czechoslovakia, Belgium, and Italy. In all these cases, including Portugal, stabilization meant a *de facto* up-valuation from the low level attained and a *de jure* devaluation from the prewar parity, a compromise between creditor and debtor interests.

But what should be the parity of a new currency erected on the ruins of an old one? It was a troublesome matter indeed to establish the conversion rate between a paper currency which had become almost “pure paper” and a new one that was to be convertible in gold. Generally, a rate was chosen close to, albeit above, the lowest exchange rate of the outgoing unit, as in the cases of the German (4.2 trillion marks to the U.S. dollar), Austrian, and Bulgarian stabilizations, as well as those of Finland, Poland, Hungary, and Roumania.<sup>10</sup>

## B. The British Malaise

The British war debt to the United States had been consolidated by the Washington agreement of 1923. But the British authorities, anxious to return to their prewar monetary standard, still doubted sterling’s ability to stand the strain of annual transfers to the United States unless these were offset by German reparation and inter-Allied, mainly French, debt payments to the United Kingdom. Inter-Allied debt agreements, backed by the Dawes Plan (1924) that brought about a sort of armistice in the reparations conflict, settled this and eliminated a major obstacle to sterling’s stabilization.<sup>11</sup> Meanwhile the termination of the French army’s occupation of the Ruhr opened up the prospect of normalized intra-European trade and exchange.

The preparation of the decisive move included raising the Bank of England’s discount rate to 5 per cent, which aroused the misgivings



of Britain's "easy money" advocates, for the New York Federal Reserve Bank held its discount rate at 3½ per cent throughout 1925.<sup>12</sup> Return to the gold standard was to be the next "logical" step. It presupposed, however, a vital decision: the choice of the price of gold. At the time, there was no reason to assume that the United Kingdom could not bear the burden of some (minor) price and wage readjustment; and it was reasonable to assume that restoring the credit of Britain, the "world's banker," would pay rich dividends.

As early as the summer of 1918, the first *Interim Report* of the official Cunliffe Committee was emphatic in recommending restoring sterling's *status quo ante*.<sup>13</sup> The following year, the Bank of England added the weight of its voice to the same effect, requesting balancing the budget and "repayment," meaning consolidation, of the inter-Allied debts—although the "easy money" policy which the Bank pursued at the end of the war did not exactly fit Governor Norman's words. Not until November 1920 did he start raising the discount rate. Norman, who became deputy governor in 1918 and governor in 1920, was convinced, as was the great majority of experts, British and American, that Britain's prosperity depended on reviving her international trade and on restoring world confidence in sterling—in short, on assuring foreign creditors that they could rely on the integrity of British business and the Bank of England. It was confidently expected that the example set by Britain would decisively influence Continental monetary policies. In fact, Sweden and Holland had anticipated the British move by reverting to prewar parities in 1924 and on January 1, 1925, respectively.<sup>14</sup>

Deflationary measures—credit tightening, with the discount rate up to 7 per cent in 1920—had improved sterling's value. After hitting a low of \$3.20 in February 1920, the pound rose to \$4.61 by December 1922. But when by 1923 the government was ready to resume specie payments, action had to be postponed for political reasons, namely the reparations conflict and the French-Belgian occupation of the Ruhr. Once the political crises had subsided, sterling started to appreciate again, due largely to the inflow of short-term capital that was speculating on Britain's return to gold and, in the process, helping to ease that return. Domestic capital outflow was inhibited somewhat by an informal embargo. "Hot money" and flight capital were flowing to London from France and Italy, both countries suffering acute inflation pains. By early 1925, sterling was within 2 per cent

of the old parity (£1 = 4.86 gold dollars). On May 13 the Gold Standard Act restored the prewar parity. The return to gold was completed at the end of the same year, when the government did not renew the expiring embargo on gold exports.

The change-over was carefully prepared. The Bank of England had accumulated a gold reserve of about £150 million that was considered a satisfactory safety margin. A standby credit of \$200 million had been arranged with the New York Reserve Bank, but was not used.<sup>15</sup> Benjamin Strong cooperated also by holding the New York Bank's discount rate to 3½ per cent until the end of 1925. So did the Netherlands Bank, that assisted the English *confrère* by transferring 65 million gulden in gold and part of its American balances to London. The London clearing banks had been "persuaded," against their wishes, to surrender whatever gold they were holding for their own account. The budget had been balanced (precariously) since 1921, and the official discount rate was raised again in 1925 to 5 per cent. The money markets interpreted all of this to mean that the gold parity was to be restored and defended. Convertibility of notes was, however, restricted to the value of 400-ounce and larger gold bars. Britain was returning to a gold bullion standard, not a gold coin standard, as she had used up to World War I. The object was to increase the central reserve, or to "protect" it against undue withdrawals, by discouraging gold hoarders as well as speculation against the pound. Nor had the Exchequer experts come to this decision without canvassing the alternatives. They had thoroughly discussed both a fixed and a fluctuating gold price, although they never seriously considered devaluation, namely a lower fixed parity. Montagu Norman's very able ally, Sir Otto Niemeyer, the top advisor of the Chancellor of the Exchequer, Winston Churchill, in monetary affairs seems to have played the decisive role. There was very little protest at this juncture from economists, industrial interests, or the trade unions.<sup>16</sup> The financial community was nearly unanimous in approving the measure. The most vocal exception was Reginald McKenna, chairman of the Midland Bank, a firm believer in a dogmatic "quantity theory" of money. He emulated Keynes, who had first raised his voice in this controversy, as had another respected Cambridge economist, D. H. Henderson, in 1923. Winston Churchill privately questioned McKenna (a former Chancellor of the Exchequer him-

self): "What would you do in my place?" "There is no escape," was the answer—from one politician to the other—"you have to go back [to the old standard], but it will be hell."<sup>17</sup>

There was in 1925 scant reason to doubt that Britain was capable of meeting the challenge of a minor deflation that was expected to improve her trade balance anyway. Physically, the war had done only moderate damage to the country.<sup>18</sup> The most important single item, by far, was the loss of shipping. But Britain rebuilt her merchant fleet very fast. Already three years after the armistice the complaint was excess shipping capacity. The apparently intact condition of the cities and of the industrial apparatus led people to believe that the country was in good shape, capable of restarting where it had left off in 1914. The post-armistice decline of foreign trade had not continued beyond 1921, and by late 1924 the country had practically recovered from the 1920–1922 slump. The prospects of industrial expansion were bright in view of the global reconstruction needs which fired the businessman's imagination, especially so in Germany. Britain's most important European competitor appeared to be stymied for years to come.

Under the surface, however, serious problems were lurking, many of them largely ignored in the optimistic atmosphere of the immediate postwar years. Indeed some were fairly ancient. An accumulated industrial obsolescence plus the pent-up demand for dwellings put great strains on the nation's capital resources. The more Britain needed her capital at home, the less was available for direct and portfolio investments abroad. Yet, capital export was essential to support Britain's strongly export-oriented industrial equipment producers, as well as to assist the lucrative business of the City, the world's financial center.<sup>19</sup>

But the roots of the trouble reached even deeper. It has been pointed out that British industry

came out of the war and postwar boom in poor financial condition, and demand for its products was weak. Excess capacity, overcapitalization, heavy fixed charges made it difficult for iron and steel, cotton, coal, and shipbuilding even to set aside sufficient reserves for depreciation, let alone to finance a comprehensive program for scrapping and rebuilding. The credit of these industries was very low. . . . Here was a vicious circle of *competitive weakness*, because of their *failure to*



*reorganize*, bringing financial weakness, and financial weakness in turn making it *impossible to attract the capital necessary to effect reorganization*.<sup>20</sup> (Italics supplied.)

Britain emerged from the war beset not only by new problems but also by aggravated old strains. Their listing would be lengthy. The reader will be confronted with some of them on subsequent pages.<sup>21</sup> Hindsight, of course, is helpful in disclosing them; some were visible in 1925, and they alone were serious enough. But who could foresee that they would turn out to be *politically* “incurable,” or practically so?

There was no lack of skeptics to emphasize the obstacles on the road to recovering the Lost Paradise of Britain’s global economic position on which her progress and prosperity rested.<sup>22</sup> Yet there was no reason to assume that she could not and would not overcome these obstacles, notwithstanding excessive productive capacities inherited from the war. Much of Britain’s industrial apparatus was intact; some of it had even been improved during the war, partly under governmental pressure to increase efficiency. New industries had risen and old ones, which existed earlier only in rudimentary size, had been expanded. True, “the major distortions [due to the war] of normal economic life . . . caused far-reaching shifts in British industry.”<sup>23</sup> There were further upheavals in the immediate postwar period, inflation and deflation, superimposing yet another set of distortions on the artificial industrial pattern generated by wartime conditions. “The need for adjustment was often hidden beneath the temporary dislocations . . . , and it was only later in the 1920’s that the irreversible alterations in the structure of British industry, caused by the war came to be better understood.”<sup>24</sup>

Few people, if any, could foresee the change in the attitude of labor and its unions. Between 1918 and 1920, some 3,000 strikes occurred, probably more than in the previous forty years. New union leaders, like the Welsh-born Aneurin Bevan, chief of the coal miners, took a militant posture, the like of which had not been encountered in the British Isles since the Chartist movement of the latter 1830’s. A broad stratum of British labor adopted and maintained a class warfare mood that reflected an anticapitalistic, almost revolutionary, temper.<sup>25</sup>

Throughout the 1920’s, and beyond, the trouble centered in the

old, “unsheltered,” export industries, coal, steel, shipbuilding, and in certain branches of the machine tool and textile trades. It had been aggravated by overexpansion during the war, especially in engineering, and by “defective systems of engaging and using labor.”<sup>26</sup> Also, British exports were hampered by the “hothouse” industrialization and the economic nationalism that became rampant during and after World War I in many parts of the world. Yet, further depreciation of the pound certainly could not have cured the basic trouble of British manufacturing, the relative laggardness, in comparison with competing nations, of its technological progress—a point to which members of the Macmillan Committee (1929–1931), such as Reginald McKenna, Ernest Bevin, and Keynes, who advocated inflationary remedies, paid no attention. They ignored the fact that the outpouring of money would be no remedy when

... employers who wished to make changes had to face the powerful opposition of organized labor. The introduction of new methods, such as the “more looms to a weaver” system, was resisted. Strict lines of demarcation between occupations were maintained in engineering and elsewhere. A plumber could repair a pipe conveying cold water; if it conveyed hot water, he had to call in a hot water engineer. Entry into certain occupations was rendered difficult. A man can become an efficient building operative in a few months; an apprenticeship of four years was required. British railways could not have their labour force as they chose. A host of restrictions, insisted upon by the Trade Unions, made this impossible.<sup>27</sup>

Not only did important segments of labor, the coal miners in particular, take a quarrelsome stance, harassing management at every turn by objecting to alleged or real “unfairness,” but they reactivated old restrictive practices of the defunct guilds and even introduced new ones. This stood in sharp contrast to the productive cooperation between labor and business in contemporary Germany as well as, to some degree, in America. The spirit of noncooperation was manifested in a 1926 circular to the members of the union of Building Trade Workers: “You should keep a keen control of overtime. Adopt a militant policy against all forms of piece work; be watchful and limit apprentices; remember *the power you now occupy is conditioned by the scarcity of your labor.*”<sup>28</sup> (Italics supplied.) A multitude of restrictive labor practices, including “only” a few cases

termed “scandalous,” was presented in 1935 in a private, pro-labor, “Impartial Inquiry,” covering thirteen industries, entitled *Are Trade Unions Obstructive?*<sup>29</sup>

An ominous aspect of the British labor market, presumably a consequence of labor’s belligerent attitude, was the comparative lack of worker response to pecuniary incentives. A more recent study by Guy Routh came to the conclusion—the author called it “An Explanatory Hypothesis”—that, “The outstanding characteristic of the [British] national pay structure is the rigidity of its relationships.”<sup>30</sup> In the 1920’s, at any rate, it was often difficult to induce change of occupation and location, or to stimulate greater effort and swifter adaptation by the prospect of improved earnings. Labor’s destructive hostility was in part, at least, due to bitterness about the sharp deflation of (inflated) wage *rates* after the war. Paradoxically, while they were cut by one-third from 1921 to 1924, they declined by only 5 per cent in the period 1924–1935, during which time the rate of unemployment never fell below 10 per cent and at times reached 20 per cent of the “insured” labor force.

Workers’ obstructionist tactics were a prime factor in reducing Britain’s competitive prowess. Devaluation might have helped to compensate for this impediment to exports but presumably not for long; wage rate increases at home and countervailing measures abroad would have been induced.

Other shortcomings of the industrial system further aggravated the situation. The usually restrained London *Times* ran, in December 1930, a series of articles severely criticizing major segments of British commerce and manufacturing for their alleged backwardness and their apparent inability to adapt themselves to new conditions. The 1920’s were a period of extraordinary technological progress and of marketing developments. Increased efficiency was the imperative of the day. Why was the British manufacturer frequently limping behind his foreign competitors? Labor trouble may have been the chief, but certainly was not the sole cause of managerial sluggishness. A highly respected financial expert, Sir Arthur Salter, pointed out in the *Times* of December 30, 1930, that time and again the reorganization of entire industrial branches—inspired or promoted, more often than not, by Montagu Norman—was impeded by the resistance of individual firms to mergers and other forms of cooperation that were designed to increase productivity and profitability for all concerned.<sup>31</sup>



Britain's industrial "retardation"—the technological and organizational lag behind German and American development, traceable to as far back as 1880—was documented by the uneconomic size of many plants, neglect of electrification, delayed mechanization, output restrictions by unions, and social "immobility."<sup>32</sup> The "retardation" had been "accelerated," as it were, by World War I. Indeed, virtually the same symptoms of basic troubles have been diagnosed since World War II. Even before the pound stabilization in 1925, notwithstanding the depreciated external value of sterling, British manufacturers were losing ground in the export markets in comparison to American, Japanese, and Continental competitors. After 1925, the relative deterioration turned into outright sales declines, if only in a limited number of fields, mentioned before: cotton goods, coal, shipbuilding, certain lines of steel and engineering. To be sure, these "old" industries were under pressure, more or less, on the Continent as well as in the United States; congestion due to *wartime overexpansion* had been compounded by high tariffs and export subsidies. Britain's misfortune was that the "old" industries were her main export producers. Export sluggishness was due, also, to the apparent unwillingness of British distributors to adapt to changes in foreign consumer tastes.<sup>33</sup>

Why, for example, did the United Kingdom's share in Argentina's total imports fall from 31 per cent in 1913 to 19.4 per cent in 1927, whereas the United States' share rose from 14.7 per cent to 25.4 per cent? It was not so much because of price differentials, as Lord d'Abernon's Economic Mission (1929) to South America found, but rather because the Americans offered "new products," and the British did not.<sup>34</sup>

A relatively low level of entrepreneurial flexibility combined with a very high level of labor "stickiness" impeded, or slowed down, the unavoidable shifting.<sup>35</sup> And nonprofitable units had been kept alive, Sir Arthur Salter pointed out, by "frozen" and continuously renewed overdrafts at the "clearing" banks. This accordingly limited bank resources available to finance sound enterprises. It is, however, only fair to repeat that the postwar maladjustments were to a large extent due to neglect and to "dirigist" mismanagement during the war.

Building of private houses stopped before the end of 1914, and the housing shortage became acute. By 1919, 610,000 new houses were

TABLE III-1  
Balance of Payments, United Kingdom, 1907-1929  
(£ millions)

	1907	1910	1913	1920	1922	1923	1924	1925	1926	1927	1928	1929
Merchandise (including silver):												
Net imports	-127	-145	-132	-380	-176	-208	-337	-392	-463	-386	-352	-382
Gold:												
Net imports	-6	-5	-14	—	—	—	—	—	-12	-4	-6	—
Net exports	—	—	—	44	10	13	13	8	—	—	—	16
Balance of visible items	-133	-150	-146	-336	-166	-195	-324	-384	-475	-390	-358	-366
Government transactions:												
Net receipts	—	—	—	—	—	—	—	—	4	1	15	22
Net payments	-9	-9	-12	-7	-5	-25	-28	-11	—	—	—	—
Shipping freights												
Net receipts	85	90	94	340	110	133	140	124	120	140	130	130

	1907	1910	1913	1920	1922	1923	1924	1925	1926	1927	1928	1929
Overseas investments:												
Net income	160	187	210	200	175	200	220	250	285	285	285	285
Short interest, commissions, etc.:												
Net receipts	25	25	25	40	30	30	60	60	60	63	65	65
Other services:												
Net receipts	10	10	10	15	10	10	15	15	15	15	15	15
Balance of invisible items	271	303	327	588	320	348	407	438	484	504	510	517
General Balance:	138	153	181	252	154	153	83	54	9	114	152	151
Overseas Loans	89	189	198	60	135	136	134	88	112	139	143	94

SOURCE: League of Nations, *Selected Documents on the Distribution of Gold Submitted to the Gold Delegation of the Financial Committee* (Geneva, 1931), p. 35.



needed. The railways had been overworked, and much of their equipment was worn out. In the coal mines, the richest seams have been impatiently exploited. *There had been no reorganization or regrouping, despite government control.*

Elsewhere, there had been *much capital investment, often in ways harmful for the future.* Shipbuilding resources, for instance, greatly exceeded normal needs. New steel works had been created on the old sites near the ports (South Wales, Cumberland, Sheffield) instead of on the more economical sites, such as Lincolnshire, near the ore fields. The steel industry between the wars had too much capital in the wrong places and too little in the right ones. Again, the Cotton Control Board had preserved intact the pattern of an industry which was both over-capitalized and capitalized wrongly—too much equipment for Indian, and not enough for Egyptian, cotton. Yet immediately after the war new capital was poured into the old pattern. Most of it was sheer loss.<sup>36</sup> (*Italics supplied.*)

Through the five years following sterling stabilization, exports of the United Kingdom grew slowly while imports kept mounting year after year. The “visible” foreign trade deficit reached £463 million in 1926, but was less than £400 million in each of the next three years—still more than double the prewar deficit.<sup>37</sup> Nonmonetary factors played a decisive role. Exporters relied on the reputation and quality of British goods or on established marketing channels but neglected frequently to adjust to requirements of new technological developments and of consumer tastes.

As world trade as a whole was expanding, the British share of world imports remained about the same, being 16% in 1913 and 15.4% in 1929, but the share of the world’s exports fell from 13–14% to 10.86% in the same years. In the slump, Britain suffered rather less than many other countries, and her share of world exports rose slightly from 9.36% in 1931 to 10.37% in 1933, but it was back at 9.8% in 1937. Britain’s share of the world export trade in manufactured goods fell from 27.5% in 1911–13 to 23.8% in 1921–5 and 18.5% in 1931–8, and as a proportion of national income, overseas trade declined.<sup>38</sup>

Even Andrew Boyle, the pro-Keynesian biographer of Norman, had to admit that British exports suffered “only partly because exporters had to sell at higher prices. Since the goods they tried to sell were often old-fashioned in design, it is questionable whether potential buyers abroad would have wanted more of them at any price.”

To his credit, Norman fully realized what Keynes preferred to ignore: that "the staple industries on which Britain's pre-war trade had rested were in no fit shape to hold their own in the post-war world. They needed surgery, not featherbedding. . . ."<sup>39</sup>

Britain's difficulties were enhanced as long as her capital exports were restrained by an informal embargo (before the return to gold). But after 1925 all impediments in the way of capital flow were eliminated, notwithstanding the advice to the contrary tendered in 1928 by the Bank of France.<sup>40</sup> This freedom was, of course, an attribute of the gold standard, essential for the smooth functioning of its payments-equilibrating mechanism and for the City's international position. But the difficulty was that Britain's capital resources had shrunk and the foreign borrowers preferred to buy elsewhere; hence the mounting trade deficit.

At any rate, a basic fact of Britain's economic life then was, and in fact still is, the relatively slow growth of her industrial productivity, as summarized in Table III-2 from the figures of J. M. Letiche.<sup>41</sup>

Comparatively low per-man-hour productivity may have con-

TABLE III-2  
Compounded Annual Rate of Growth in Productivity Per  
Man-Hour in Manufacturing in Nine Nations, 1920-1938  
(% in selected years)

Country	1920-1938	1924-1928	1929-1933	1934-1938
United States	3½	2¾	1¾	7½
United Kingdom	2½	2	—¾	4
France	3	n.a.	n.a.	3½
Germany	2½	n.a.	2½	n.a.
Netherlands	3½	2½	3	4½
Sweden	3½	2¼	3	2¼
Canada	2¾	2	¼	5
Japan	3	6	4½	n.a.
Australia	2¼	3	—2	2

tributed to holding back British exports which should have risen in order to strengthen an otherwise weak balance of payments.

Britain, France, and Germany were responsible for 60–65 per cent of world trade in manufactures in 1913. Between World Wars I and II, the volume of world trade in manufactures never appreciably exceeded that of 1913; the peak of 1926–1930 was hardly above the 1913 level; the average of 1931–1935 was only 76 per cent of 1913; and the average of 1936–1938 was 92 per cent. The fact that the *share of Britain* in particular *was declining markedly within this reduced total* was the significant factor in impeding her international adjustment.<sup>42</sup> (Italics supplied.)

There were risks involved in the courageous move to restore sterling's monetary position; but Britain had to take them. It has been widely overlooked in the "posthumous" discussion that sterling was not only the chief accounting unit in international transactions at the time but was also the common denominator in a vast volume of short- and long-term credits outstanding on the Eurasian continent, and beyond. The perpetuation of exchange rate fluctuations may have induced traders to abandon the use of sterling. It was only vaguely understood, if at all, that at stake was what is called today the "world monetary system." It still was a sterling system. The likely alternative to restoring the gold standard, at the old sterling parity, may have been the breakdown of that system. That is what happened after September 1931.

### C. A Conflict of Ultimate Objectives—The Norman-Keynes Controversy

The foregoing pages have related the economic troubles of Britain in the 1920's—her merchandise imports rising faster than world imports, her exports relatively stagnating, and "massive" unemployment piling up.<sup>43</sup> They can all be explained without reference to the restored gold parity. In current sociological terminology, the troubles were of the structural kind, noncurable by monetary "medications." They have continued to persist, more or less, despite three subsequent sterling devaluations: 1931, 1949, 1967. The same problems existed in 1923–1924, while sterling stood at a 10 per cent discount. Then, adverse circumstances developed that could not have been foreseen in 1925; few if any of them could have been met adequately by debasing sterling. And, there were strong reasons for returning to the old parity.



From 1854 until 1914 the United Kingdom's balance of merchandise trade had been "unfavorable" in every single year, although the British share in world exports of manufactured goods in 1900 still amounted to 20 per cent of the total.<sup>44</sup> This trade deficit was more than offset by net revenues from foreign investments and other "invisibles," such as shipping, warehousing, insurance, and banking. These services were partly dependent on the City's position as an international financial center.<sup>45</sup> The surplus on current accounts thus created permitted the export of capital on a large scale without endangering Britain's payments position—a position that could scarcely have been restored and maintained if confidence in sterling were not re-established. For this reason alone, if for no other, fluctuating exchange rates (the "quicksilver standard," Churchill called it) were taboo.

Assuring foreign creditors that the "word" of the Bank of England was good even when keeping it implied "sacrifices," strengthened immeasurably the confidence in sterling. This was the more significant in view of the inherent strength of New York as London's competitor. Indeed, could one expect foreigners, and even British capitalists, to keep their funds in the City rather than on Wall Street, if the former were not as "safe" as the latter? The world's best-known clearing center could not function, if confidence in its monetary stability were impaired. The fact that Switzerland, Holland, and Sweden, the wartime neutrals, had restored the prewar parities of their currencies before England, and had suffered no "stabilization crisis," was a further argument in favor of Britain's proceeding along the same line.

More important was a consideration that had been clearly recognized by Governor Moreau of the Bank of France. It was he who had thwarted Poincaré's feeble attempt at a *révalorisation intégrale* of the French franc to its pre-1914 parity. "In a country," Moreau wrote in his diary, "where so many things are in need of reorganization, notably in the industrial field, while the money market is a marvel of precision, one understands that the political *dirigeants* (mangers) of England decided without hesitation to restore sterling to the pre-war parity. By restoring the financial prestige of England, they made it possible for the mechanism of the City to function again." And he added: "Mr. Vissering, the President of the Netherlands Bank, confirmed . . . that such was indeed the result of sterling's return to

the parity.”<sup>46</sup> Benjamin Strong, too, was emphatically in favor of sterling’s return to the old gold parity.

Was there any “sacrifice” involved? Negligible was the industrial and financial opinion in its vast majority, according to the *Report of the Chamberlain–Bradbury Committee* in January 1925.<sup>47</sup>

The British index of wholesale prices appeared to have outpaced its American counterpart by about 10 per cent. Given the *alleged* 10 per cent depreciation of sterling’s purchasing power against gold (or the U.S. dollar), theoretically a devaluation of the pound by that percentage had to occur in order to provide British export with a competitive base in the United States.<sup>48</sup> By this arithmetic, raising the dollar value of sterling to parity necessitated a 10 per cent “deflation” to adjust prices and wages. The choice was presented as one between an international orientation of a leading financial center and an “isolationist,” autarchistic program *à la* Keynes, “looking after the [domestic] price-level and letting the [foreign] exchanges look after themselves.”<sup>49</sup>

This presentation of the alternatives (by Keynes) was misleading even from a short-run point of view. Every monetary system, unless in a completely closed economy, is “international” in the sense that its domestic and foreign prices (in terms of gold units) must more or less mutually adjust. The internal and external value of money are *not* locked into noncommunicating compartments. They affect each other under every monetary regime. Yet the juxtaposition of Keynes’ two “principles” was accepted as an immutable truth and the dispute boiled down to a conflict of “ultimate” objectives. Exchange rate or gold price stability was supposed to be the sole aim of the “classical” precept, whereas stability of domestic prices and of employment—no depression—was the ideal of the managed money or dirigist school. For purposes of foreign exchange policy, the latter had a convenient formula on hand, the much-advertised purchasing power parity concept. Ricardo’s innocent analytical tool was now twisted by Gustav Cassel, the Swedish monetary economist, and his followers into an infallible guide post for policy.<sup>50</sup>

The problem of “purchasing power parities” arises only, Keynes emphasized, for nonconvertible currencies with variable exchange rates.<sup>51</sup> The concept denotes foreign exchange rates at which a unit of domestic currency buys the same “basket” of goods at home as it does abroad.<sup>52</sup> The analytical concept had been subtly transformed

into a policy dogma. If at given exchange rates domestic prices are higher than those abroad, the difference *should* be corrected by lowering the foreign exchange (gold) value of the currency in question. Contrariwise correction came about by raising it if the price differentials favored the domestic producers. As if commodity trade was the sole factor in determining the foreign exchange value of a currency! The policy implication was that each currency should be permitted to move to a level of external value that corrected the respective country's trading position. Otherwise, overvaluation of the currency might obtain. Relatively high domestic prices would impair the trade balance, cause a drain of gold, and force a price level deflation. Similarly gold influx and price level inflation would be sparked by undervaluation.

Hence, the dogmatic postulate was deduced that the dollar value of sterling should be permitted to stay, or rather, to hover, on the mid-1924 depreciated level in order to keep British prices on a competitive stance with American prices. Gradually raising the dollar value of sterling to the old par, from about \$4.40 in 1923–1924, to \$4.86, was declared anathema by the theorists. *A new economic orthodoxy was born*, promoted in the 1930's and thereafter to a categorical imperative. International price and income disparities must be corrected by varying the exchange rates, or by letting them fall wherever they may, rather than by permitting prices and costs to adjust themselves.

The fallacies involved in this approach are legion.<sup>53</sup> Cassel himself, seconded by Keynes, called attention to the fact that "our calculation of the purchasing power parity rests on the proviso that the rise in prices in the countries concerned affected all commodities in a like degree."<sup>54</sup> This was surely a dubious assumption. Then, too, which price levels are to be compared: wholesale, retail, or export and import prices? All purchasing power parity calculations were scientifically unacceptable; the findings were too contradictory. This was pointed out by a Keynesian(!) historian of the 1925 sterling stabilization.<sup>55</sup> To prove his point, Keynes chose for comparison the cost of living index of Massachusetts, the highest in the United States at the time, and that of the British Board of Trade. This too was a dubious technique to measure the difference between the pound's internal and external purchasing power at given exchange rates. Implicitly, he assumed that once the exchange rates had been set to fit the arbi-



trarily measured purchasing power parity, price levels would move in harmonious unison at home and abroad. A further implication was, that British wage rates, however inflated, could or should never decline. They actually did decline slightly in 1925–1926. Still another was that merchandise exports and imports are the one factor determining the over-all balance of payments and the exchange rates. This disregarded the “invisible” services as well as the international flow of capital.

The fallacy of manipulating the analytical approach to suit the preconceived policy objective was aptly shown up in a League of Nations publication by a Keynesian-oriented, Norwegian economist, Ragnar Nurske:

In any event it is clear that comparison of price movements in different countries is not sufficient for determining the equilibrium rates of exchange. The purchasing-power-parity approach, which uses price movements as the main criterion, tends to *neglect the important conditions affecting the volume of demand*; it treats demand simply as a function of price, leaving out of account the wide shifts in aggregate income and expenditure which occur in the business cycle (as a result of market forces or government policies) and which lead to wide fluctuations in the volume and hence the value of foreign trade, even if prices or price relationships remain the same. Especially in times of depression and in the early stages of recovery, the supply of goods and factors of production tends to be highly elastic, so that *great changes in effective demand may take place with little or no effect on prices*. For example, the striking revival of demand which occurred in the United States in the second half of 1938, reflected in an expansion of industrial activity by 35% and *a rise in the value of imports by 16%, was accompanied by a falling tendency in the general level of prices*. (Italics supplied.)<sup>56</sup>

The “Casselians,” including most Keynesians and “Friedmanites,” ignored the common experience that floating exchange rates may cause new domestic cost price distortions. They ignored, also, a psychological aspect of the problem: the absence of “automatic” restraints on wages and prices under fluctuating exchange rates. In any case, it was a futile exercise to rely on a comparison of national price indices covering broad categories of articles. The infinite variety of types and qualities of products within each statistical category frequently deprives over-all price averages of their usefulness in this

context. The indices may be actually misleading in view of daily and hourly price fluctuations which they fail to register. As a matter of fact, abundant data are available indicating that price *level* differentials are *not* the sole factor in maintaining or expanding a country's exports. "Qualitative" factors, like changes in technology or in consumer taste, may be more effective than sheer price competitiveness. As an example, the "hypertrophy" of German exports in the 1950's and early 1960's could not be explained in terms of price level differentials.<sup>57</sup>

At any rate, the choice between a stable gold parity and fluctuating exchange rates went far beyond a mere temporary question of balance of trade equilibrium. At stake was the role of gold. Norman's reaction to the Cassel-Keynes approach, in a letter to Strong, was couched in pragmatic terms:

. . . consideration of this subject [of relative price levels and exchange rates] by means of a chart needs more than the usual lines based on prices and facts; it needs . . . a line to represent the *psychology of people generally*. . . . There have always been some here to whom the idea of gold was repugnant. . . . (Italics supplied.)<sup>58</sup>

This was, indeed, the characteristic difference between a doctrinaire like Keynes, who knew better what people wanted than they did themselves, and an empiricist like Norman, who believed in adjusting policies to the preferences of people "in China and Peru as well as in New York and London."

Briefly, Keynes believed in a little England that was to go its own way, with scant regard to the rest of the world. It has been noted,<sup>59</sup> in this context, that there was not a single reference in his *General Theory* (1935) to the international economy! He was later to reverse this narrow view of the economic universe, but he did so under the influence of Norman.<sup>60</sup>

Would Britain's ability to compete on the world markets for industrial products really have been strengthened by currency depreciation? Lord Bradbury, a top-level Treasury expert and an intimate of Governor Norman, argued that returning to the old parity was necessary in order to terminate "living in a fool's paradise" and to restore "discipline" on the labor market. Also, the Casselian approach neglected the fact that depreciated exchange rates had meant higher prices for imported staples and higher production costs in a

country that *relied on imports for four fifths of its food and three fifths of its industrial raw materials*. It was assumed implicitly that foreign demand for exports from the devaluing country was highly elastic under all conditions; and that British exchange-dumping, which was what devaluation would have involved, would not call for retaliatory measures by other nations. Nevertheless "competitive devaluations" and foreign exchange restrictions were to be the response to Britain's departure from gold in 1931.

Actually, "exports fell in value [after the pound's revaluation], but

TABLE III-3  
The Balance of Payments of the United Kingdom on Income Account, 1924-1930  
(£ million)<sup>a</sup>

	1924	1925	1926	1927	1928	1929	1930
Excess of imports of merchandise and bullion	324	384	475	390	358	366	392
Government receipts from overseas (net)	-25 <sup>b</sup>	-11 <sup>b</sup>	4	1	15	24	21
Net national shipping income	140	124	120	140	130	130	105
Net income from overseas investments	220	250	285	285	270	270	235
Net receipts from short interest and commissions	60	60	60	63	65	65	55
Net receipts from other sources	15	15	15	15	15	15	15
Total	410	438	484	504	495	504	431
Estimated total credit balance on above items	86	54	9	114	137	138	39

New Overseas Issues on the London Market<sup>c</sup>

British Empire	73	58	52	88	86	54	70
Foreign	61	30	60	51	57	40	39
Total	134	88	112	139	143	94	109

NOTE: See Table III-1, above.

<sup>a</sup>From British official publications.

<sup>b</sup>Excess of payments made overseas.

<sup>c</sup>Midland Bank figures.

were 8 per cent higher in volume in 1929 than in 1924."<sup>61</sup> Throughout the post-stabilization years, until 1930, the British over-all balance of *current* payments was favorable in every year, the surplus varying between £9 million in 1926 and £137 million in 1928.<sup>62</sup> It had been £181 million in 1913, when the capital thirst of the British



Commonwealth was far less intensive. True, the annual surpluses were modest in money terms, and even more so in “real” terms. Due to the rigidity of domestic costs and to the wartime loss of interest revenues from capital invested abroad, the surplus on current accounts was not high enough to cover the long-term capital outflow. Since London had resumed its role as international financial center, even before the return to gold, the payments situation was bound to become precarious—unless merchandise imports were restrained or exports boosted. That devaluation would bring about an equilibrium was a highly dubious contention.

It was no mere coincidence that Keynes, the chief protagonist of British devaluation, and formerly a forthright Free Trader, soon became a passionate advocate of high tariffs. Devaluation itself would have been a most convenient technique for what amounted to raising import barriers and simultaneously providing all-round export subsidies. However, the rigidities written into the British economic system would have been hardened, thus delaying but by no means eliminating the necessity of ultimate corrections.

In any event, the British economy as a whole enjoyed relative price stability and expanding production under the gold standard of the 1920's. The index of industrial production, without building construction, rose from 85 in 1923 to 106 in 1929; with building included, it went from 98 to 112. Financially, Britain's leadership role in Europe, and in the League of Nations, had been re-established. Yet, Keynes had succeeded in implanting in the public, and the academic, mind, the conceptual distinction between an “international” standard and one that is domestic-oriented. This brilliant stratagem laid the foundation for the political victory, in the 1930's, of monetary dirigism over the gold standard.

In a world of strongly nationalist tendencies, the currency system that was supposed to serve the domestic needs was more likely to enjoy popular preference. No anti-Keynes was to arise to show forcefully that such a distinction was not a valid one. In reality, every money system is “international,” unless a country is surrounded by totalitarian walls. In this respect, the difference between money systems is one of degree, of faster or slower, of more or less complete “synchronization” of interest rate and price trends, as mentioned before.

Yet, the dividing line between these two schools, the domestic-

oriented and the international-oriented, cut very deeply. The discussions of the mid-1920's barely touched on the conflict in hypotheses that lurked behind the clash between the followers and the critics of Montagu Norman's gold standard policy.<sup>63</sup> The former's implication was that the price and volume of available, short-term, credit had to be adapted, more or less, to the flow of gold, that is to the balance of payments. But one of the most objectionable features of the international gold standard, in the eyes of Keynes, was its short-run effects on business activity and volume of employment. In the hearings before the Macmillan Committee, in 1930, Norman defended his position, none too effectively, against Keynes by pointing out that as a rule raising the Bank of England's discount rate would bring about the expected result, an equilibrium in the balance of payments, *before any appreciable "damage" to prices and employment occurred*, other than the forced liquidation of undesirable speculative positions.<sup>64</sup>

The schism dividing the spirits was, briefly, whether the "discipline" of the gold standard's "automatism" should or should not be operative. In that celebrated debate, the Governor, who lacked the academician's dialectical facilities, was "cornered" by Keynes, "the incarnation of dialectical skill and with a lifetime of experience in the verbal dissection of the most subtle points of philosophy and economics."<sup>65</sup> Norman's evidence before the Macmillan Committee, as Clay has summed it up,

throws a good deal of light on his practice when he was preparing for the restoration of the Gold Standard. He was a bad witness, because he was answering interrogations by critics who had a clear theoretical view of events, while he deliberately refused to generalise, and explained his action as a series of responses to particular market situations which were never quite the same. He began by referring to the background against which all his judgments were made—the "troublesome question of perpetual maturities of debt" in the domestic situation, and the urgent need of restoring stability to the economics of European countries . . . Asked whether in moving Bank Rate he had in view the consequences to the industrial position of the country, he replied: "So far as the legislative position goes, we are, but so far as the international position goes, not at all a free agent: the whole of the international machinery is bound together and . . . necessarily works as a whole . . ." Sometimes international considerations were

not predominant; he had to look “inwards” as well as “outwards;” but the advantage at home to industry and commerce of maintaining the country’s international position was paramount. He recognised the difficulties of industry but did not think they were caused by financial policy.

Pressed by Keynes, who explained that the Bank Rate was “effective,” as Norman said it was, in correcting an adverse international position only by causing domestic unemployment, he . . . admitted that the external and domestic effects were necessarily linked. But he thought, first, that the *effect of Bank Rate was largely exhausted in the short money market*; it was effective frequently without the necessity of any open market operations on the volume of money to enforce it; *he judged the position mainly by the situation in the short money market, and did not wait for an outflow of gold*. The untoward effects on British industry of returning to gold he attributed to the *subsequent* stabilisation of the currencies of foreign competitors, particularly France and Belgium, at much lower rates than ruled when we stabilised. (Italics supplied.)<sup>66</sup>

The Keynesian, domestic-oriented approach implied several doctrinaire assumptions: that the level of interest rates is the crucial factor in the business cycle, because its rise, as was necessitated by the return to gold, unavoidably stymies enterprise, forces liquidation, and generates unemployment; that the restoration of the pre-1914 pattern of international trade was *not* essential to Britain’s prosperity; and that unemployment cannot be cured except by the deliberate injection of massive doses of credit without regard to their effect on “liquidity” and prices. All told, Sir Theodore Gregory’s verdict about Keynes’ famous anti-Norman pamphlet of 1925 can hardly be contradicted. “*The Economic Consequences of Mr. Churchill*, brilliant and effective as it was, was propaganda and not the reasoned piece of analysis which one might have expected from a responsible writer and thinker, whose influence in the world was already very great.”<sup>67</sup> Yet, Keynes’ influence was to grow immensely without any visible effect on his methodological standards in matters of monetary policy.

It should be noted again that in 1924–1925 only two alternatives were discussed: a return to the old parity or floating exchange rates. Stabilization on a level below \$4.86 was not given serious consideration. And rightly so, for the world markets would have taken it for



granted that a \$4.40 sterling, as an example, would only last as long as it suited British export interests, and that the “stabilization” was a mere disguise for an intended system of conveniently floating exchange rates.

The case for sterling’s return to parity was strengthened by the prevailing, but erroneous, expectation that American prices would soon rise due to the influx of gold there. This was taken for granted by Keynes, too.<sup>68</sup>

#### D. The Mystique of Devaluation

By late 1925, according to Professor T. E. Gregory, the British cost of living index had adapted itself to its American counterpart.<sup>69</sup> Relatively high interest rates (the official discount of 5 per cent remained in force until late 1926) and moderate credit restraints by the Bank of England may have been instrumental in bringing about some deflationary pressure.<sup>70</sup> On the whole the period 1924–1929 was one of rising credit volume and high prosperity in Britain, the “distressed” industries aside. Improvement in her terms of trade was a contributing factor. That improvement was due to weakening raw material prices and would have been imperiled by a sterling devaluation.<sup>71</sup> Public criticism of the return of the old parity died down after 1925, to be resuscitated in 1930.

During the Great Depression and ever since, a myth took hold of the economists’ imagination. The Act of 1925 achieved the status of a *deus ex machina* that not only kept as many as 1.2 million Britishers unemployed throughout the 1920’s, but somehow brought about the subsequent downfall of the gold standard. In the hearings of the Macmillan Committee (1931) a union leader, Ernest Bevin, blamed the return to parity for the general strike of 1926. Reginald McKenna, the “politician-banker,” argued that it forced Britain into a five-year-long deflation of the money supply. In reality, the tremendous growth of the money supply in 1914–1919—including time and savings deposits—had left behind a volume of “pent-up” purchasing power that was a major disturbing element in Britain’s financial picture.<sup>72</sup> And that money supply rose further during the second half of the 1920’s.

Let’s look more closely at this viewpoint. Financially, devaluation would not have brought relief either to the Exchequer or to the

TABLE III-4  
Cost of Living (Gold Basis) in United Kingdom and United States, 1922-1925

Date	Sterling cost of living	Rate of exchange (\$)	Gold cost of living in Britain	American gold cost of living	Massachusetts gold cost of living	Ratio of American cost of living to British	Ratio of Massachusetts cost of living to British	Trade union index of unemployment (%)	Weekly wage index	Gold wages index	Real wages index
1922											
2nd Qr.	182	4.44	166	167	152	100	91	16.4	202	183	111
4th Qr.	179	4.51	166	170	154	102	93	14.1	179	166	100
1923											
2nd Qr.	169	4.63	169	170	156	106	97	11.2	177	169	104
4th Qr.	176	4.42	169	173	158	108	99	10.4	173	157	98
1924											
June	169	4.32	150	169	154	113	102	7.2 <sup>a</sup>	178½	158	105
Dec.	171	4.69	174	173	158	99	90	9.2	179	173	94
1925											
June	172	4.86	172	174	159	101	92	12.3	181	181	105
Dec.	177	4.85	177	178	165	100	93	11.0	180	180	102

SOURCE: T. E. Gregory *The First Year of the Gold Standard* (London: Ernest Benn Ltd., 1926), p. 52.

<sup>a</sup>Excludes Building Trades from this point.

capital account of the payments balance. The £850 million war debt to the United States, plus £400 million to other nations, had been contracted largely in dollars. On the other hand, by sterling devaluation, lightening the burden of the £1,825 million British credits to Allied countries would have relieved *the debtors*. (The volume of British-owned foreign securities had been reduced by £550 million by forced liquidation during the war.<sup>73</sup> The “net dead weight” of the enormous internal debt would in no way have been lightened by a sterling devaluation, unless this had led to a fresh inflation of prices and wages. The internal debt had skyrocketed from £650 million in early 1914 to £6,587 million at the end of 1923, a tenfold increase.<sup>74</sup> The annual servicing cost alone amounted to almost 50 per cent of the total budgetary revenues. And if prices and wages had risen as a result of a devaluation, thus lightening the internal debt burden, this would have been offset by increases in production costs, which in turn would have negated the “beneficial” impact of the devaluation on employment in the export industries. And Britain’s refusal to return to the old parity would surely not have enhanced the international marketability of British bonds.

The alleged overweight of Britain’s national debt was invoked after 1931 as a chief factor in “forcing” her off the gold standard. The service charges, together with the “dole” to the unemployed, were considered as responsible for excessive taxation and for unbalancing the budget after 1929.

But was the British tax load, probably the world’s heaviest, a factor in reducing the United Kingdom’s propensity to export in the 1920’s? A comparison with Germany should be instructive. The two countries’ exports were remarkably similar in composition, albeit with greater emphasis on textiles in the British case. Germany’s national debt—roughly 100 billion goldmarks (nominally \$24 billion) at the end of the war—had been wiped out by the runaway inflation. But she had a reparations burden to carry, the capitalized value of which was set in 1921 by the London Ultimatum tentatively at over \$30 billion. That was about equal to the nominal value of the British debt of which, however, only £1 billion were “external.” But that portion was offset by British claims on German reparation and on inter-Allied debt payments, whereas reparations constituted an external debt, one complicated by a “transfer” problem.<sup>75</sup> The British income tax was gradually reduced after 1919; German income tax



TABLE III-5  
United Kingdom Net Deadweight Debt, 1914–1934  
(£ thousands)

March 31	External debt <sup>a</sup>	Internal debt	Total
1914	nil	649,770	649,770
1919	1,364,852	6,070,097	7,434,949
1920	1,278,713	6,550,066	7,828,779
1921	1,161,563	6,412,795	7,574,358
1922	1,088,670	6,565,631	7,654,301
1923	1,155,653	6,586,580	7,742,233
1924	1,125,813	6,515,234	7,641,047
1925	1,121,600	6,476,248	7,597,848
1926	1,110,768	6,447,876	7,558,644
1927	1,101,454	6,453,164	7,554,618
1928	1,095,229	6,432,588	7,527,817
1929	1,084,684	6,415,654	7,500,338
1930	1,074,159	6,394,880	7,469,039
1931	1,066,663	6,346,646	7,413,309
1932	1,090,837	6,343,106	7,433,943
1933	1,060,435	6,583,358	7,643,793
1934	1,036,545	6,785,785	7,822,330

SOURCE: *House of Commons Sessional Papers, 1933–1934*, vol. 16, Command Paper 4697 on “National Debt,” pp. 6–7.

<sup>a</sup>At par of exchange.

rates rose after 1924. Germany, moreover, entered the post-inflation era with more worn-out and run-down industrial and transport equipment than was Britain's case at the end of the war. Also the German people's foreign investments had been confiscated by the Allies. Yet, German industry recovered faster and more effectively than the British did.

Both countries ran deficits in their trade balances; but in Germany's case this was due to an excess of capital inflow whereas Britain was up against an excessive capital outflow. Incidentally, Germany's new currency was re-established in 1924 on the prewar gold base, foregoing any potential “advantage” of a lower parity. Her

prices rose somewhat after the stabilization in contrast to stable or slightly declining British prices. Her exports were not less victimized than those of the United Kingdom by tariff walls rising all round, or by the sharp depreciation of the French, Italian, Belgian, and other currencies.

Nor was Britain the only country that had “upvalued” its currency after the war. If a deflation by 10 per cent, or less, imposed on sterling was responsible, allegedly, for an unprecedented volume of unemployment, how much unemployment was to be expected in France from the swift near-doubling of the franc’s external value, within a few months to late 1926—from 240 francs to about 125 francs to the pound? British experts had predicted a French “stabilization crisis,” but it never materialized.<sup>76</sup> The same question should have been, but apparently was not, raised with respect to the reform of the Italian lira that was stabilized in 1927 by boosting its actual, depreciated foreign exchange value from less than three American cents to almost four cents. That was 27 per cent of the prewar parity. In both countries, a substantial business upturn and a reduction of unemployment were the near-term outcome of the “deflations.” On the other hand, hyperinflations in Central Europe had resulted in short but extremely severe stabilization crises.

The Dirigist Money School, with Keynes as its natural leader, remained convinced that the curse of unemployment and of bitter labor strife that beset Britain throughout the 1920’s was the consequence of the return to gold parity. The spread and ultimate dominance of this myth had emotional roots that became apparent as the drama unfolded, especially in the coal fields of Great Britain.

Keynes was, however, on solid ground when he criticized the return to gold without adequate deflation of the outstanding credit volume. Defenders of the official policy also raised that objection. Montagu Norman, so it was claimed, relied on a gold reserve that had been fattened by the inflow of capital speculating on sterling’s revaluation, and on the ability of the Bank of England to attract foreign funds by its discount policy. Clearly, this was a weak monetary foundation. Norman’s thinking was based on prewar experience, ignoring the change in the political and financial “scenery.” But Keynes, in turn, was caught in a blatant self-contradiction. On the one hand, he argued that discount rates and the capital flow have no effect on foreign trade. This was his stance in the debate on the

“transfer” of reparation payments.<sup>77</sup> Yet in the debate over Britain’s return to gold, he insisted that the discount rate was a most powerful instrument in determining the level of employment and prices.

Norman and his collaborators were relying on the “discipline” of the gold standard. It was supposed to operate as it had in the past. But before 1914 there was no “dole” for the unemployed who would rather accept a lower standard of living than take a wage cut or make an effort to increase his productivity. And before the war cheap money was not a categorical imperative of statesmanship, certainly not in Great Britain.

### **E. “Social Justice” versus Gold**

Britain’s gold standard that emerged in full armor by 1926 had been shaped to the pre-1914 pattern. In form it was the identical institution, but with “embellishments” which revolutionized it. In any case, the “spirit” was not the same. One is reminded of Alexis de Tocqueville’s dictum that the operation of institutions depends on the minds of the men who run them, rather than on the laws by which they are regulated.

I would to God that I believed more in the omnipotence of institutions! I would have higher hopes for our future because chance could on some given day then allow us to fall upon the precious piece of paper that would contain the prescription. But alas! It is not so, and I am thoroughly convinced that political societies are not what their laws make them but what they are prepared in advance to be by the feelings, the beliefs, the ideas, the habits of heart and mind of the men who compose them, and what native disposition and education made these men be.<sup>78</sup>

Men’s attitudes toward the institution of the gold standard had changed. The war and its aftermath had undermined the belief in the automatic and beneficial self-regulation of the free market system, of which the gold standard and its “mechanism” were an essential ingredient. It came increasingly under the fire of critics. Was it really necessary, they argued, to “strangulate” a business upturn in order to protect the gold reserve and the currency’s convertibility? Likewise the ubiquitous vested interests in cheap money, price inflation, and fluctuating exchange rates contributed their share to circumvent the protection of creditors’ and savers’ rights, a protection which the



gold standard implied. Politically the most significant factor was the resistance of organized labor to the alleged or real impact of the monetary “mechanism” on wages and employment. In Britain, the restored gold standard’s future was imperiled from the outset, not by any shortage of gold but by a surplus of coal and of cotton yarn.

The showdown came upon the heels of the sterling stabilization. Coal mining was the weakest sector. Previous to the war, it had been a mainstay of Great Britain’s prosperity, providing over one million men with a livelihood.<sup>79</sup> Presently, it became one of the weakest spots in her industrial armor. During and immediately after the war, production had expanded to meet a swollen demand, with the United Kingdom as the Allies’ and Neutrals’ chief source of supply. But precious little had been done to improve either the equipment or the financial structure. By 1925, Continental competition was making itself felt to the full. The French and Belgian mines had been rehabilitated; the coal fields of the Ruhr and of Upper Silesia were back in operation. They were partly modernized, their unit costs were reduced, and they operated at relatively low wages. British coal, to a large extent, was noncompetitive. The Samuel Commission presented in March 1926 a rational solution.<sup>80</sup> A substantial number of miners should move to other areas where employment opportunities were available. The miners refused to budge, except for a relatively small fringe of “newcomers” who had been brought in from the outside during the wartime coal boom. The miners indignantly rejected any suggestion of an increase in working hours, or of a moderate cut in wages that had been inflated during the war and boosted further under the first Ramsey MacDonald regime (1924). And the owners, embittered through incessant labor conflicts, rejected the counsel to become more efficient by introducing modern techniques and merging small collieries. The recalcitrant miners went on strike and were locked out. The upshot was the short and abortive general strike of 1926, resulting in slightly lower wages and massive unemployment in the coal fields, an unprecedented defeat for Britain’s organized labor.

Limited as the crisis was, it served well the anti-gold standard objectives of distinguished economists like D. H. Henderson, Sir Josiah Stamp, and company. But they did not form public opinion; not even the polemics and pamphleteering of J. M. Keynes could do that. He did succeed, however, in convincing the powerful press

magnate, Lord Beaverbrook, that the unfortunate miners were paying for a conspiracy between Governor Montagu Norman and Chancellor Winston Churchill, to preserve the profits of the “international bankers” rather than enhance the welfare of the British workingmen. This appeal to “mob instincts and nationalistic sentiment,” spread over the 6,000,000 circulation of the *Daily Mail* and related papers, could not fail to impress a public that knew little, and cared less, about such esoteric matters as monetary policy. But people willingly lent their ear to hair-raising stories about financial conspiracies against the national welfare. “Intellectual” sponsorship by an illustrious Cambridge don added to the story’s plausibility. “Hard money” became identified, as unemployment persisted, with high interest rates and a modernized version of economic tyranny. The “heat” was on the politicians and they, in turn, put pressure on the Bank of England, weakening in effect its defensive posture on the foreign exchange markets. It was almost a foregone conclusion, although not perceived until years later, that if sterling should come under fire in a crisis, the “psychological” defenses against mass sentiments might well prove insufficient to withstand the political onslaught.

The crisis did come, and too soon. Montagu Norman, the architect of the return to gold, although aware of the difficulties and pains of adjustment, had presupposed a twenty-year or similar period of reasonable “peace and prosperity.” This assumption was shared by many experts of the mid-1920’s, including Benjamin Strong, who enthusiastically supported the British Governor’s philosophy and sterling’s return to gold. Why, indeed, should British industry (one can read between the lines of Norman’s diary) not be able and willing either to improve the old apparatus or, wherever improvement might be useless, scrap it and turn to radically new lines? Why should labor not move from one occupation or location to another, as it had time and again over the centuries? Why would the “mechanism” of the gold standard be less effective in the future than it had been in the past, in forcing whatever correction was necessary in order to bring the balance of payments into equilibrium and keep it there?

All this was perfectly rational, except that these bankers did not recognize the significant changes, economic and political, affecting the functioning of the monetary system that had taken place. When in the very center of the international credit system labor refused to

tolerate even minor or temporary hardships and obsolete business was determined to hold its own, preferably at the Treasury's and the consumer's expense, both supported by major segments of public opinion, the message should have been clear that one could no longer play the gold standard "game" by its classical rules. The Welfare State's determination to bypass the "automatism" resulted in *making the gold standard nearly unworkable*. In the century before 1914 the gold standard survived and flourished because it had never been exposed to such chronic strains as now appeared in the interwar era.

The men primarily responsible for sterling's return to the old parity were not "reactionaries," insensitive to the sufferings of their fellow men. Nor did they consider unemployment an "incurable disease," as one of Norman's biographers, Andrew Boyle, has insinuated. They believed in progress, and saw competition as its driving force, and not in preserving "frozen" vested interests by fiscal "tinkering" (subsidies) or by cheap money at home and foreign exchange dumping abroad. Thinking in terms of sustainable wealth creation, they rejected policies of a "beggar-your-neighbor" kind. Imbued with the outlook of nineteenth-century economic liberalism, their attention was focused on people's *real income*, not on nominal wages. Brought up in the spirit of "classical" ideals—free enterprise and individual responsibility—they were deeply suspicious of the direction in which the Managed Money advocates were driving, consciously or otherwise.

Keynes, by contrast, had a clear vision of the political realities—of the rising power of labor and of its mentality (at the time of falling prices). He stated his position in the aggressive and ambiguous terms of the *tribunus populi*:

On grounds of *social justice* no case can be made out for *reducing* the wages of the miners. They are the victims of the Economic Jugger-naut. They represent in the flesh the "fundamental adjustments" engineered by the Treasury and the Bank of England to satisfy the impatience of the City fathers to bridge the "moderate gap" between 4.40 dollars and 4.86 dollars. They (and others to follow) are [preaching] the "moderate sacrifice" still necessary to ensure the stability of the gold standard.<sup>81</sup> (*Italics supplied.*)

The slogan "social justice" has often served to disguise totalitarians, from Moscow to Buenos Aires. It was used in the 1920's for



many purposes, legitimate or otherwise, but outside France scarcely, if ever, in favor of widows and orphans living on fixed pensions. Keynes never explained the meaning of this emotion-laden term. It comprised the policy objectives he had adopted, especially stable nominal wage rates.<sup>82</sup> At the time it had served well to create the impression that any reduction of nominal wage rates—even after they had spurted ahead of “productivity,” as in 1924—would force the workers into a miserable condition. It is interesting in this context to note the judgment of a true “social reformer,” a woman of great scholarship and perspicacity, who was not motivated either by shallow sentimentality or political opportunism:

There must be a scarcity of political constructive minds [Beatrice Webb wrote in her diary on August 9, 1926], if J. M. Keynes seems such a treasure . . . I think his love marriage with the fascinating little Russian dancer has awakened his emotional sympathies with poverty and suffering . . . but he is contemptuous of common men especially when gathered in herds. . . . What Keynes might achieve is a big scheme of social engineering; he might even be called in to carry it out, but as an expert and not as a representative . . .<sup>83</sup>

Beatrice Webb, the passionate Socialist, was equally critical of others who, like Keynes at that time, implied or asserted that “the prevention of unemployment was an easy and rapid task instead of being a difficult and slow business involving many complicated transactions and far more control over capitalist enterprise than anyone as yet has worked out.”<sup>84</sup>

Keynes had his own approach. It must be assumed that he was familiar with the unhealthy conditions prevailing in certain branches of British industry and probably aware of the fact that rectifications, however painful, were unavoidable. If he failed to mention them, it was for his own reasons. Temperamentally exuberant and self-reliant, he was a man of action, immediate action, with an extraordinary flair for voicing the “common man’s” inarticulate longings and for the showmanship of paradox. Undeterred by classical traditions which emphasized “real” wealth as against monetary concepts, he turned to the monetary (credit) machinery as being the natural lever to revamp the economic process with a minimum of resistance and complication. It was the one lever with the aid of which, he thought, the painful industrial readjustments could be avoided.<sup>85</sup>

The Norman-Keynes controversy should not be overdramatized. Yet they were the chief protagonists in the conflict of the two schools of thought, the most distinguished representatives of one side and of the other. Norman stayed in the background, preferably hidden behind the high walls of the Old Lady of Threadneedle Street, whereas Keynes stood in the glare of maximum publicity. There was much written about this colorful intellectual struggle, but one essential point seems to have been overlooked: their community of interest. Both understood from the outset, better than most of their contemporaries did, that the war had deprived Britain of her basic strength, of her strong position as *the* international merchant and banker. The question was: What role should Britain play from now on? Keynes' idea was that the United Kingdom must withdraw into itself, as it were, and try to make a good living by intensified, and managed, domestic expansion, without any major adjustments which might imply capital losses and unemployment. The idea had a strong appeal to the masses. Norman's concept was different. As he saw it, the United Kingdom had been so weakened as to be no longer capable of standing on its own feet. International cooperation was his prescription for Britain; and to him the restored gold standard was the vehicle as well as the *conditio sine qua non* of international cooperation.<sup>86</sup>

Arguments about the desirable monetary system, however, were only a part of the controversy. Monetary ideologies obscured until 1930 the true bone of contention: the fiscal policy controversy. An annually balanced, or overbalanced, budget was the logical correlate of the return to gold. Solving the unemployment problem by fiscal techniques—unbalanced budgets—became Keynes' chief objective in the depression. By 1936, he was to provide the "general" theory to underpin fiscal policy in the following three decades, and longer: the ideology of deficit financing.<sup>87</sup>

### Notes to Chapter Three

1. See Tables II-1, above, and V-5, below.
2. For the Bank of England, the Cunliffe Committee (1918) had set £150 million as the minimum requirement.
3. About the complexities of the zloty stabilization, see Lester V. Chandler, *Benjamin Strong*.

- Central Banker* (Washington, D.C.: Brookings, 1958) p. 390 f. See also Republic of Poland, Reports submitted by the Commission of the American Financial Experts, headed by Dr. E. W. Kemmerer (Warsaw: Ministry of Finance, 1926), pp. 1–48.
4. See chap. 4, Sec. D, below.
5. By early 1926 the gold standard was operative, at least *de facto*, in thirty-nine countries. See W. A. Brown, Jr., *The International Gold Standard Reinterpreted, 1914–1934* vol. 1 (New York: National Bureau of Economic Research, 1940), p. 395.
6. See Sedillot, *Le Franc*, pp. 249 ff.; Sauvy, *France entre Guerres*, vol. 1, chap. 13.
7. See Moreau, *Souvenirs*, p. 192.
8. See Richard A. Lester, "The Gold Parity Depression in Norway and Denmark, 1924–1928," *Journal of Political Economy*, August 1937, pp. 433–467 (from the Keynesian angle). Finland followed the advice of Professor Ely Heckscher (Stockholm). For a searching analysis, see B. Ohlin, "Den Danska Kronan efter 1914," *Ekonomisk Tidskrift*, no. 3 (1927).
9. Sweden enjoyed an unprecedented boom in the 1920's, although the Swedish krona had returned to the old parity—ahead of sterling—and had been moderately "deflated." This was also true of the Dutch gulden. In neither case was any appreciable pressure on employment caused by the currency stabilization. See Sec. C, below.
10. See James R. Mood, *Handbook of Foreign Currency and Exchange* (Washington, D.C.: Department of Commerce, 1930).
11. See chap. 5, sec. B, below.
12. See chap. 9, sec. A, below.
13. The *Report of the Committee on the Currency and Bank of England Note Issues*, appointed by Chancellor Winston Churchill in 1924, reiterated the same conclusion. See T. E. Gregory, *The Return to Gold* (London: Benn, 1925), pp. 38ff.
14. Britain's intention of returning to convertibility was foreshadowed by a Treasury Minute of December 15, 1919, which prescribed that "the maximum fiduciary or uncovered circulation of any year cannot be exceeded in any subsequent year, although it need not be reduced below this amount in any subsequent year." (Gregory, *Return to Gold*, p. 45.) This measure helped to strengthen confidence in sterling.
15. See Federal Reserve Board, *Annual Report* (1926), pp. 12–13. Another \$50 million standby credit was arranged with J. P. Morgan but also was never used.
16. The otherwise strongly protectionist Federation of British Industries favored the return to the old parity. (Chandler, *Benjamin Strong*, p. 311.)
17. When Mr. (Stanley) Baldwin became Prime Minister for the second time, the opponents of the policy advocated by the Cunliffe Committee were confined to a small number of those who were susceptible to the still small voice of Keynes, and this in spite of the fact that still small voice was already beginning to be immeasurably amplified by the multiple organ of Lord Beaverbrook. . . . In March (1925), Bank Rate was advanced to 5 per cent, which . . . meant that a decision had been taken . . . In Winston's private circle there were a few of the Keynes-cum-Beaverbrook school who vehemently put the case for not returning to gold at all, there were others who pressed him to wait, and others again who advocated a return but at a somewhat lower gold equivalent . . . Nor did his advisers ever conceal from him that a decision to return might involve adjustments which would be painful and that it would certainly entail a more rigorous standard of public finance than any system of letting the exchange go wherever the exigencies of a valetudinarian economic and financial policy took them . . . Keynes' thesis . . . was that the discrepancy . . . was . . . 10 per cent . . . we should . . . have to deflate domestic prices by something of that order. This meant unemployment and downward adjustments of wages and prolonged strikes . . . at the end of which it would be found that these industries had undergone a permanent contraction. It was



much better, therefore, to try to keep domestic prices and nominal wage rates stable and allow the exchanges to fluctuate. (Grigg, *Prejudice and Judgement*, p. 184.)

18. See Taylor, *English History*, pp. 122–126.
19. "It appears that in the case of railways, at any rate, British foreign investment over a wide portion of the globe is very largely represented by orders to British manufacturers for railway materials and rolling stock." (C. K. Hobson, *The Export of Capital* [London: Constable, 1914], 1963.)
20. A. E. Kahn, *Great Britain in the World Economy* (New York: Columbia University Press, 1946), pp. 75–76.
21. See especially chap. 6, sec. E, chap. 7, sec. B, and chap. 9, sec. B, below.
22. See, e.g., J. W. Lea, *Britain's Decline* (Birmingham: Cornish, 1922); Arthur Marwick, *British Society and the First World War* (Boston: Little, Brown, 1966); A. G. Youngson, *British Economy, 1920–1960* (Cambridge: Harvard University Press, 1960).
23. Taylor, *English History*, pp. 148 ff.
24. Sidney Pollard, *The Development of the British Economy* (London: Edward Arnold, 1966), p. 53.
25. This was part and parcel of the postwar political trend that has immeasurably enhanced the power of the Laborite parties in the industrial countries of Europe.
26. Clay, *Lord Norman*, pp. 168–169. As to the near-bankrupt condition of the cotton trade, Britain's greatest export industry, see *ibid.*, pp. 333–334.
27. Fred Benham, *British Monetary Policy* (London: P. S. King, 1932), pp. 27 f.
28. Quoted in the *London Economist*, March 16, 1935, p. 593.
29. London: Gollancz, 1935.
30. Guy Routh, *Occupation and Pay in Great Britain, 1906–1960* (Cambridge University Press, 1965).
31. Clay, (*Lord Norman*) extolled the untiring efforts of Montagu Norman to help the reconditioning of British industries—certainly an extraordinary preoccupation for a central banker.
32. See A. L. Levine, *Industrial Retardation in Britain* (New York: Basic Books, 1967); S. B. Saul, *Studies in British Overseas Trade* (Liverpool, 1960), chap. 3.
33. "British overseas trade (it was being said) has been conducted in the past too much, as it were, in the English Club, in the sea-ports and with a 'take it or leave it' attitude to the 'dagoes' who are the inhabitants of the country and the customers of British trade. Individual instances of failures on the part of British manufacturers to meet local requirements occur almost daily. Most of these are relatively trivial, but they typify an ignorance of, and lack of contact with, foreign markets which are symptomatic of fundamental shortcomings." (Pollard, *British Economy*, p. 184.)
34. The point was emphasized in *The Nation* (London), August 21, 1930—a liberal organ strongly in favor of sterling devaluation.
35. See the illuminating testimony of Dr. W. W. Stewart before the Macmillan Committee on July 3–4, 1930, printed in the *Minutes of Evidence*. It was later reprinted by the American Enterprise Association under the title *Monetary Policy and Economic Prosperity*. (New York, 1950).
36. Taylor, *English History*, pp. 124–126. See also S. E. Thomas, *British Banks and the Finance of Industry* (London: Routledge, 1937).
37. See Table III-1.
38. Pollard, *British Economy*, p. 188. See also, G. D. H. Cole, *British Trade and Industry* (London: Macmillan & Co., 1932), chap. 9.
39. Boyle, *Montagu Norman*, p. 222.
40. See chap. 5, sec. B, below.
41. J. M. Letiche, "Differential Rates of Productivity Growth and International Imbalance,"

- Quarterly Journal of Economics*, 1955, p. 377. Letiche (p. 378) cites a number of historical case studies, all supporting the conclusion that "compared with most western European industrial countries Britain definitely lagged behind." According to E. H. Phelps-Brown and M. H. Browne (*A Century of Pay* [New York: St. Martin's Press, 1969]), unit wage costs in manufacturing declined in Britain between 1925 and 1929 from 100 to 95, in the United States from 100 to 90, and in Sweden from 100 to 88, but rose from 100 to 112 in Germany. See K. S. Lomax, "Production and Productivity Movements in the United Kingdom Since 1900," *Journal of Royal Statistical Society* (1959); D. A. Aldcroft, "Economic Growth in Britain in the Interwar Years," *Economic History Review*, August 1967.
42. Letiche, "Rates of Growth," pp. 397 f. See Austin Robinson, "The Future of British Imports," *Three Banks Review* (London), March 1935, p. 8—in the same sense. About British "economic senescence," see John Knapp, "Pragmatism and the British Malaise," *Lloyds Monthly, Bank Review*, October 1968; about insufficient standardization, see Clive Day, *Economic Development of Europe* (New York: Macmillan Co., 1942), p. 213.
43. From 1851 to 1914, with a few exceptions, the rate of unemployment reported by unions making returns was low, generally around 3 per cent; from 1921 through 1926 it averaged about 12 per cent, ranging from 8.1 per cent in 1924 to 15.2 in 1922. See B. R. Mitchell, *Abstract of British Historical Statistics* (Cambridge University Press, 1962), pp. 64–65.
44. W. A. P. Manser, "Should We Close the Trade Gap?" *Westminster Bank Review*, February 1966. See Table III-1, above.
45. "During most of the first six decades of the nineteenth century net receipts from invisibles accounted for between 25 and 30 per cent of all receipts from the rest of the world. During the four decades before the First World War they were running at an average level of 35 to 40 per cent of total receipts from abroad." (Phyllis Deane and W. A. Cole, *British Economic Growth, 1688–1959* [Cambridge University Press, 1962], p. 35.)  
 "In fact, for at least a century now the very broad pattern of the United Kingdom's balance of payments has been as follows: a deficit on the trade balance (except in 1956 and 1958); a net out-flow on long-term capital account (except between 1946 and 1950), heavy at times, especially before 1914; and a surplus on invisibles which was generally sufficient, up to the Second World War, to cover deficits on the other two major accounts." (M. Panic, in *Lloyds Bank Monthly*, July 1968, p. 13.)
46. Moreau, *Souvenirs*, p. 136.
47. Clay, *Lord Norman*, p. 151. Detailed analysis of that report is to be found in D. E. Moggridge, *The Return to Gold, 1925* (Cambridge University Press, 1969), pp. 25 ff. This scholarly but thoroughly biased (Keynesian) presentation reached this writer shortly before completion of his manuscript.
48. Ten per cent was the accepted figure. By D. T. Jack's computation, the disparity in purchasing power between sterling and the dollar had fallen to less than 5 per cent in the first quarter of 1925, on the eve of the stabilization. See D. T. Jack, *The Restoration of European Currencies* (London: King & Son, 1927), p. 49.
49. J. M. Keynes, *Economic Consequences of Mr. Churchill* (London: Woolf, 1925), p. 16. See Gustav Cassel, *Das Stabilisierungsproblem* (Leipzig: Gloeckner, 1926). The distinction was to recur in many variations.
50. See Gustav Cassel, *The Downfall of the Gold Standard* (Oxford: Clarendon Press, 1936); Eric Lundberg, "The Influence of Gustav Cassel on Economic Doctrine and Policy," *Skandinaviska Banken Quarterly Review*, 1968; C. Bresiani-Turroni, *The Purchasing Power Parity Doctrine* (an "Extrait") (Le Caire, Imprimerie Nationale, Boulse, 1934) for critical appraisals.
51. If the gold value of the currency is fixed, domestic price levels have to adjust themselves to world market prices, which was exactly what Keynes considered as objectionable.

52. In chapter 3 of his *Tract on Monetary Reform*, Keynes presented the purchasing power parity doctrine as a logical deduction from the quantity theory of money that was “axiomatic” to his thinking, following Irving Fisher.
53. The formula which says ‘exchange rate equals foreign prices divided by domestic prices,’ . . . fails in practice because international comparison of different national prices runs into insuperable difficulties. All attempts to make up characteristic selections of goods, and to use their prices in the formula, have consistently failed because there is no generally recognized basis for making up such selections of goods. Gustav Cassel after the first world war worked out a modified formula, according to this, the percentage adjustment of the exchange rate equals the percentage change in foreign prices, divided by the percentage change in domestic prices. But that did not permit international comparison of absolute prices either. His idea was not to work out the proper rate of exchange at all, but to compare relative changes of the national price levels during a specified period . . . (Gerhard Riedel, “For Revaluationists Only: By How Much?” *Economic Review*, no. 424 [Frankfurt/Main, Berliner Handelsgesellschaft], July 31, 1969.)
54. Gustav Cassel, *Money and Foreign Exchange After 1914* (New York: Macmillan Co., 1922), p. 154. Keynes, *Monetary Reform*, p. 92.
55. Moggridge, *Return to Gold*, pp. 74–75.
56. In League of Nations, *International Currency Experience*, pp. 126–127. See also, Youngson, *British Economy*, pp. 230–238.
57. See P. M. Boardman, *Germany’s Economic Dilemma*, (New Haven: Yale University Press, 1964), pp. 103 ff.
58. Clay, *Lord Norman*, p. 150.
59. By Professor Douglas Dosser (University of York), in *Westminster Bank Review*, May 1968, p. 38.
60. See chap. 4, sec. D, below.
61. Clay, *Lord Norman*, p. 156.
62. See Table III-3, above. Between the second quarter of 1925 and the last quarter of 1926, the value index of British exports fell from 99 to 91, but imports dipped even more, from 103 to 88, indicating that the country’s foreign trade had been under the influence of forces which had little, if anything, to do with the return to gold.
63. See Clay, *Lord Norman*, pp. 235, 244 f.
64. *Minutes of Evidence*, (Macmillan Report), vol. 1, pp. 210 ff.
65. Sir Theodore Gregory, in *Lloyds Monthly Bank Review*, April 1968, p. 37.
66. Clay, *Lord Norman*, pp. 160–162.
67. In *Lloyds Monthly Bank Review*, April 1968, p. 37. For another critical appraisal, see Sir Keith Hancock, “Unemployment and the Economists in the 1920’s,” *Economica* (London), November 1960.
68. See Moggridge, *Return to Gold*, p. 85.
69. See Table III-4.
70. The deposits of the clearing banks declined from £1,810 million in 1921 to £1,641 million at the end of June 1926; bank and currency notes outstanding from £395 million in September 1926 to £352 million in March 1929; both resumed the rising trend after the respective dates. The volume of savings deposits had been rising throughout the 1920’s. See Table VIII-3, chap. 8, sec. B, below.
71. Britain’s terms of foreign trade improved in the proportion of 100 in 1913 to 127 in 1921–1929. See Table III-5.
72. See chap. 8, sec. B, below.



73. See E. V. Morgan, *Studies in British Financial Policy, 1914–1925* (London: Macmillan & Co., 1952), pp. 323–342.
74. Table III-5. The total public debt had risen twelve-fold, to £7,654 million.
75. See chap. 5, sec. B, below.
76. Between February and May 1928, the French wholesale price index rose from 622 to 646, the retail index from 522 to 546, relieving much of the competitive pressure on British exports.
77. See chap. 5, sec. B, below.
78. Quoted by Richard Herr, *Tocqueville and the Old Regime* (Princeton: Princeton University Press, 1962), pp. 35–36.
79. According to the Census of 1911, *Statistical Abstract of the United Kingdom*, no. 74 (London, 1931), 1,128,000 miners were employed.
80. A Royal Commission, headed by Sir Herbert Samuel, appointed by Prime Minister Stanley Baldwin.
81. Quoted by Boyle, *Montagu Norman*, p. 195.
82. Full employment (“right to work”) at fixed nominal wages was the British unions’ postulate—as long as the cost of living was declining. The propositions in Keynes’ *General Theory of Employment, Interest and Money* (New York: Harcourt Brace Jovanovich, 1936) rested on the fallacious assumption that labor’s attitude would remain the same under rising living costs.
83. Boyle, *Montagu Norman*, p. 207. Beatrice Webb understood Keynes better than most of his critics did. The introduction written (in the Nazi time) to the German edition of his *General Theory*, emphasizing the fitness of a totalitarian regime for realizing his objectives, was indeed the language of the “social engineer,” to whom human beings are cogs in a macro-machine. His lack of understanding of the aspirations of Labor was disclosed by his energetic opposition, in 1939, to reducing working hours in the British textile industry. See Clay, *Lord Norman*, p. 334.
84. K. Muggeridge and R. Adam, *Beatrice Webb* (London: Secker & Warburg, 1967), p. 225.
85. Dr. W. W. Stewart, in his testimony before the Macmillan Committee (July 4, 1930), implied a less charitable view of the Keynesian approach:

My feeling is that the monetary theorist is not sufficiently familiar with industrial development to put it in its proper perspective as part of the general economic situation, and his dwelling upon monetary factors is frequently the result of lack of familiarity with the industrial conditions. Industry is a highly complicated and difficult process which takes place under the direction of specialists—the chemists, the engineers, the electricians, and so on. This goes on while the financial mechanism dealing with bank deposits and advances undergoes little change. See chap. 8, sec. B, below.

86. See Clay, *Lord Norman*, pp. 235, 244–245, about Norman’s philosophy. Keynes, the politician, still awaits his “biographer.”
87. The history of the origins, under President Herbert Hoover, and of the successful spread of the deficit financing ideology, has been cogently told by Herbert Stein, *The Fiscal Revolution in America*, (Chicago: University of Chicago Press, 1969).

## *The New Gold Standard*

### Introduction

IN RETROSPECT MOST people think of the 1920's as an age of more or less trouble-free prosperity, as compared with the bleak depression years of the 1930's. Actually, while the 1920's were a decade of partly inflation-financed prosperity in the United States, it was, as far as Europe was concerned, a period overshadowed by the political, social, economic, and psychological consequences of the war. Montagu Norman and others thought that it would take Britain twenty years to recover her wartime losses and regain her prewar economic status in the world. In the meantime, Britain and the rest of Europe tried through a multitude of *ad hoc* measures to lessen the chronic tensions and prevent the periodically threatening crises. Victors and vanquished alike strove to restore the stability of their currencies, especially after the catastrophic German inflation of 1922–1923, but the efforts were severely handicapped, since it proved impossible—largely for political and psychological reasons—to return to the prewar institutional arrangements. The results were compromises, which in the end proved inadequate. The gold bullion standard weakened, and the gold exchange standard largely destroyed, one of the most important aspects of the traditional gold standard: the power of the people to control the monetary and fiscal policies of their governments. No longer was it possible for the man

in the street to demand gold, if he feared that the policies of his government were endangering the purchasing power of the currency. The power over the value of money had shifted from the central banks—and ultimately the people—to the government. The sharp increase in price levels during the war years, and the seemingly inadequate increase in monetary gold stocks during the war and postwar years, produced during the 1920's a growing fear of a "shortage of gold," which developed into a gold shortage psychosis during the 1930's—even though by that time gold production was actually growing faster, percentage-wise, than the output of goods and services.

During the 1920's, leading economists "proved," to their own satisfaction, that the supply of gold could not grow sufficiently to meet the progressively increasing monetary needs, and they predicted that the resulting gold shortage would lead to chronic deflation and economic stagnation. The events of the 1930's, many claimed, proved the correctness of their theory. The "gold shortage" notion, in turn, produced various efforts to "stretch" the supply of monetary gold by withdrawing gold from circulation which was the aim of the gold bullion standard; or by raising the value of gold, as the United States did in 1934; or by detaching the monetary system completely from gold, as the United States and Britain attempted halfheartedly, but with sad results, in 1931 and 1933.

To bolster the postwar gold standard, Britain in particular strove for international monetary cooperation of the leading powers, the goal of Montagu Norman being close cooperation of the leading central banks—each freed from political controls, and thus able to be guided by monetary and economic rationality on a world-wide scale, rather than by narrow national political expediency. The idea proved impossible, because of the essentially nationalistic mood of the time. And when the idea of international monetary cooperation was revived at Bretton Woods, the concept had undergone a fundamental change. The stability of the international monetary order was no longer expected to rest upon the cooperation of apolitical central banks, but of the obviously politically inspired treasuries.

The inherent weaknesses which have developed in the Bretton Woods system during the past twenty-five years were foreshadowed by the failures of the 1930's. Britain's attempt to restore the leadership of the Bank of England and to concentrate a large part of the



monetary resources of the world in London to bolster sterling as the most important “reserve currency” failed, because of the nationalistic tendencies throughout the world, and the failure of Britain to solve her own internal economic problems and thus lend strength to sterling. The nations preferred to hold gold rather than sterling, and chose to look after their own immediate needs rather than work toward the long-range ideal of international cooperation. The basic requirement for a viable international monetary system thus failed to develop during the 1920’s, and the beginnings withered away during the depression years of the 1930’s. (G. C. Wiegand)

### A. The Role of the City

Throughout the war and the following period of monetary “chaos,” the juridical concept of the gold standard was carefully preserved. Most currency units were defined in quantities of gold, although money was nonconvertible and foreign exchange rates deviated widely from official parities. But forty-three currencies, including all the internationally important ones, were back on gold by the end of 1928, at least *de facto*.<sup>1</sup> The return to convertibility had fully restored the legal form and the administrative routine of the institution. It was taken for granted that there was no difference in “substance” between the prewar and the reconstituted postwar standards. Convertibility was supposed to be the essential thing, the mainspring of the self-regulating “mechanism” of the balances of payments. Prices and incomes would by “synchronized” quasi-automatically, as they were before 1914. The international flow of capital would bring about equilibrium in the balances of payments and regulate the global distribution of gold reserves.

We know better, of course—by hindsight. Central bank “guidance” of the money markets and their proper functioning were inhibited or vitiated by recurrent interventions, delaying, if not distorting, the response of prices and incomes to the operation of the “rules of the game.”<sup>2</sup> The change in the psychological and political background has been discussed.<sup>3</sup> But had not the new system itself undergone changes, conducive to its breakdown within a few years after its all-round restoration?

One change in the new “set-up” appears at first glance. The prewar international gold standard “centered” in London. The City was the

world market for liquid funds as well as for most staple commodities entering world trade. As the money market of a rich country and the depository of short-term funds from five continents, it had ample facilities to “monetize” the short-term, usually self-liquidating, private credit instruments arising out of international trade and finance. This role of London as the credit center, and its effectiveness in directing the global distribution of gold reserves, was cogently outlined by Benjamin M. Anderson, Jr.:

More commodities were dealt [sic] in London than in any other single center. There was a great community of expert students of commodities, of recognized integrity, whose grading of commodities was accepted throughout the world. There was an admirable warehouse system. There was a great body of expert speculative buyers, who knew their outlets, and who were prepared to buy, at a concession in price, almost any commodity, on very short notice. The merchants of the world trusted this machinery and the British banks could safely trust it. They could make loans which were truly liquid loans, against virtually any commodity. The London stock market also was a wide and dependable stock market, which made readily marketable a greater range of securities than would be marketable in any other center, and which consequently made good collateral out of securities which could not serve as collateral, safely, in other financial centers. The foreign exchange of every country in the world was freely dealt [sic] in London, and could consequently be made the basis of bank credit. What came to London became liquid, and everything came to London. London, therefore, needed less gold than other centers needed. I hasten to add that very much of this is true of London today [1937] though the abnormal developments during and since the war have, of course, modified the earlier picture.<sup>4</sup>

This was, indeed, a highly “integrated” system that made possible the relatively smooth operation of the gold standard which depended on sterling’s assured convertibility into gold. But was London’s pre-war position restored with the return to gold? Does a negative answer imply that the reborn standard could function only in a defective fashion—due to the fact that London had lost the unique position of world-wide leadership? An impressively elaborate attempt was undertaken to prove that the postwar gold standard was different in “substance” from its predecessor because the later standard lacked the “foundation stone” of the earlier one: a perfectly organized credit

TABLE IV-1

# The Years Fifty-four Nations Were on the Gold Standard, 1919-1936

[illegible]





center, a focal point of the foreign exchange markets.<sup>5</sup>

By this theory, the “essence” of the gold standard is to be found in “the whole institutional pattern that breathes life into these forms of law and practice . . . In the prewar world this was the London-centered system of international finance based upon British predominance in international trade.”<sup>6</sup> The underlying assumption is that it was London’s role as credit and clearing center that guaranteed the automatic functioning of the international gold standard. The free flow of credit from and to the City was made possible by England’s unique resources in foreign trade and finance, her position as repository for floating capital, and the aid of highly specialized bankers. The latter provided credit on purely financial considerations and without discrimination. “Indeed, one of the distinguishing characteristics of the whole prewar gold standard system was precisely the lack of restriction imposed by the London market upon the utilization of sterling as world medium of exchange.”<sup>7</sup>

Professor W. A. Brown’s thesis was that the smooth functioning of the postwar system had been undermined by the emergence of New York as a competitor.<sup>8</sup> The more centers there are taking care of international clearings, the less efficient, allegedly, are the technical means through which clearance is effected. Wall Street had neither the refined technique nor the experienced personnel which London had developed over a century.

The logic of reasoning from a multiplicity of centers to the undermining of the gold standard is difficult to follow. Actually, there were two major centers in pre-1914 Europe competing with the City, namely Berlin and Paris. Amsterdam and Brussels were significant, too. Berlin used to borrow short and lend long, internationally. Until the Moroccan crisis of 1905 it relied on Paris for short-term funds—by “pensioning” bank acceptances<sup>9</sup>—as much as it did on London. Thereafter the Berlin banks kept borrowing from the French banks, via Brussels, meanwhile expanding their own short-term international lending activities. The importance of Paris as a capital market is seen at a glance on Table IV-2. French investments abroad, mostly in government bonds, were estimated in 1913 at 45 billion gold francs (\$9 billion), equivalent to \$30 billion in 1970.<sup>10</sup> In fact, Paris was widely considered the “capital market of the world,”<sup>11</sup> whereas London and Berlin were the money markets *par excellence*.<sup>12</sup> London regained much of its eminent position, once sterling was back on gold

TABLE IV-2  
French Investments Abroad, 1914  
(billions of gold francs.)

<i>Europe</i>	30.4	Other European countries	.5
Russia	11.3	<i>Asia, Africa, and America</i>	14.6
Great Britain	.5	Egypt, Suez, and South	4.5
Belgium and the Netherlands	.5	Africa	
Turkey	3.5	Tunis and other French	4.0
Bulgaria and Serbia	.6	colonies	
Roumania	3.0	United States and Canada	1.0
Greece	.7	Argentina, Brazil, and	3.0
Austria-Hungary	3.5	Mexico	
Italy	1.3	Other South American	.6
Switzerland	.5	countries	
Spain and Portugal	4.0	Asia	1.5
Scandinavia	.5	<i>Total, all countries</i>	45.0

SOURCE: H. G. Moulton and C. Lewis, *The French Debt Problem* (New York: Macmillan Co., 1925), p. 335.

in 1925, both within Europe and over the wide range of countries that later became known as the Sterling Area. The City no longer had a dominant position in a global context; but it not only resumed but expanded its old role. And it added a new one, that of the intermediary between America and Europe. There was, after the war, far more “coordination” through central bank cooperation than ever before. The “world credit structure” was not substantially more decentralized in the 1920’s than it had been before. Centralization, however, was not a necessary requirement for sustaining a “balanced” credit structure. Nor was the weakness of the gold exchange standard due to the absence of a “focal” center. Rather, reliance on London as its focal center hastened its doom.<sup>13</sup> And the mutual adaptation of balances of payments—their automatic adjustment—need not have been inhibited, either before or after the war, by the existence of several centers.

International credit makes the maintenance of the gold standard possible. But one may say as well, as Dr. Brown does, that the “substance” of the gold standard consists in making a vast volume of international credit possible. Whether it is available from one



"dominating" center or from several, whether the centers compete or cooperate—and they do both—or whether the clearings work with greater or less efficiency, all these questions are of minor importance.<sup>14</sup> What does matter is that credit should flow freely between markets in accordance with interest rate and exchange rate differentials.

Why should the difference between a centralized and decentralized international credit market be the fundamental issue upon which the life or death of the gold standard hinged? Dr. Brown assumes that the financial crisis of 1929-1931 might have been overcome if only the flow of short-term funds had been substituted for the slackening long-term capital movements. But he overlooks his own thesis, that basic maladjustments in the economic system were the fundamental cause of the difficulty. Yet he is arguing that remedial actions which took the form of "financing the depression" with short-term funds would not have broken down "in a world in which international finance was dominated by a single strong creditor country with a powerful underlying pull over the exchanges."<sup>15</sup> But why could not several strong centers accomplish this as well as, or better than, a single one?

There was, of course, a great difference between the City and Wall Street in the prevailing "direction" of the credit flow. One was commercially and outward-oriented, the other was industrially and inward-oriented. In the United States, "the controlling factor in the demand for credit since 1922 had been chiefly the fluctuation in the demand for financing the purchase of securities." W. W. Stewart, whom we are quoting, emphasized this point in his testimony before the Macmillan Committee.<sup>16</sup> This circumstance was significant for the course of the then prevailing phase of the economic cycle, since it had been partly responsible for the difference between the degrees of financial "heat" that were generated on the one side of the Atlantic and on the other. But it had little relevance in terms of monetary "leadership." Actually, New York's competition in financing international trade was limited. Acceptance financing flourished in London throughout the 1920's; in New York it survived only under constant care in the form of special rediscount rates, provided by Strong's Federal Reserve Bank. In any case, the weakness of the interwar gold standard had more profound roots than whatever

minor malfunctioning may have been due to the existence of two or more focal centers in lieu of one.

## B. The Gold Bullion Standard

Montagu Norman was not given to theorizing, but in answering a request for advice by the Governor of the Bank of Norway—about returning to the gold standard—he gave a succinct, if incomplete, expression of his monetary philosophy:

It must surely be the concern of all to *avoid*, so far as possible, *disturbing fluctuations in the value of gold*. I doubt whether at present the means exist for doing so in all circumstances, and I therefore think that every opportunity should be taken of improving the efficacy of such means as we have . . . I would therefore suggest that your decision should be taken on these broad grounds of principle.

In some other countries the question is complicated by the habits and psychology of the public, but I understand that in Norway the convenience of paper currency is appreciated, and confidence in the value of money does not depend upon the existence of gold coin. You are therefore free to adapt your policy to circumstances. Such liberty, to my mind, is valuable, because the *future gold supplies* of the world are a *matter of uncertainty*. Demand is rendered more inelastic wherever the principle of gold circulation, for currency or for hoarding, is accepted, and any inelasticity may be dangerous when there are such unknown quantities as India and Russia. *I do not believe that gold in circulation can safely be regarded as a reserve* that can be made available in case of need, and I think that even in times of abundance hoarding is bad, because it weakens the *command of the Central Bank* over the monetary circulation and hence *over the purchasing power of the monetary unit*.

For these reasons, I suggest that your best course would be to establish convertibility of notes *into gold bars* only and in amounts which will ensure that the use of monetary gold can be limited, in case of need, to the settlement of international balances.<sup>17</sup> (Italics supplied.)

The image Montagu Norman left behind in the popular press and the Keynesian literature is that of a stiff, unreformed “Victorian” banker. The foregoing quotation is one evidence among many of his ability to disguise his ultimate intentions. The *idea of stabilizing the*

*value* (purchasing power) of gold bordered on the revolutionary. Taken at face value, it implied the closest possible cooperation of central banks under a unified direction.<sup>18</sup> But the proposition that gold should be concentrated in each nation's central reserve was along the lines of prewar development, accelerated during the war. The practice of deliberately drawing gold out of circulation represented a change, albeit a minor one, in the "substance" of the standard, leading eventually to the outright prohibition of gold ownership in the United States and in Britain.

The wartime process of withdrawing gold coins from circulation, replacing them by bank notes and deposits, was continued in most countries until gold coins largely vanished from circulation.<sup>19</sup> Almost everywhere, even in France, the central bank's obligation to sell gold had been limited to bars of appreciable size. This is the gold bullion standard. Gold coins were simply not made available. To strengthen their gold holdings was the aim of the European monetary authorities, although withdrawing gold coin from circulation, in order to increase the central bank's gold reserves, in theory at least, tended to have an inflationary effect. The central bank's increased gold holdings permitted an increase in central bank credit.<sup>20</sup>

Norman's arguments in favor of the gold bullion standard throw light on his "ideology" and will be discussed presently. His aim was to strengthen "the command of the central bank over the monetary circulation and hence over the purchasing power of the monetary unit." A central banker of the nineteenth century would have considered any such approach as a utopian lapse into "dirigism"—to which Norman was opposed tooth and nail. But he and his contemporaries overlooked an essential function of gold coin circulation.

A gold-coin standard provides the people with direct control over the government's use and abuse of the public purse. . . . When governments or banks issue money or other promises to pay in a manner that raises doubts as to their value as compared with gold, those people entertaining such doubts will demand gold in lieu of the silver, or paper money, or bank deposits, or government securities . . . The gold-coin standard thus places in the hands of every individual who uses money some power to express his approval or disapproval of the government's management of the people's monetary and fiscal affairs. It gives the people of a nation direct control over the use or abuse of their public purse.<sup>21</sup>



Individualist or not, Montagu Norman could not care less about philosophical traditions. His problem was to maintain the British gold standard in the face of Britain's weak balance of international payments. This meant the chronic threat of a gold shortage in the Bank of England and the necessity of having access to both the gold that had been accumulating in private hands and in the hands of "cooperating" central banks.<sup>22</sup> But the world monetary system as a whole had been affected during the war years. According to the Gold Delegation of the League of Nations (1930) the total of *gold coins withdrawn from circulation between 1913 and 1923 amounted to \$2,670 million of old parity*, more than enough to offset the deficiency in the production of gold between 1915 and 1930.<sup>23</sup>

The gold bullion standard was another significant step toward replacing the quasi-automatic money system of the pre-1914 era by central bank management, which in turn was subjected to the rule of nationalistic governments.

### C. Gold Shortage

The gold bullion standard tightened the central banks' grip on the respective monetary systems. Worry about the uncertain prospects of the gold supply was the avowed motive; a substantially broadened base for credit expansion was the outcome. The fear of an impending gold shortage was gaining ground in the 1920's; it became an obsession when prices tumbled in the first years of the Great Depression. The gold-shortage notion served as a convenient argument in favor of devaluations. It offered a simple explanation of the global crisis, welcome to those "quantity theorists" who, with sovereign disregard of the facts, postulated a more or less fixed relationship between the size of the monetary base, the "money supply," and the general level of prices.

The allegation of an impending gold shortage was not new. In the late 1870's an Austrian geologist, Professor Edward Suess, created a sensation by predicting that a monetary catastrophe was threatening due to the "exhaustion" of gold-bearing ore bodies. This pessimistic outlook fitted into the depressed atmosphere of that period, but it faded with the opening up of the major Transvaal mines in the 1890's and the subsequent rise of prices.

After the First World War, a more sophisticated version was

TABLE IV-3  
The World's Gold Output, 1913-1939

Year	Million fine oz.	Year	Million fine oz.
1913	22.6	1926	19.1
1914	21.7	1927	19.1
1915	22.8	1928	18.9
1916	22.0	1929	19.2
1917	20.3	1930	20.9
1918	18.6	1931	22.3
1919	17.3	1932	24.1
1920	16.1	1933	25.4
1921	16.0	1934	27.4
1922	15.5	1935	30.0
1923	17.8	1936	32.9
1924	18.6	1937	35.1
1925	18.7	1938	37.7
		1939	39.5

SOURCE: *Annual Report of the Director of the Mint*, (Washington, D.C.; fiscal year ended June 30, 1944), p. 102.

introduced by Gustav Cassel and, independently, by a mining-statistician, Joseph Kitchin. According to Cassel, "... an increase in total gold stocks of somewhat under 3 per cent per annum was required in order to maintain stable prices." He reached this conclusion by comparing annual averages of the (British) Sauerbeck index of wholesale commodity prices from the 1860's to 1910 with the annual increments of new gold.<sup>24</sup> Kitchin arrived at nearly identical conclusions. About 3 per cent was, supposedly, the approximate annual rate of progress in "real" world-wide wealth creation. By this token, he claimed, a lag in the increase of gold production must bring price levels down and with it, business activity to a corresponding extent. Cassel went further, asserting that the gold standard was afflicted by a paradox. The annual rate of gold output itself must rise at an accelerating pace in order to provide adequate monetary reserves. "The greater the accumulation of gold, the greater ought also to be the early inflow of new gold."<sup>25</sup>

The world's annual gold output had risen from 9.6 million troy ounces in 1895 to 22.6 million in 1913 and to 22.8 million ounces in 1915. From 1916 to 1922, gold production was jolted by the cost inflation; in the latter year, total output amounted only to 15.5 million ounces.<sup>26</sup> In U.S. dollars of old gold parity, it had declined from \$472 million to \$320 million. In the following seven years to 1929, the output increased at an average annual rate of half a million ounces, or barely more than 3 per cent a year. The production record of 1913 was not reached again until 1932, partly because the London capital market, the chief source of funds for South Africa, was for several years incapable of providing capital in the amounts required for mining expansion.

Relying on dubious assumptions—further rising costs of mining, exhaustion of ore bodies, etc.—the forecasters proceeded to project a gradual decline of the monetary gold supply; Kitchin's estimate that by 1940 the annual output would stagnate below 20 million ounces found remarkably wide acceptance. Other estimates compiled by the Secretariat of the League of Nations provided even more frightening forecasts. All such projections were founded on the experience of the 1920's, during which the recovery of gold production was admittedly slow, reaching a bare 19.2 million ounces in 1929. The situation was aggravated by the fact that after 1921, year after year, a widely varying but a substantial portion of the gold output—65 per cent in 1924—was lost to Oriental hoarders, depending on the balance of payments situations of India, China, and Egypt.<sup>27</sup> In 1920–1929, on the average, total nonmonetary “consumption” absorbed about 10 per cent more gold than it had between 1890 and 1914.<sup>28</sup>

As one country after another adopted, in effect, the gold bullion standard during the 1920's, the monetary demand for new gold should have declined. But legal or voluntary *reserve requirements* in relation to outstanding bank notes were raised in a majority of countries from the customary 33 per cent to 40 per cent, and to 50 per cent and over in some cases. Reserve ratios to other demand liabilities of European central banks were raised, too, where such requirements existed before or else were first introduced,<sup>29</sup> a defense measure motivated by the prevailing instability of their balance of payments and the impaired confidence in many currencies. Yet, the actual percentage gold cover of total (short-term) liabilities of all central



TABLE IV-4  
Consumption of Gold by India, China, and Egypt, 1915-1929  
(millions of pounds sterling at 84/11½ per fine ounce)

Year	India <sup>a</sup>		China & Egypt <sup>b</sup>	
	Amount (millions)	% of world's current output	Amount (millions)	% of world's current output
1915	1.3	1	-2.5	-3
1916	5.0	5	2.4	3
1917	19.6	23	2.5	3
1918	-3.3	-4	0.4	1
1919	27.9	37	11.5	15
1920	3.5	5	-3.0	-4
1921	0.7	1	-2.2	-3
1922	26.7	40	1.2	2
1923	20.2	27	1.5	2
1924	52.5	65	0.2	—
1925	27.8	34	1.3	2
1926	16.0	20	-0.4	1
1927	15.1	18	0.4	1
1928	18.0	21	1.4	2
1929	14.0	17		

SOURCE: League of Nations, *Selected Documents on the Distribution of Gold* (Geneva 1930), Table 1 opposite p. 62.

<sup>a</sup>Net imports for years to March 31 following (there is a lag of one to two months between output and import), with the country's own production for the calendar years added.

<sup>b</sup>Including China's own production.

banks was about the same in 1928 as it had been in 1913, about 44 per cent, although the liabilities had greatly increased. Central banks were criticized for "hoarding" or "neutralizing" gold by maintaining reserves, as much as 9 per cent on the average, above the legal minima; also, for occasionally reducing their outstanding liabilities without having suffered gold losses.<sup>10</sup> This criticism overlooked the situation created by the accelerated growth of the total money supply, including "liquid savings."<sup>11</sup>

There were other factors supposed to have enhanced the alleged gold "famine." Examples were the final elimination of silver from the

TABLE IV-5  
World Ratio of Gold Reserves to Sundry Liabilities, 1913-1928  
(per cent)

	Notes and sight liabilities of central banks (1)			Demand deposits of commercial banks (2)			(1) + (2) (3)			Ratio of demand deposits to total of (3)	
	1913	1927	1928	1913	1927	1928	1913	1927	1928	1913	1928
Europe	38.2	30.1	34.6	22.0	23.4	27.0	14.0	13.2	15.2	63.4	56.2
North America	53.9	61.2	58.3	16.6	16.5	15.3	12.7	13.0	12.1	76.4	79.2
South America	51.1	57.1	59.5	69.1	62.8	65.9	29.4	29.9	31.3	42.5	47.5
South Africa											
and Oceania	117.4	53.2	55.1	16.3	19.2	19.0	14.3	14.1	14.1	87.8	74.4
World	44.0	43.1	44.7	20.6	20.6	21.4	14.0	14.0	14.5	68.2	67.7

SOURCE: League of Nations, *Interim Report of the Gold Delegation of the Financial Committee* (Geneva, 1930), p. 103.

monetary bases of the Latin Monetary Union countries; and the accumulation in some central banks, especially in the Federal Reserve Banks, of their own notes for which gold had to be held on reserve.<sup>32</sup> The gold shortage believers, however, including such recognized financial experts as Sir Henry Strakosch, left out of consideration improvements in the technique of gold clearings and other economies in the monetary use of the yellow metal. By the time the Gold Delegation of the League of Nation's Financial Committee published an exhaustive refutation, in September 1931, of the Cassel–Kitchin doctrine of a close interdependence between gold, price levels, and economic progress (the latter measured in terms of global commodity outputs), the depression had taken care of the theory. In the single year 1931 the global gold output jumped by about 7 per cent, owing to the reduction of mining costs by some 15 per cent and to the enlarged labor force available to South African mines which, even before the wave of devaluations, provided the mining companies with an extraordinary subsidy.<sup>33</sup>

It is true that in the 1920's the volume of international gold movements was much larger than before the war, in particular both from and to Britain, but the incidental "drain" on London could have had only a minor effect, if any, on the total demand for gold.<sup>34</sup> Over the period 1924–1929, as a whole, the inflow and outflow were in balance. And the "drain" was greatly reduced by a new development: the emergence and expansion of the gold exchange standard.<sup>35</sup> As a result, an excessive supply of reserve assets, rather than a reduced one, was the earmark of the period, as we shall see. In the 1930's, an inflation of British and American currency bases by gold inflows became the great worry.

The gold shortage theory was founded on arbitrary theoretical and statistical assumptions. It disregarded the fact that the active money volumes were not related in a fixed proportion to gold reserves. It paid no heed to the significant impact of price level changes on the volume of the gold output. It assumed implicitly that a more ample supply of new gold would have benefited the central banks short of reserves, rather than adding to the holdings of those which had piled up large reserves. "Even had more gold been available, it does not follow that the situation would have been substantially different from what it proved to be, unless the central banks of the world had allowed the accruing supplies of gold to affect the price-level."<sup>36</sup> *Gold*



TABLE IV-6  
Gold Movements to and from the Bank of England, 1925-1930  
(£ thousands)

	1925	1926	1927	1928	1929	1930
Jan.	—	-251	-16	+3,945	-197	+3,593
Feb.	—	+1,387	-1,180	+21	-1,424	+1,071
March	—	+1,058	+401	-149	+1,680	+4,794
April	—	-259	+2,211	+2,403	+4,660	+7,126
May	+1,347	+2,646	-1,545	+2,320	+5,021	-6,628
June	+1,044	+1,151	-1,140	+8,466	-7,085	+73
July	+6,358	+1,768	+699	+2,106	-14,347	-4,438
Aug.	-1,338	+3,211	-586	+1,244	-6,617	+2,458
Sept.	-2,787	+159	-770	-4,762	-5,615	-548
Oct.	-10,829	-3,518	+671	-5,233	+1,346	+3,227
Nov.	-3,281	+543	-1,212	-5,088	-2,315	—
Dec.	-2,109	-1,624	+1,252	-6,594	+12,035	—
Total	-11,595	+6,271	-1,215	-1,321	-8,228	+11,088 <sup>a</sup>

SOURCE: League of Nations, *Selected Documents on the Distribution of Gold*. (Geneva, 1931), p. 33, Table 4.

<i>Sum of deficits</i>	<i>Sum of surpluses</i>
-11,595	+6,271
-1,215	+11,088
-1,321	—
-8,228	—
-22,359	+17,359

Net excess of gold outflows £5 million.

<sup>a</sup>To October 22. The column for 1930 adds up to £+10,728,000.

*production declined because mining costs had risen.* At a price level around 100 per cent higher than in 1914, and the money volume greatly expanded,<sup>37</sup> the need for central bank reserve assets had risen, indeed. But it had been more than fully met by using sterling and dollars as reserve assets and by increasing the prime monetary reserves by more than the equivalent of a decade's "loss" of gold production, as we have seen.

Whether *gold reserves* were or were not "adequate," may be gauged in terms of their ratios to central bank note and sight liabilities, or to commercial bank deposits. League of Nations estimates, mentioned above, indicate practically no change between 1913 and 1928.<sup>38</sup> A more striking light is thrown on Cassel's gold shortage

hypothesis by a comparison of estimated percentage increases, between 1913 and 1928, in total demand deposits and in total world trade, respectively: from 100 to 233.4 in the one magnitude, from 100 to 130.5 in the other (Table IV-7). In other words, the question was not whether there was a sufficient gold supply to finance trade that was financed by credit money; actually the problem was to provide sufficient gold reserves to maintain confidence in relatively overextended currencies, the pound sterling and the German mark, in particular. This problem was “resolved” temporarily by the gold exchange standard. Widely adopted in the 1920’s, it was even more economical of gold than England’s gold bullion standard. Essentially it involved a smaller or weaker nation using the gold standard of a larger or stronger nation, often Britain’s.<sup>39</sup>

Resort to the gold exchange standard—the subject of another chapter—more than offset any shortage of gold in the 1920’s in comparison with the situation in 1913 when there was no complaint about gold shortage. Total central bank *gold plus foreign exchange reserves* amounted at the end of 1929 to \$14.7 billion; legally required reserves amounted to \$6.95 billion.<sup>40</sup> Whatever else was wrong with the monetary system of the 1920’s, there was no “absolute” shortage of gold. In fact, as late as in 1929 there was ample margin available for further credit expansion and to take care of gold’s function as a “buffer” against the pressure of “normal” payments disequilibria.

Not shortage of gold but an excess of gold was the worry of the Federal Reserve authorities before the crisis of 1929, namely, the fear of inflationary repercussions. A similar situation existed in France, Holland, and Switzerland, members of the Gold Bloc after 1926.<sup>41</sup> Actually *the large reserve in the United States* contributed significantly to the boom psychology. It *helped to generate a misleading sense of financial security* and promoted the expansion of a debt structure which was to collapse in the depression.<sup>42</sup>

It is *an economic myth*, frozen to a dogma, that the “long waves” of price level fluctuations under the gold standard have been determined solely or mainly by the ups and downs of gold production. Critics have used this dogma to discredit the gold standard as an inherently unstable system. Suffice it to remark that the determining *monetary* factor in major price level changes was the “use and abuse of credit” rather than changes in the volume of gold reserves.<sup>43</sup> The fact is, as could be clearly traced in South Africa, that the local banks

TABLE IV-7  
Assumed Production Growth and Actual Credit Growth  
of World, 1913–1928

	Assumed percentage growth of world production and trade (1913 = 100) 1919 = 100, thereafter 3 per cent increase per annum	Actual percentage increase in world demand deposits (1913 = 100) Gold Delegation's figures
1913	100	100
1926	123.0	192.5
1927	126.7	228.0
1928	130.5	233.4

SOURCE: *Chase Economic Bulletin* (March 16, 1931), p. 6.

“immediately” responded to gold discoveries by expanding their credit facilities.<sup>44</sup> But of course, the credit inflation *tended* to spread as the gold reserves of the leading central banks increased. And there is the further fact that under the gold standard global credit inflation or contraction was often the consequence rather than the cause of nonmonetary long-term developments.<sup>45</sup>

More factors than monetary ones affect the “secular” course of price levels. “The period of rising prices after 1896,” economist Charles O. Hardy pointed out,

was marked by a great increase of gold production. It was also the period of the Boer war, the Russian—Japanese conflict, and the Balkan wars, and finally the World War.

The most striking change in [the general level of] gold prices during the period was the accompaniment of the World War and in this case the changes in the gold supply were relatively insignificant. The same thing can be said for the period of the Napoleonic wars. Statistically speaking, therefore, a case can be made for the theory that price trends are dominated by the alternations of war and peace, which is just about as convincing as the case for explaining them exclusively in



terms of the gold supply. For some periods, one explanation fits better than the other; for others, the reverse is the case.<sup>46</sup>

But the crisis of commodity prices after 1928 seemed to justify the Casselian gold shortage approach and to support the views of economists who were proposing substitutes for gold, methods to “stretch” its supply—such as eliminating reserve requirements or changing a currency’s gold content.

How would the economic process of the 1920’s have been affected by a richer flow of gold into central bank coffers? Could the catastrophe of 1931 have been avoided by means of an artificially (through devaluations) enlarged gold supply? As mentioned above, there is no reason to assume that the distribution of gold would have been any different from what it was. Countries with a favorable balance of payments would have continued to attract gold; the others might have gained none. The stimulating impact of a sudden increase in the gold supply may be admitted, and so must the possibility of a prolongation of the boom, but presumably at rising prices and costs. But does that provide a rationale for assuming that the crisis would have been avoided? Actually, some central banks might have “neutralized” the gold increment in order to forestall inflationary hazards. More gold might have stimulated more expansion of the irrational sort, namely various forms of “speculation.” In any case, the willingness of the gold-rich countries to rescue those in critical trouble depended on political rather than on purely financial considerations.

Ideas, like ideologies, never die, however; they do not even fade away. The distinguished French economist Charles Rist later revived the Cassel-Kitchin gold shortage concept, in a fresh version. It was no longer a disequilibrium between gold production and the production of goods that may have caused the depression. It was an imbalance between the price of gold and the general level of prices which allegedly brought about the catastrophe. By this theory, the catastrophe might have been averted by devaluing both the dollar and sterling, but back in the early 1920’s.<sup>47</sup> This version of the gold shortage idea still carries some weight, at least among advocates of an all-round boost of the price of gold, who worry about the supply of “international liquidity.” But they fail to meet the pertinent objection, namely the inflationary repercussions of that act.<sup>48</sup> Rist himself seems to have fallen victim to the same quantity theory which he was combating otherwise.

### **D. Central Bank Solidarity: The Ideology**

Never before did central banks possess so much power and exercise so much influence as they did in the 1920's. That was the general consensus at the time, and still is, relying on appearance rather than on realities. True, they had never before been so deeply engaged in international affairs, even beyond their competence. But, throughout those years, leading central banks betrayed their lack of self-confidence by their untiring efforts to convince governments and public opinion that their own independence was essential to the welfare of mankind.<sup>49</sup> "Independence" was part and parcel of every program of "central bank cooperation," embodied in the resolutions of two top-level international monetary conferences, namely at Brussels in September 1920 and at Genoa in April 1922.

"Cooperation," "solidarity," and "coordination," whatever they meant, were popular terms. As the English-speaking public understood them, they were to serve the noblest of objectives: stabilization, peace, equality of nations, and optimal redistribution of capital and gold. All central banks agreed on the necessity of cooperation, including the Federal Reserve Bank of New York. The prime motor-force behind the drive for independence was Montagu Norman, with the Financial Commission of the League of Nations serving as one of his vehicles. British, i.e., the Bank of England's, domination over that important international organism was unchallenged. One of the two potential contenders, the United States, was officially absent. But the most influential person in the Federal Reserve System, Governor Benjamin Strong, who died in October 1928, supported Norman in almost all matters of practical relevance on the international (European) scene—except when their domestic interests differed.<sup>50</sup> The other contender, France, was preoccupied with pressing for reparation payments and was inhibited by an unstable political situation. Moreover, French officialdom was fearful of Germany, jealous of that country's independence vis-à-vis the Allies, and suspicious of British intentions. British public opinion, on the other hand, became increasingly convinced that there was nothing to be feared from a disarmed German democracy, and that the undefined reparation claims were an obstacle on the road toward world-wide prosperity of a durable kind. British officialdom was satisfied with having eliminated the chief European competitor for naval power and was anx-

ious to start the wheels of international trade turning again. The conflict of these two political points of view, the French and the British, inhibited cooperation at times.

Norman, however, did not permit himself to be discouraged either by American “neutralist” attitudes or by French resistance to any policy that smacked of deviation from the letter of the Versailles, St. Germain, and Trianon treaties. His initiative was instrumental in bringing about the Brussels and Genoa conferences: their monetary resolutions reflected his ideas. The publicity-shy Governor never claimed them as his own, but there is ample evidence on hand to provide insight into his role and intentions.<sup>51</sup>

In October 1926, Governor Emile Moreau sent his closest collaborator to London to explore the intentions of Montagu Norman. Pierre Quesnay brought back a report which was duly recorded in Moreau’s Diary:

Quesnay also gives me interesting views about the ambitions of Montagu Norman and the group of financiers who surround him: Sir Otto Niemeyer, Sir Arthur Salter, Sir Henry Strakosch, Sir Robert Kindersley . . . they are striving to make London the great international financial centre. But those close to Norman state that this is not his main objective . . . he wants more than anything else to witness the setting up of links between the various Banks of Issue . . . The economic and financial organization of the world appears to the Governor of the Bank of England to be the major task of the Twentieth Century.

In his view politicians and political institutions are in no fit state to direct with the necessary competence and continuity this task of organization which he would like to see undertaken by central banks, independent at once of governments and of private finance. Hence his campaign in favour of *completely autonomous central banks, dominating their own financial markets and deriving their power from common agreement among themselves.*

They would succeed in *taking out of the political realm* those problems which are essential for the development and prosperity of the nations: *financial security, distribution of credit, movement of prices.* They would thus prevent internal political struggles from harming the wealth and the economic advancement of nations. These views are indeed doctrinaire, and without doubt somewhat Utopian or perhaps even Machiavellian, but Quesnay’s outline interests me greatly and will help me, I think, to negotiate usefully with Norman and the



people whom he has more or less won over to his way of thinking—Strong, Schacht, Vissering [Netherlands Bank], etc. (Italics supplied.)<sup>52</sup>

A few days' stay in London, as guest of Norman, filled by conversations with the "leading financiers" around his host, enabled Quesnay to sum up their "ultimate" ideas. What Norman was "up to" in striving for central bank cooperation is apparent, also, from passages in his letters and notes, like the letter to the Norwegian Governor cited earlier, and from the testimony of men who were close observers, Benjamin Strong and Emile Moreau, in particular.

That "Central Banks should be freed from any political pressure" was indeed Norman's recurrent theme.<sup>53</sup> What he thought of "politicians" was expressed as early as November 1919 in a letter to Benjamin Strong:

I cannot regard the certainty of sound money as definitely settled. On this subject the community, in so far as definite views are taken, may be divided into three groups: (1) the advocates of unadulterated sound money; (2) the advocates of expansion and the printing press, which to a considerable extent is the view held by many political leaders; and (3) the advocates of confiscation called "Levy on Capital."<sup>54</sup>

Numerous other expressions of this sentiment could be quoted. For a reliable testimony, the following information is instructive. P. J. Grigg, a friend of Norman, wrote in 1960 of Norman's conception of the place of central banks in the scheme of things:

. . . it was absolutely vital that a central bank should be in the last resort free from coercion from the central government . . . he invented all sorts of contacts with the central banks in order to strengthen the hands of all of them *vis-à-vis* their governments . . . What I could not see then but I can see now in the light of hindsight is that the moment we [Britain] got a government of the Left the central bank would become a branch of the Treasury.<sup>55</sup>

The idea of a supranational "Convention" of central banks, with power to override the will of the sovereign government in matters of most vital political and economic significance, sounds utopian indeed. Moreau was not the only one to interpret it as "Machiavellian." Andrew Boyle, a biographer of Norman, but thoroughly biased against him, could see nothing but a mixture of Victorian

naiveté and imperialistic ambitions in the Governor's project. Even Benjamin Strong, who otherwise shared his colleague's objectives, recognized that Norman had overlooked the political hazards.

In the face of a powerfully organized antagonism in Congress [Strong wrote to Norman in February 1922] the Federal Reserve System must, to a considerable extent, rely for its protection against political attack and interference upon the present administration

...

We cannot afford, practically or politically, to embark upon a course which ignores the policy of the administration, which would possibly antagonize the administration and place us in the position where we would be quite helpless to resist the repeated efforts which have been made in Congress to effect important and possibly vital modifications in the underlying principles of the Federal Reserve System.<sup>56</sup>

The political impotence of the Federal Reserve System could not have been more candidly stated.

Norman's plan was tailored primarily for Europe; even so, non-participation by the Federal Reserve System was a very serious obstacle, despite the New York Federal Reserve Bank's cooperation in providing the short and medium term credits needed for stabilizing sick balances of payments. Norman could count on his "friend," Dr. Hjalmar H. G. Schacht, only as long as a given project appeared to serve the interests of Germany.<sup>57</sup> Schacht's idea of cooperation was a gigantic investment bank with \$5 billion to \$6 billion of American capital for projects like "railroads through China and watering the Sahara"(!), the equipment to be bought in Germany.<sup>58</sup> As to France, the Financial Committee of the League of Nations, Norman's "province," dispatched one of his intimates, Sir Otto Niemeyer, early in 1928, to present Norman's plan of a united front. The politically "realistic" Moreau promptly rejected it with the argument that it would nullify the independence of the Bank of France by subordinating it to an international body.<sup>59</sup>

That was the end of Norman's politico-monetary scheme—an association of central banks that would guarantee the functioning of the international gold standard, institutionalize the gold exchange standard, "coordinate" discount rates, correct some economic mischiefs of the peace treaties, safeguard "peripheral" balances of pay-

ments against temporary difficulties, “stabilize” the value (purchasing power) of gold—and, last but not least, protect sterling itself.

Norman did not even succeed in bringing together an international conference of central banks which he had advocated for several years. He had a share in establishing—in connection with the Young Plan of 1929, that was to resolve the festering matter of reparations—the Bank for International Settlements in Basle, essentially an institution to handle the transfer of reparation annuities and a “club” of central bankers, without direct Federal Reserve participation.

In 1922, Benjamin Strong proposed an international stabilization fund. Norman rejected it as premature; the political debts had to be cleared away first. Did he do so because the leadership position would have fallen to New York, not to London, as has been suggested?<sup>60</sup> In reality, the American Governor was not in a position to engage his Bank openly in such an international project. Norman’s argument, that reparations and similar problems had to be cleared away, was beyond reproach. But the next sentence in his letter of February 27, 1922, to Strong seems to contradict the British Governor’s desires to establish central bank cooperation:

And is it not true that when these things shall have happened, stability in the Exchanges will be looking after itself in the old-fashioned way and artificial stabilisation will hardly be necessary?

What Norman may have had in mind was that the diverse currencies had to be put back on the automatic gold standard before international cooperation could be established. In any case, the Americans, just like the French, were not prepared to subordinate domestic objectives of monetary policy to the British point of view.

Norman’s idea of a politically independent association of central banks was neither “Machiavellian” nor “naïve.” At the time, and that was before the depression, such an association would have carried tremendous weight in public esteem. It could not, of course, have been literally “independent,” but, backed by collective support, each central bank might have been in a much stronger position in relation to its respective government than it was individually. That may not have been the case in the United States, where the pathetic failure of President Woodrow Wilson to “save the world for democracy” alienated that nation from the Allies and from all ideas smack-



ing of involvement in European politics. But in Europe, and even beyond, a great deal might have been achieved in the direction of promoting rational monetary policies.

What Norman had in mind, for one thing, was indicated by a remark he made some years before the 1929 crisis: "Cheap Money will some day bury us."<sup>61</sup> Moral pressure to keep the politicians out of central banking, as much as possible, apparently was his prime objective. Was it not a reasonable prospect that decisions of a collectivity of central banks would have influenced, if by indirection only, the policies of the United States, too? And was it not a sensible idea to prepare collectively against potential difficulties of the newly reconstructed and fragile gold standard?

Of course, not even the most orthodox believers in the gold shortage theorem could, or did, foresee the kind of debacle that was to be the Great Depression.<sup>62</sup> There was no precedent for a cyclical swing of that magnitude and duration. There was no theory to provide a "model." Leaving the apostles of the ill-fated Eternal Prosperity aside, wise men shared the opinion of the distinguished Swiss banker-economist, Felix Somary, that no government could "permit" the breakdown of major banks. (He was referring to the large German banks which did break down; the small ones turned out to be "panic-proof.") And such money panics were considered as the very core of any crisis. In fact, a far-sighted and cautious central banker like Benjamin Strong expected that 1929 would be the first "normal" year of the postwar era; Norman anticipated a postwar twenty-year "transition" period leading to normalcy, as already mentioned. But the problem of a gold shortage did worry him; clearly he had an "international coordination" of the monetary demand for gold in mind.<sup>63</sup> By 1927, he had become alarmed about the possibility of an imminent sterling crisis, but could not arouse the politicians, or even the central bankers. They were blissfully ignorant of the illiquidity of the respective banking systems and of the excessive volumes of money supply. Most of them believed that the mechanism of the restored gold standard would take care of potential troubles. Belated corrective measures disclosed the weakness of overextended money supplies—a classic instance of the parable of the barn door and the stolen horse.

Norman's basic concept, the international gold standard, had to be international to be fully operational. To establish it was not

enough: it had to be maintained. That task had been taken care of more or less "automatically" under the pre-1914 system. This was no longer true. Now the task called for leadership that was independent of political interference and it required multilateral cooperation.

To be viable, the gold standard had to fulfill its fundamental function. It must sustain reasonably stable price levels on a world-wide scale. More precisely, such price level changes as might be brought about by genuine economic development should be minimized, rather than aggravated by central bank policy. Under post-World War I conditions, this implied a "coordination," or planned synchronization, of gold prices, discount rates, and related monetary policies which would have been virtually impossible if each country went its own nationalistic way and did so under the pressure of domestic "politics." That even such an all-embracing cooperation would have accomplished more than prolong the Bank of England's "lease on life" is indeed questionable. This was the meaning, presumably, of the recommendation suggested by the British delegation and adopted by the Genoa Conference (1922), that the "value of gold" should be "stabilized." "Credit will be regulated not only with a view to maintaining currencies at par with one another, but also with a view to preventing undue fluctuations in the purchasing power of gold."<sup>64</sup> No contradiction was implied in this to Norman's outspoken opposition to the "commodity dollar" of Irving Fisher and similar "dirigist" programs which required departure from the gold standard.<sup>65</sup> A most significant (inflationary) implication, however, was that close central bank cooperation would permit the reduction of gold reserve requirements, thus stretching the available gold supply.

In any case, not later than in 1926, Governor Norman recognized that the restored international gold standard was shaky at its European center as well as on the "periphery." To re-establish the City in its traditional role as the world's financial center was no longer possible for sterling because Britain's balance of payments position was not strong enough. It could not support numerous weak currencies, let alone satisfy the ravenous capital thirst of the Empire. "Twenty years" were needed, so Norman thought, to recoup the missing income from lost foreign investments and to restore the competitive prowess of British industries. In the meantime, Britain's balance of payments problem could only be resolved by the cooperation of central banks, meaning in this context: support for sterling

as well as for other temporarily shaky currencies. The implied postulate of concentrating the greater part of national gold reserves in London, in the prime “reserve currency,” was the rationale of the gold exchange standard.

After the devaluation of the pound in September of 1931, Norman managed to establish the Sterling Area formally, with the outer members keeping their gold partly in London. A gold exchange standard united the nations of the Empire and some others in a monetary and credit network.<sup>66</sup> With undaunted energy and patience, he embarked in 1931 on the process started twelve years earlier: to stabilize the pound, the key currency of the Sterling Area, on a new gold parity. Then World War II again threw the monetary order of the whole world into confusion. But in the meantime, and this is noteworthy, the overseas members of the Sterling Area cut the ratio of their sterling holdings to their total reserves from 61 per cent in 1929 to 37 per cent in 1931, then raised it to 46 per cent in 1938.<sup>67</sup> By then sterling had been stabilized again, this time in relation to the dollar, not to gold directly. If the Sterling Area arrangement—the outlying members to hold sterling in lieu of gold—was to be a substitute for the “cooperative” gold standard, it certainly proved a disappointment. The overseas members took every advantage of it by drawing on Britain’s credit resources, yet refusing to surrender as much as one half of their gold. And they insisted on exchange rates between their own and the mother country’s currency, which were disadvantageous to Britain. Despite the 10 per cent tariff advantage of the Ottawa Agreement (1932), the association was bound to melt.

The construction of the Sterling Area throws light on Norman’s monetary ideology. For an intermediate period, at any rate, he was aiming at what he called the gold standard protected by a gold exchange standard. The idea finally materialized about the time of Norman’s death (1944), after a fashion, in the form of the International Monetary Fund, a brainchild of—J. M. Keynes, who never gave credit to the source of his inspiration.

Cleverly, in October 1941, Norman had invited his chief adversary to join the Board of the Bank of England and apparently succeeded in “indoctrinating” him.<sup>68</sup> The rabid opponent of gold, and most outspoken advocate of a monetary system freed from the “chains” of the gold standard, helped to build a new (post-World War II) system based on fixed exchange rates, the prime appurtenance of the



TABLE IV-8  
CENTRAL BANK FOREIGN EXCHANGE AND GOLD RESERVES  
OF FIFTEEN STERLING AREA COUNTRIES<sup>a</sup> 1929–1938  
(£ millions at end of year)

	1929	1931	1932	1933	1934	1938
Exchange (in £) <sup>b</sup>	150.9	82.4	108.7	167.8	208.7	216.1
Gold (in U.S.\$)	(476)	(470)	(494)	(528)	(547)	(690)
Gold (in £) <sup>b</sup>	97.5	139.3	150.7	161.1	186.0	250.1
Total (in £) <sup>b</sup>	248.4	221.7	259.4	328.9	394.7	466.2
Exchange as % of total	61	37	42	51	53	46

SOURCE: League of Nations, *International Currency Experience*, p. 55. The 1938 total was shown as 462.2, but this was presumably an error in addition.

<sup>a</sup>Australia, Denmark, Egypt, Eire, Estonia, Finland, India, Latvia, New Zealand, Norway, Palestine, Portugal, Sweden, Thailand, Union of South Africa.

<sup>b</sup>At the current market rates.

gold standard, underpinned by a dollar-and-sterling-exchange standard. Keynes grasped at last, more or less, what Norman had visualized from the outset: a) that monetary stability, i.e., a system of fixed exchange rates, is an essential condition of “sustainable” full employment; b) that such exchange stability can be established only in an international frame of reference, i.e., with the United States participating, and implying, c) that the gold exchange standard was to provide the technique to combine stability with “flexibility.” But there was a novel aspect added, namely the subordination of exchange rate (gold price) policy to the requirements of each country’s domestic full employment. This was the Keynesian “contribution.” The outcome was the “Bretton Woods system”: all currencies convertible into dollars, and the dollar itself into gold (externally) and supporting the others.

The “internationalization” of a fundamentally “autarchy”-minded Keynes was a crowning piece of Norman’s life work.<sup>69</sup> Norman’s declining health unfortunately did not permit him to appreciate it. Of course, the end product, the International Monetary Fund, with its permissive escape clauses and based on the cooperation of treasuries rather than of central banks, would not have been entirely to his satisfaction.

The idea of central bank cooperation met its crucial test in the financial crisis of 1930–1931, and failed. The crisis called for interna-

tional cooperation at the top political level, with the problem of intergovernmental debts a first item on the agenda. Such cooperation did not materialize, for political reasons. The problem was shunted aside by the German banking crisis of June–July 1931. The failure was not Norman's responsibility; but his lack of diplomatic astuteness and his francophobia certainly were not helpful.

### E. Central Bank Cooperation: The Practice

Six countries which otherwise would have found it impossible or prohibitively expensive to obtain foreign capital were enabled to reorganize their finances and obtain funds at moderate cost . . . several other countries received advice and assistance but did not borrow under League auspices. In all of these cases, the cooperation of the League was far more important than the sums involved. Financial experts appointed by the League made recommendations for restoring the budget equilibrium; new central banks were established or old ones remodeled in accordance with their plans; currencies were stabilized and new monetary systems devised where necessary; and state owned railroads were placed under supervision.<sup>70</sup>

The six countries were Austria (1922), Hungary (1923), Danzig (1923), Estonia (1923), Greece (1924 and 1927), and Bulgaria (1926). Central bank cooperation in restoring sound financial conditions—balanced budgets, convertible currencies, and “independent” central banks and *no monetization of the public debt*—went beyond the League's framework. Such monetary rehabilitation was mostly under the leadership of the Bank of England with the “technical assistance” of its experts. Close cooperation of other central banks and governments and the financial “blessing” of the New York Federal Reserve Bank were obtained in most instances. For the “League loans” and some others, the funds were provided either by central and commercial banks or by the public sale of bonds guaranteed by a number of governments. The bankrupt nations had to assign specific properties or revenues to the creditors.

Most countries in need of rescue action were in a plight—for diverse reasons but all connected with the war—so desperate as to defy the possibility of refinancing through the normal channels of domestic or international capital flow. Austria and Hungary had been mutilated, deprived of major parts of their resources and budge-

tary revenues, flooded by refugees, and plagued by internal dissension and unrest. Similar situations existed in Bulgaria and Greece. To become going concerns, these nations needed "working capital." Runaway inflation and capital flight had destroyed both their savings at home and their "creditability" abroad. Only *ad hoc*, one-time aid of moderate volume, was even possible, to start with.

Austria and Hungary were the first cases on the agenda; the reparation "mortgages" put on them by the respective peace treaties had to be relieved before foreign capitalists could be induced to provide even short-term credit to them. Similar, although less "desperate," situations prevailed in Poland, Roumania, Yugoslavia, even in Portugal. They were "refinanced," and their budgets and monetary systems were reorganized by leading central bankers and cooperating private financial houses, with J. P. Morgan and Company frequently in the foreground. About the same time teams of American experts headed by Professor Edwin W. Kemmerer, of Princeton University, worked out plans for revamping currencies and constructing central banks in nine countries, from South Africa to Poland and Latin America.<sup>71</sup> In most Central European cases, experts from the Bank of England or another leading central bank were installed to supervise the execution and continuity of the fiscal and monetary reorganizations. No such supervision and control would have been feasible, of course, in conjunction with the stabilization of the Belgian franc, the Italian lira, and the French franc. But they were helped along, with the exception of France which needed no help, by the substantial standby or actual credits which the Bank of England and the New York Reserve Bank provided directly or by way of inducing leading private institutions to step in.<sup>72</sup>

There was, however, far more to the cooperation of central banks, informal and casual as it may appear, than piecemeal rescue operations. Its "backbone" was the intimate collaboration between Montagu Norman and Benjamin Strong from 1919 on, growing in mutual regard and warmth until the latter's death in October 1928. Strong's successor at the New York Federal Reserve Bank, George L. Harrison, originally a lawyer, carried on along Strong's lines, but lacked the latter's influence in the Federal Reserve System. The intimacy of the transatlantic relationship evaporated, but the cooperation continued, and not only in terms of a continuous exchange of information and opinion. Occasionally, but in a very limited fashion, the



New York Federal Reserve Bank went out of its way to protect sterling. Once, in late 1929, Governor Harrison became alarmed by the weakness of sterling on the New York foreign exchange market and intervened by buying pounds—to the tune of £5 million. Even under the Strong regime, however, the cooperation failed whenever national objectives collided. Without regard to Norman's wishes—who considered it as mandatory that British interest rates should at all times be above the American level in order to avoid gold losses—an inflation-conscious Strong had held the New York Bank's discount above the London level from April 1922 to May 1924 despite a declining trend in American commodity prices.<sup>73</sup>

Central bank cooperation involved far more than joint actions to restore sick monetary and fiscal systems and provide them with "working capital," whether gold or foreign exchange, and technical assistance. Despite political differences, which have been greatly exaggerated by sensationalist "historians," the four leading central banks were in contact with one another throughout the 1920's, exchanging views, occasionally coordinating policies, and trying, although not always successfully, to eliminate conflicts between national and cosmopolitan points of view.<sup>74</sup> The degree of "bilateral synchronization" of central bank policies, discount rates in particular, has been extensively related, so far as the "senior" institutions were concerned and the available English, French, and German source material reaches.<sup>75</sup> The leadership role of Montagu Norman was uncontested. His masterpiece was, it is generally recognized, the Dawes Plan of 1924. The reintegration of Germany into Western economic society laid the cornerstone to an unprecedented, world-wide prosperity and its fateful exuberance.<sup>76</sup>

Historical high points, before the crisis, were experiments with lowering Federal Reserve discount rates on two occasions, 1924 and 1927. Both, but the second one in particular, were motivated, as an "insider," Randolph Burgess, has emphatically pointed out,<sup>77</sup> by contracyclical considerations, as well as by the exigencies of Bank of England policies. In both cases, the lowering of rates in the United States prevented a gold outflow from Britain and permitted the Bank of England to avoid raising its discount rate again. Undoubtedly, the 1927 credit cheapening was instrumental in "overheating" stock market speculation in the United States.<sup>78</sup>

Central bank cooperation failed in the crisis of 1931. Yet, on

balance, this sort of cooperation in the period under review accomplished as much as could fairly be expected from an entirely new *modus operandi* in the monetary world, in view of the extremely difficult circumstances obtaining. Those were a gold exchange standard with a “sick” currency at its focal center, and money supplies almost universally overextended. Recognition of the System’s fatal weakness was, evidently, the reason for Dr. Schacht to show his appreciation for the £10 million aid the Reichsbank had received in 1924 from Norman, by turning his modest sterling portfolio into gold in 1928. He had started to do so in 1926, after the British general strike. Norman implored him in two letters (December 11 and 21, 1928) to adhere to the “protective” gold exchange standard. Schacht answered evasively that the influx of foreign, largely French, funds deprived him of control over his own money market and a lower discount would not help. Norman wrote in his rejoinder of December 22:

When writing to you ten days ago I had it in mind that you might be willing to give me marks for sterling . . . to the extent more or less that gold would otherwise be taken from London for Germany; in other words, the Reichsbank would acquire a deferred and profitable claim for gold instead of an immediate and unprofitable deposit of gold. And I think that these continual shipments of gold from London to Berlin have made both your and my position worse: *you have more gold than you need, while I am in danger of being left with less than I require . . .*

I will leave you to think over what I have written. I agree with you that the *present position is largely due to French operations in devisen*; but I do not think that those operations would have had this effect upon you and upon myself had it not been for the *dislocation of the American Money Market*. And while I agree that the gold standard gives greater satisfaction than the exchange standard, I do not think that either you or I during these uncertain years (when capital as well as trade balances is moving from country to country) can wisely rely on the former alone: *we need a gold standard protected by devisen*: otherwise movements are apt to be too sudden, too severe and too suddenly effective on markets.<sup>79</sup> (Italics supplied.)

Schacht remained adamant. Evidently, he was aware of the facts of life, that the weakness of the pound was due to a basic disequilibrium rather than to such temporary factors as French “operations”

or a "dislocation" of the New York money market.<sup>80</sup>

Toward the end of what had been an "era," Norman lamented over the failure of his life work. He said, in effect, that he should have never even started reconstructing Austria. Of course, the emotional outburst of a frustrated man may be discounted. In any event, the return of the industrial world to the gold standard for a second time, if only to one of a diluted sort,<sup>81</sup> was deeply influenced by the rich experience of the 1920's, and not the least by Norman's sometimes "abortive" efforts to stabilize sick currencies. Actually, the Bank of England was playing a European role in the 1920's that the United States government was going to play world-wide and on a vastly increased scale after World War II, the later role drawing its inspiration from Norman's ideas.

The cooperation of central banks in the 1920's ended in a breakdown of the entire system, having been essentially a cloak that masked the ultimate purpose of its chief ingredient, the gold exchange standard, which was to maintain Britain's gold standard without obeying the rules of the gold standard.

#### *Addendum One: Norman and Schacht*

The following incident, related to this writer by what he considers an unimpeachable source, throws light on the intimacy of the relationship between Norman and Schacht.

In September 1924, a few days before the opening of the Dawes Conference in Paris, Schacht left for London for preparatory conversations with Norman. He was accompanied by a junior member of the Reichsbank's staff: we shall refer to him as the Secretary. In London, Schacht went to the Bank of England. Upon returning to the hotel, he found a telegram from the Chancellor requesting his immediate return to Berlin; he left at once. He and the Secretary would meet in Paris. As he stepped into the train, Schacht turned to the Secretary and said casually, "When you see Norman tomorrow morning, please sign the treaty he will give you." "What treaty?" asked the Secretary (a jurist by profession). "Norman will tell you," was the answer as the train was leaving.

The following morning, the Secretary presented himself to Norman. He had been told by his chief, he said, about a treaty he was



to sign. "Oh yes," said Norman, and drew out of his pocket a white sheet of paper and handed it over. There was no letterhead on it, no indication of an official nature. It contained two short paragraphs, to this effect:

- 1.) The Deutsche Reichsbank obligates itself to follow the advice of the Bank of England in all matters pertaining to central bank policy, such as discount rates, open market operations, credit policy, etc.
- 2.) If Danzig reverts to the Reich, the Bank of England will make every effort to bring the Bank of Danzig into the fold of the Reichsbank.

The Secretary was completely taken back. Aside from the dubious validity of such a "treaty," how could he, an official of the German government, sign away the sovereignty of the Reich? How, on the other hand, could he violate the order of his chief and offend the Governor of the mighty Bank of England, on whose goodwill Germany depended just at that moment? But his signature might be considered as attempted treason, his own career thereby terminated. He stared at Norman, not knowing what to say.

Norman stood up and, smiling, went over to the thoroughly embarrassed German, laid his hand on the latter's shoulder, and looked straight into his eyes. "Trust me," was all he said. As the Secretary told it: he was so impressed that he signed, but forgot to ask for a copy of the "treaty."

Next day he met Schacht in Paris. After talking about current matters, Schacht finally asked, "Did you sign the treaty?" "Yes, I did, but . . ." Schacht laughed and explained the matter. Norman had learned through the diplomatic grapevine that at the Dawes Conference the French were planning to bring up the Reichsbank's inflationary records, arguing that in view of that record the Reichsbank might try again to sabotage the reparations by "suicidal" money printing. The French delegation might request that a French controller be put in charge of the Reichsbank, a request unacceptable to the Germans. If the French should raise this issue, Norman would draw the "treaty" out of his pocket, read out the first paragraph, and conclude with the rhetorical question, "Gentlemen, do you no longer trust the Bank of England?"

"And why the second paragraph?"

“Just in case our Nationalists should object to having ‘sold out’ a piece of German sovereignty, the Bank of England’s implicit promise to work for Danzig’s return to the Reich would provide political protection.”

NOTE: We include this account with some hesitancy, for we have found no additional evidence to support the story in the late Dr. Palyi’s papers. He did himself at one time, however, have a close personal acquaintance with Dr. Schacht. DLK and GCW.

*Addendum Two:*

Selected Resolutions submitted to the Genoa Conference, April 20, 1922:

*Resolution 5:* Gold is the only common standard which all European countries could “at present agree to adopt.”

*Resolution 6:* “It is in the general interest that European Governments should declare now that the establishment of a gold standard is their ultimate object, and should agree on the program by way of which they intend to achieve it.”

*Resolution 9:* “These steps might by themselves suffice to establish a gold standard, but its successful maintenance would be materially promoted, not only by the proposed collaboration of central banks, but by an international convention to be adopted at a suitable time. The purpose of the convention would be to centralize and 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. The convention should embody some means of economizing the use of gold by maintaining reserves in the form of foreign balances, such, for example, as the gold exchange standard or an international clearing system.”

*Resolution 11:* “It is desirable that the following proposals, to form the basis of the international convention contemplated in Resolution 9, be submitted for the consideration of the meeting of central banks suggested in Resolution 3:

1. The governments of the participating countries declare that the restoration of a gold standard is their ultimate object, and they agree to carry out, as rapidly as may be in their power, the following program:

- a. In order to gain effective control of its own currency each government must meet its annual expenditure without resorting to the creation of fiduciary money or bank credits for the purpose.
  - b. The next step will be, as soon as the economic circumstances permit, to determine and fix the gold value of the monetary unit. This will not necessarily be at the former gold parity.
  - c. The gold value so fixed must then be made effective in a free exchange market.
  - d. The maintenance of the currency at its gold value must be assured by the provision of an adequate reserve of approved assets, not necessarily gold.
2. When progress permits, certain of the participating countries will establish a free market in gold and thus become gold centers.
  3. A participating country, in addition to any gold reserve held at home, may maintain in any other participating country reserves of approved assets in the form of bank balances, bills, short-term securities, or other suitable liquid resources.
  4. The ordinary practice of a participating country will be to buy and sell exchange on other participating countries within a prescribed fraction of parity of exchange for its own currency on demand.
  5. The convention will thus be based on a gold exchange standard. The condition of continuing membership will be the maintenance of the national currency unit at the prescribed value. Failure in this respect will entail suspension of the right to hold the reserve balances of other participating countries.
  6. Each country will be responsible for the necessary legislative and other measures required to maintain the international value of its currency at par, and will be left entirely free to devise and apply the means, whether through regulation of credit by central banks or otherwise.
  7. Credit will be regulated not only with a view of maintaining the currencies at par with one another, but also with a view to preventing undue fluctuations in the purchasing power of gold. It is not contemplated, however, that the discretion of the central banks should be fettered by any definite rules framed for this purpose, but that their collaboration will have been assured in matters outside the province of the participating countries."



## Notes to Chapter Four

1. See Table IV-I.
2. See chap. 2, Sec. C, above.
3. See chaps. 2 and 3, above.
4. Quoted by Brown, *International Gold Standard*, pp. xvii–xviii. Anderson wrote this in 1937.
5. Ibid., p. xxiii. In the following the writer has drawn on his own article, “The Meaning of the Gold Standard: A Review Article,” *Journal of Business* (Chicago), July 1941.
6. Brown, *International Gold Standard*, p. 29.
7. Ibid., p. 158.
8. Ibid., chaps. 17 and 18.
9. Short-term borrowing with a repurchase agreement.
10. In terms of the respective countries’ economic size, the net international credit position of France then was several times larger than that of the United States today (1970).
11. See M. G. Myers, *Paris as a Financial Center* (New York: Columbia University Press, 1936); P. B. Vigneux, *Le Crédit par Acceptation: Paris Centre Financier* (Paris: Riviere, 1931); Maurice Mogenet, *Un Siècle d’Economie Française: 1863–1963*, (Credit Lyonnais), p. 104; J. Marchal, *Les Grands Marchés Financiers . . . Leur Solidarité Internationale* (Paris: Receuil Sirey, 1932); J. LeRoy, *Les Syndicats d’Emissions* (Paris, 1915); A. Thery, *Les Grands Etablissements de Credit Francais Avant, Pendant et Après la Guerre* (Paris; E. Sagot, 1921); Ulmer, “Les Emissions de Valeurs Mobiliers et l’Epargne en France,” *Bulletin de la Statistique Générale de la France et du Service d’Observation des Prix*, no. 18 (1928–1929), p. 297.
12. Berlin was a close competitor of London on the international money market; by 1913 it was threatening to overtake London. See P. H. Lindert, *Key Currencies and Gold, 1900–1913* (Princeton: Princeton University Press, 1969); also Herbert Feis, *Europe the World Banker, 1870–1914* (New York: Augustus M. Kelley, 1930).
13. See chap. 5, sec. A, below.
14. As a matter of fact, London was the unchallenged money market center of Europe throughout the 1920’s—for a technical reason. There was no aerial connection as yet between Europe and America, the transatlantic phone worked “indifferently” and was expensive, and the cables were frequently overloaded. Foreign exchange arbitrage, for one thing, was largely confined to Europe.
15. Brown, *International Gold Standard*, p. 1047.
16. W. W. Stewart was Director of the Division of Analysis and Research of the Federal Reserve System, 1923–1926. See *Minutes of Evidence* (Macmillan Report), vol. 2, pp. 183–208.
17. Clay, *Lord Norman*, pp. 153–154.
18. See chap. 4, Sec. D, below.
19. Yet in the United States, in 1925 for example, about 20 per cent of the “money in circulation” was gold certificates and 8 per cent more was gold coin. *Federal Reserve Bulletin*, December 1925, p. 920.
20. The gold bullion standard was willingly accepted by the public in most countries. Attempts, in 1929–1930, by Italy, the Netherlands, and Switzerland to put gold coins back into circulation actually misfired (Brown, *International Gold Standard*, p. 962), indicating at least a temporary confidence in the respective governments—if not a lack of foresight on the part of the public.
21. W. E. Spahr, in *Monetary Notes* (New York: Economists’ National Committee on Monetary Policy), December 1, 1947, p. 5.
22. See chap. 4, sec. D, below.

23. *Interim Report* (Cunliffe Committee), p. 103. See Table IV-5, below.
24. League of Nations, *Interim Report of the Gold Delegation of the Financial Committee* (Geneva, 1930), p. 15.
25. See Feliks Mlynarski, *The Functioning of the Gold Standard* (Geneva: League of Nations, 1931), chaps. 4 and 5.
26. See Table IV-3.
27. See Table IV-4.
28. W. J. Busschau, *The Measure of Gold* (South Africa: Central News Agency, 1949), p. 92.
29. Sight liabilities other than notes were *not* subject to gold reserve requirements in Australia, Denmark, Germany, Japan Norway, Spain, Sweden, Switzerland, and the United Kingdom. (League of Nations, *International Currency Experience*, p. 96.)
30. See Table IV-5. Between 1924 and 1929, credit extended by the Bank of England had been cut by £35 million. In 1924, the Hungarian National Bank revised the ratio of its reserves to demand obligations from 45 per cent to 60 per cent.
31. See chap. 8, sec. B, below.
32. Noted by B. M. Anderson, in *Chase Economic Bulletin*, September 29, 1930.
33. By 1936, "the currencies of the 23 principal gold mining countries (outside of the U.S.S.R.) . . . had depreciated by about 43 per cent on the average, which meant that the price of gold in these countries was, on the average, 76 per cent higher in 1936 than in 1929." (League of Nations, *International Currency Experience*, pp. 17-18.) See chap. 9, sec. A, below.
34. Table IV-6. The movement of gold out of England included the *flow of new gold* from the London market, from where it was distributed world-wide.
35. See sec. E, below.
36. League of Nations, *Selected Documents on the Distribution of Gold* (Geneva, 1931), p. 28. (article by Professor T. Gregory.)
37. See chap. 8, sec. B, below.
38. See Table IV-7.
39. For a fuller discussion of the gold exchange standard, see chap. 4, sec. D, below. For a full account of prewar experiments with it, consult E. W. Kemmerer, *Modern Currency Reforms* (New York: Macmillan Co., 1916), pp. 124 f., 365 f., 460 f. Also see his *Gold and the Gold Standard* (New York: McGraw-Hill, 1944), pp. 152-173.
40. In dollars of pre-1934 gold content, not counting foreign exchange reserves, the gold reserves of all central banks amounted (at the end of 1929) to \$9,378 million and the required reserves to \$7,200 million, leaving a "surplus" of \$2,178 million available for monetary purposes. (League of Nations, *International Currency Experience*, p. 12.) Hence the widespread charge that the central banks were "hoarding" gold.
41. See chap. 7, sec. D, below.
42. See chap. 6, sec. B and sec. E, below.
43. A phrase often mentioned by my colleague and friend, the late Dr. Walter E. Spahr, of New York University.
44. D. W. Gilbert, "The Economic Effects of the Gold Discoveries upon South Africa: 1886-1910," *Quarterly Journal of Economics*, August 1933, p. 567.
45. See chap. 8, sec. B and sec. C, below.
46. Charles O. Hardy, *Is There Enough Gold* (Washington, D.C.: Brookings, 1936), pp. 145 f. See Charles Rist, *Histoire des Doctrines Relatives au Crédit et la Monnaie*, (Paris: Receuil Sirey, 1938), pp. 265 ff.
47. Charles Rist, *La Défense de l'Or* (Paris: Receuil Sirey, 1953), p. 65.
48. The ink was barely dry on the League of Nations Gold Committee report when piles of gold started coming out of the mines. The Casselian innovation lay in replacing the old relationship of "volume of money in circulation" as against "volume of trade" by a compari-

son of *annual changes* in the two variables. Mistakenly, he substituted annual gold output for annual changes in the monetary dimension. His subtle approach (in terms of differentials per unit of time rather than in total quantities) became after World War II the methodological base of a revived quantity theory of money—including Milton Friedman's annual 4 per cent money-supply-increase formula. See chap. 8, sec. A and sec. B, below. Time and again, rising gold production has been accompanied by declining price levels, and rising prices followed stagnant or declining gold output, as has been shown by J. T. Phinney, "Gold Production and the Price Level: The Cassel Three Percent Estimate," *Quarterly Journal of Economics*, August 1933.

49. See chap. 2, sec. C, above.
50. In the late 1920's, as an example, Norman wished to reduce his discount rate—which he wanted to keep "a little above" the New York rate—but was inhibited by Strong's refusal to reduce his discount. Clay, *Lord Norman*, pp. 132–142.
51. The books of Moreau, Chandler, Clay, Brown, Clarke, and Boyle have brought to light a wealth of source material. See E. W. Bennett, *Germany and the Financial Crisis, 1931*, (Cambridge: Harvard University Press, 1962). This writer has taken advantage of his predecessors' labors—with credit given where credit is due—but sparingly of their interpretations and comments. See also K. E. Born, *Die Deutsche Bankkrise [1931]* (Munich: Piper, 1967).
52. Moreau, *Souvenirs*, pp. 136 f. Quesnay was general manager of the Bank of France, 1926–1930, then of the Bank for International Settlements, 1930–1937.
53. See Clay, *Lord Norman*, pp. 136–137, 272–276, 293.
54. *Ibid.*, p. 122.
55. Boyle, *Montagu Norman*, p. 206.
56. Quoted by Clarke, *Bank Cooperation*, p. 30.
57. About the intimacy of the Norman–Schacht friendship, see *Addendum One* to chap. 4, above.
58. As told by Schacht to this writer in Berlin in early 1929, while interpreting his participation in the Young Plan conference. Schacht referred *expressis verbis* to the Louisiana project of John Law as his pattern, but objected to mentioning John Law in the *Frankfurter Zeitung* article in which I published the "idea" at his request but without mentioning Schacht as the inspirer. When his grandiose idea was rejected, a frustrated Schacht sabotaged, as mentioned by Clay (*Lord Norman*, p. 365), Norman's attempt to make the Bank for International Settlements into an international gold clearing house.
59. Moreau was fully aware of the fact that the "international body" in charge of central bank cooperation was to be controlled by the Bank of England.
60. Clarke, *Bank Cooperation*, pp. 33–34.
61. See chap. 2, sec. C, above.
62. See chap. 4, sec. C, above.
63. At the Genoa Conference (April 1922) an objective was proclaimed again which had been specifically rejected by the Brussels Conference. This was the attempt to prevent fluctuations in the value of gold itself (which a simultaneous attempt to return to a gold standard might intensify) by "coordinating demands for gold and stabilizing credit policies to keep currencies at the parities established." (Clay, *Lord Norman*, p. 137.)
64. The relevant resolutions of the Financial Commission presented to the Genoa Conference (April 20, 1922) are reprinted in *Addendum Two* to chap. IV, above.
65. See Clay, *Lord Norman*, p. 136: "He, Norman, expressed his disbelief in any policy of attempting to stabilize the value of gold," meaning the Fisherian type of stabilization. Strong was "vehemently" opposed to all attempts at stabilizing the purchasing power of gold. (Clarke, *Bank Cooperation*, pp. 37–38.)



66. Originally, the Sterling Area comprised the British Empire (excepting Canada) and a few other countries which were commercially and financially "allied" to the United Kingdom, such as the Baltic states, Iran, and several Scandinavian countries. See Clay, *Lord Norman*; W. F. Crick, *Origin and Development of the Sterling Area* (London: University of London, 1949); A. R. Conan, *The Sterling Area*, (London: Macmillan & Co., 1952).
67. See Table IV-8.
68. Keynes' biographer noted that "he was elected to the Court [board of trustees] of the Bank of England" (Harrod, *Keynes*, p. 517), without mentioning that it was Norman personally who invited him, and added erroneously, "no great change in either [Keynes or Norman] resulted."
69. See Preface to the German edition of Keynes' *General Theory*, i.e., *Allgemeine Theorie der Beschäftigung des Zinses und des Geldes*, (trans. by F. Waeger) (Munich: Duncker & Humblot, 1936). In it Keynes referred to the Nazi system of quasi-self-sufficiency (under totalitarian rule) as a condition particularly favorable to the application of his theories.
70. Margaret G. Myers, "The League Loans," *Political Science Quarterly*, December 1945, p. 492. E
71. All such plans were constructed on the principles underlying the pre-1914 gold standard, including the rule that the *earning assets of central banks have to consist essentially of short-term commercial paper*. The nine nations which Professor E. W. Kemmerer and his experts advised between 1923 and 1930 were, in chronological order, Columbia, Guatemala, the Union of South Africa (Dr. Gerard Vissering, of the Bank of the Netherlands, went along as co-expert), Chile, Poland, Peru, Bolivia, Ecuador, (Nationalist) China, and Columbia a second time in 1930.
72. About the "standby" and other support for sterling stabilization, see chap. 3, sec. B, above.
73. Clay, *Lord Norman*, pp. 143-144.
74. About the decisive role of the bank of France in the framework of central bank cooperation, see chap. 5, sec. D, below.
75. There was an informal agreement between the Austrian, the Hungarian, and the Czechoslovak central banks to help each other in emergencies. They did so, on at least one occasion, in the late 1920's, even though at the time Czechoslovakia's diplomatic relations with the two other Danubian countries were strained. (Private communication in 1934 to this writer by a leading officer of the Hungarian National Bank.)
76. Technically, Sir Arthur Salter was the chief author of the Dawes Plan.
77. Burgess was a vice-president of the New York Federal Reserve Bank. See Wicker, *Monetary Policy*, chaps. 6 and 8.
78. See chap. 8, sec. C, below.
79. Clay, *Lord Norman*, pp. 244-245.
80. Strengthening foreign confidence in the German mark was the (transparent) excuse proffered by Mr. Dreyse, vice-president of the Reichsbank (*Bank Archiv* [Berlin], October 1, 1927) to justify Schacht's policy of accumulating gold. It implied that accumulating sterling would not have served the purpose.
81. See chap. 9, sec. A, below.

*The Unstable Equilibrium of the 1920's***Introduction**

WITH THE WISDOM of hindsight of half a century it is easy to see how the unwillingness of the world to face reality at the end of the First World War helped to pave the way to the Great Depression and ultimately the Second World War. Economic, political, and social conditions had changed drastically during the four years of fighting and there was no way of returning to prewar conditions. Yet, a disturbed world longed for peace and "normalcy," and instinctively looked upon the prewar period and its institutions as "normal." The halfhearted attempt to return to a quasi-gold standard in the form of a gold bullion, and later on a gold exchange standard, failed, partly because of their inherent structural defects, and partly because the system of values had changed. Political considerations loomed larger than economic, and with the change in political power the immediate goal of domestic prosperity became more important than a sound international financial system. Even the experts refused to see that in the end it is impossible to maintain a sound domestic equilibrium, while the world economy was in disarray. The reparation-Allied-debt transfers complicated matters, but the amounts involved were of such dimensions that the problem could have been solved, if the world's economic situation had otherwise been sound. But it was not.

Europe, and especially Britain, refused to think in terms of the new and much poorer world. When sterling was made convertible at the prewar parity of \$4.86, the rigidity of the wage price structure in Britain did not permit an adequate reduction in British price levels, and war-impooverished Britain was able to maintain her prewar standard of living and the prewar parity of sterling only with the help of the gold exchange standard.

German reparation payments and French budget deficits, and a chronic German import surplus, were financed through well over 150 foreign long-term loans contracted by Germany within less than seven years; not to mention the top-heavy short-term indebtedness of the German and Austrian banks. When the stream of new loans ended in 1930, the prices of German dollar bonds declined sharply, and by 1933 most of them were in default.

The situation was similar with regard to the war-inflated commodity prices. Dollar and sterling loans to Latin America and other raw-material-producing countries temporarily prevented a drastic adjustment of commodity prices, until, with the onset of the depression and the end of foreign loans, the collapse of the price structure became almost unavoidable, and the dollar and sterling loans, which had supported the inflated prices during the 1920's, went into default.

Failure to permit needed adjustments during the postwar years thus produced a correspondingly more severe depression during the 1930's, once the fifteen years of inflation from 1914 to 1929 had collapsed. (G. C. Wiegand)

### **A. The Gold Exchange Standard**

Before 1914, the central banks of five European countries were permitted by statute to use foreign exchange in unlimited amounts as equivalent to metallic reserves. The countries were Belgium, Bulgaria, Finland, Italy, and Russia. In eight other countries—Austria-Hungary, Denmark, Greece, Norway, Portugal, Roumania, Spain, and Sweden—statutes limited the permissible volume of such holdings. Central banks rarely published details regarding their foreign exchange holdings. The amounts were relatively small, were treated as part of the banks' commercial banking operations, and appeared in the balance sheets under the catch-all item "other assets."



And even after the war, many of the European central banks continued to function largely as privately owned commercial banks, although subject to special regulations. The gradual process of “self-socialization”—the deliberate subordination of the profit motive to the “public interest,” if not the dictates of the government—still left the central banks with the obligation to earn dividends for their shareholders.

The gold exchange standard which came to be regarded as characteristic of the 1920's was actually not a postwar invention. It had been in use since the late 1870's. The classic example was the Indian currency whose reserves consisted mainly of claims on London, as a result of which the rupee was being held at a fixed parity to sterling.<sup>1</sup> Similarly, Santo Domingo and the Philippines relied on the United States Treasury and the Dutch East Indies on the Netherlands, for managing the foreign exchange value of their currencies—a dependent, colonial monetary system. But even independent central banks held claims in foreign currencies as a matter of convenience,<sup>2</sup> and commercial banks on the Continent carried very substantial amounts of sterling, German marks, and French francs.<sup>3</sup>

The revolutionary idea to make general use of the gold exchange standard has been attributed to the English economist, R. G. Hawtrey. It was originally presented as the “New Monetary System” at the top-level Genoa Conference in 1922. Countries other than the “center” or “reserve” countries were to keep a major part of their monetary reserves in the form of “reserve currencies,” i.e., in effect dollars and sterling.<sup>4</sup> The idea was to “economize” on gold, the holding of which would be a “luxury” for poor countries. Scant attention was paid before 1930 to the money supply effect: the same quantity of gold serving as a monetary base in two places, thus increasing the inflationary potential at the outset and the deflationary hazard in case of liquidation. Governor Strong was one of the first to object to this practice. He was impressed by its potentially adverse effect on the gold-holding central bank but he ignored the risk which the creditor banks took.<sup>5</sup> Before 1914 banks bought and held foreign exchange as needed; now the “peripheral” central banks were asked and prompted by the Bank of England to hold foreign exchange—supposedly for the purpose of serving thereby the “common welfare.” The motivation was purely financial in one case, largely “political” in the other. Resort to the gold exchange standard technique

meant—under postwar conditions—that countries with a deficit in their balance of payments postponed paying “hard cash.” Instead, they borrowed from countries with a payment surplus. The central bank with a payment surplus gained or retained a reserve in the form of a gold-convertible interest-bearing claim, the country with a payment deficit lost no reserve. The deficit country was under no pressure, as it would have been otherwise, to raise interest rates or restrict the money supply. Each time a deficit country could avoid or postpone the transfer of gold by an *ad hoc* credit in the opposite direction, an imbalance was created, as shown by the following example.

Let us assume that in her dealings with France, Britain incurred a £100 million deficit. Under the classical gold standard, Britain would have had to ship £100 million worth of gold to France. Britain lost gold, France gained it; the monetary base of the two countries combined remained the same. Now, by substituting a debt certificate for gold, a part of the reserve assets of the two countries was doubled: £100 million gold remained in London and £100 million in foreign exchange were added to the French reserves. A deflationary pressure on London was avoided; the inflationary pressure in France increased; and the world as a whole experienced a corresponding increase in international liquidity, which tended to be inflationary.

At the end of 1913, an estimated total \$963 million at the old gold parity comprised the foreign exchange holdings of the monetary authorities; more than one half of the total, \$558 million, were held by three then “underdeveloped” countries: Russia, India, Japan.<sup>6</sup> By 1928 foreign exchange holdings of central banks consisting largely of British pounds, and to a lesser extent of U.S. dollars, amounted to \$2,520 million, equal to 42 per cent of total official reserves. By that time twenty-four central banks, between them, were holding \$5 in foreign exchange to every \$7 of gold in their possession. In 1924 the ratio of exchange holdings to total reserves amounted to 100 per cent in Danzig, 80 per cent in Greece, 73 per cent in Lithuania. In the case of major central banks outside the United States and the United Kingdom 30 per cent to 40 per cent was the most common. In France, for instance, 38 per cent of total reserves consisted of foreign exchange holdings at the end of 1929.<sup>7</sup>

No reliable data are available regarding the relative importance of dollar and sterling holdings. Circumstantial evidence, however, seems to indicate that sterling predominated, as in the case of the

Bank of France. In theory the over-all monetary requirement for gold was not reduced by the full amount of foreign exchange holdings, because the Bank of England was supposed to "neutralize" an appreciable amount of gold as reserve against potential gold withdrawals by correspondent central banks.<sup>8</sup> But this was to a large extent a requirement in theory.

Throughout the 1920's the growth of foreign holdings by central banks was generally regarded as a desirable trend which helped to finance the boom. Few monetary theorists or practical men of affairs recognized the potential deflationary danger. While the "pyramiding" of international reserves fed the boom of the 1920's, the "depyramiding" process which set in, at first quite slowly in 1930, speeded the downward spiral beginning in 1931. Between 1928 and 1930, the foreign exchange holdings of twenty-four central banks declined by only \$220 million,<sup>9</sup> whereas their gold reserves increased from \$3,490 to \$4,316 million. A chief component in the decline was the conversion, in 1929, by the Bank of France, of \$226 million worth of sterling into gold.<sup>10</sup> This move has been dramatized in the sensation-seeking (English) literature, creating the picture of a financial warfare between the two central banks. Actually the Bank of France was as anxious as most central banks to hold foreign assets, including sterling, which combined the safety of gold with reasonable earnings and served as the most widely used payment instruments in international trade. Given very low interest rates in Paris after 1926, the Bank of France had to seek remunerative outlets for a part of its funds in foreign money markets.

This should dispose of the fable, one that dies hard, that a breakdown of the gold exchange standard had forced sterling off gold in September 1931. Actually most central banks, with the exception of the Reichsbank, maintained their sterling reserves and many of them, e.g., the Bank of France, and the Bank of the Netherlands, suffered losses amounting to multiples of their capital and reserve accounts.<sup>11</sup> Their governments had to refinance them.

After the sterling devaluation the foreign exchange portfolios of the creditor central banks were either "written down" or liquidated altogether; hence the reduction of the total foreign exchange holdings in the twenty-four countries by almost \$1,100 million in 1931, and by more than \$700 million the following year, leaving the total non-gold reserves at an almost nominal level of \$500 million.



This was the end, for all practical purposes, of the first experiment with a comprehensive gold exchange standard—and the curtain raiser for the construction of the second, the Sterling Area, made up of countries which entrusted, more or less, the fate of their own currencies to the management of sterling.

None of the major central and commercial banks of the creditor countries seems to have participated in the 1931 runs on the Austrian schilling, the Hungarian pengoe, the German mark, and the British pound. Panic-stricken *private* (short-term) investors were emptying the “treasure boxes” of the victimized authorities. Actually, the leading official institutions undertook rescue actions—whether or not in an adequate fashion, is another matter.<sup>12</sup>

The “international liquidity” generated by the gold exchange standard rested on the presumption that the reserve currencies would always be convertible into gold at statutory prices. Suspension of the convertibility of the chief reserve currency caused the gold exchange standard to collapse; it was not the breakdown of the gold exchange standard that caused sterling to collapse. It was the panicky run of private creditors on sterling that “forced” the Bank of England off gold. The private capital flow, to which we now turn, was the perverted “regulator” that had shored up the international gold standard of the 1920's—and reversed itself at the crucial time.

Building up the gold exchange standard of the 1920's was largely the work of Montagu Norman. He persuaded one European central bank after another to keep part of its reserve in sterling. That was one of his chief techniques to protect the British gold standard—in lieu of deflationary measures which were politically not feasible. The integral gold standard needed no “crutches.”

In this conception, the flexibility, the adjustability, of the economic components of the international system made cooperation almost unnecessary. Or, viewed from another angle, the adherence of the central banks to agreed rules of behavior, and especially to the principle that the maintenance of exchange rate stability should take precedence over all other economic objectives was itself a form of cooperation that normally made other forms of cooperation redundant.<sup>13</sup>

Norman realized what most of his contemporaries did not: that in an age of monetary and commercial nationalism, with the central

banks at the mercy of political forces, the “limping” automatism of the new gold standard needed “crutches.” The gold exchange standard was the most effective substitute for genuine self-adjustment of the “key currency.” But in the process of building it up, it fostered a boom in Europe and strained the credit of the “center” to the limit of its endurance.

### B. Intergovernmental Debts

The Dawes Plan (1924) was one of the sparks that ignited the hectic prosperity. The Plan’s acceptance by all concerned terminated the occupation of the Ruhr by France and Belgium, that had generated a warlike tension. If not definite peace, at least a sort of armistice—for five years and seven months—was concluded on the reparations front. The inter-Allied debt problem was resolved temporarily: German annuities took care of it. Shelving the politico-financial controversies, if for a while only, meant eliminating a very serious obstacle to the recovery of Europe, of world trade, and of political and economic stability. The agreement was an extraordinary achievement in which Montagu Norman played an outstanding role.<sup>14</sup> It was made possible by France’s dissatisfaction with the negative results of the Ruhr occupation, combined with her urgent need for German payments to balance her budget and to support the tottering franc. Nor could France permit herself to be isolated diplomatically. It is necessary to recall all this in order to test the contribution, alleged or real, of “political debts” to the course of monetary events.

The Dawes Plan had five essential features:<sup>15</sup>

a) The first was the definite stabilization of the Reichsmark (RM 4.20 = \$1) at the old parity. Actually, Germany had stabilized her currency at the end of 1923, when the old mark had depreciated almost to zero.<sup>16</sup> But unless a limit was put on French claims, Germany’s monetary stability could not have been assured for any length of time. France demanded total restitution (*dédommagement intégral*) for the heavily inflated costs of reconstructing northern France based on the Louis Marin resolution of the French Parliament of 1915.

b) By international treaty, the “independence” of the Reichsbank was guaranteed and so was the implicit obligation that Germany had to abide by the rules of the gold standard, namely refrain from any

policy that would put either the Bank's 40 per cent gold reserve ratio or the asset liquidity of the Reichsbank into jeopardy. Its credits to the government were strictly limited.

c) Germany obligated herself to annual installments *in cash*, which were to rise from \$60 million to about \$250 million. During the lifetime of the Plan, from September 1, 1924, to May 13, 1930, Germany's payments totaled RM 7, 970 million. That was less than \$2 billion, including deliveries in kind, occupation costs of Allied troops, and other minor items. This was surely not excessive in terms of her "capacity to pay" in domestic currency, as the experts on the Allied side and even some Germans agreed.<sup>17</sup> The highest Dawes Plan annuity, about \$250 million in 1929–1930, amounted to less than 4 per cent of Germany's estimated national income that was not burdened by any significant public debt, or by major armament costs.<sup>18</sup> But a one-way "welfare clause" had been added. Germany would have to pay more if her economic conditions improved. The fact that the total of the reparation debt, as well as the number of annual installments this required, remained unsettled provided additional fuel to heat the nationalist agitation against the Weimar Republic. Yet the fiscal burden of the reparation payments was actually somewhat smaller than that of Britain's national debt service.

d) The crucial problem of "transferring" the annuities was thrown into the laps of the Allies, represented by an American "transfer agent," S. Parker Gilbert,<sup>19</sup> who later became a partner of J. P. Morgan. He had to see that Germany fulfilled her obligations, but seemingly had no actual powers other than to advise both sides. Yet, his word carried great weight, since he could invoke the "transfer clause" in order to protect the mark against excessive strain on the country's gold reserve. Politically, this was the most significant and most controversial aspect of the Dawes Plan. It gave Germany the promise that her monetary system could not be "bled white"—and the inducement to indulge in budgetary deficits in the hope of sabotaging the transfer.

e) Last but not least, a first slice (\$110 million) of the reparation debt was mobilized in the form of German bonds, denominated in foreign currencies and sold abroad, largely to American investors. The Dawes loan—initiated by Poincaré himself—was a "genuine success," and it afforded a breathing spell to both the German and



the French budgets. The pattern was set for the next five years: foreign loans were to finance the German reparation payments.<sup>20</sup>

Thus, until late 1929, the equilibrium in Germany's balance of payments was maintained by the eastward flow of credit, especially from the United States, offsetting the westward flow of "political payments." In little over five years, Germany's net capital imports, estimated at \$4,420 million—\$6,250 million gross to the end of 1930, according to the German official *Untersuchung des Bankwesens*, 1933—not only offset the less than \$2,000 million in reparation payments, plus Germany's trade deficit, but also permitted the Reichsbank to increase its gold reserve by \$550 million. As to the recipients of reparations, the British position was "neutralized." The United Kingdom drew mainly out of Germany to pay to the United States on the inter-Allied debt account. About 25 per cent of the Dawes Plan annuities represented France's net gain after her inter-Allied debt payments; the bulk of the remaining 75 per cent went to the United States.<sup>21</sup>

The actual amount paid annually to the United States in interest and installments on the inter-Allied debt was a small item in the American payments balance; it was minor in proportion to the budgets and balances of payments even of the debtor nations. In retrospect, the moralistic hullabaloo which British and American spokesmen raised about the inter-Allied debts seems to make little sense, to say nothing of the curious theory of Keynes that the transfer of major sums, superimposed in world trade, would be impossible. He contended that capital movements supposedly follow the flow of trade, not the other way around.<sup>22</sup> Nor were the forebodings borne out of economists like Hubert Henderson of Cambridge, that German goods would "swamp" the world markets.

On an international scene marked by suspicions, jealousies, and sharp conflicts, the Dawes Plan was a splendid financial and political achievement, given the circumstances. These were the insatiable French appetite for ever more reparations and the German determination to limit them, preferably to escape all payments; the American insistence on the inter-Allied debt payments; and the special claims of minor countries. Europe was gratified, also, by the United States having been "drawn" into intra-European affairs, even if by only "one foot."<sup>23</sup> With one stroke, as it were, confidence was restored in Germany's future and a transatlantic capital flow was set

TABLE V-1  
Total Indebtedness of Foreign Governments to the  
United States, March 1, 1935  
(\$ thousands; figures rounded)

Country	Total indebtedness	Principal unpaid	Interest accrued and unpaid under funding and moratorium agreements
Austria	23,822	23,752	70
Belgium	416,422	400,680	11,992
Czechoslovakia	165,380	165,241	139
Estonia	18,377	16,466	1,418
Finland	8,637	8,414	—
France	4,000,903	3,863,650	98,616
Great Britain	4,793,186	4,368,000	293,666
Greece	32,808	31,516	843
Hungary	2,121	1,909	155
Italy	2,011,067	2,004,900	3,661
Latvia	7,560	6,879	474
Lithuania	6,762	6,198	378
Poland	229,967	206,057	17,748
Roumania	63,898	63,861	37
Yugoslavia	61,625	61,625	—
Total	\$11,842,534	\$11,229,148	\$429,198

SOURCE: Amos E. Taylor, *The Balance of International Payments of the United States in 1934* (Washington, D.C.: Department of Commerce, 1935), p. 67.

in motion. All dire predictions by a majority of English, American, and German experts, to the effect that the transfer of massive amounts of money would upset world trade and disrupt international balances of payments, turned out to be wrong—for over five years, beginning September 1924. In little over five years, an international Bankers' Committee, headed by W. Layton, estimated (August 1931) that Germany had paid 10.3 billion Reichsmarks in reparations (including the servicing of the Dawes loan) and received about 18 billion Reichsmarks in credits. According to contemporary theory, Germany should have undergone a most serious deflation in order to squeeze an average annual \$250 million merchandise export surplus out of an economy that used to operate on an import surplus. But there was no German export surplus, and no need for it except in one of those years. Year after year the surplus on capital account almost exactly balanced the deficit on current account. The drain due to reparation charges (the net cost totaling roughly \$500 million in six years), servicing the rapidly growing foreign debts, and the \$1,800 million deficit in Germany's foreign trade were offset by foreign loans.<sup>24</sup>

It all worked out as if the Invisible Hand had been in charge: an unplanned and unexpected equilibrium, painlessly established—except for some “miscalculations” which became manifest in due course.<sup>25</sup>

The quasi-equilibrium rested on the implicit assumption that foreign capital would be available to Germany at all times, and in growing volume at that. But by early 1929, the easy flow of credit to Europe was ebbing. The French government became disturbed by the rising chorus of German requests for putting the transfer clause of the Dawes Plan into effect. The Germans, their national self-reliance fully restored with growing prosperity, became restless under the Versailles *Diktat* and the “limitless” reparation burden. They resented being treated as *de facto* second-class members of the international community, even though they had been accepted to full membership in the League of Nations. In any case, the Dawes Plan was approaching the end of its five-year term.

A new conference was due and was called in Paris in April 1929, under the chairmanship of Owen D. Young, the chairman of General Electric Company. With interruptions, it lasted for a year. The resulting “New Plan” set up a definite timetable for reparation pay-



TABLE V-2  
Germany's Balance of Payments, 1924-1932  
(millions of Reichsmarks)

or	Current items					Net capital flow, in (+) or out (-)	Flow of gold & for. exch. into(-)		
	Merchandise			Interest & dividends	Other services			Total current balance	
	Exports	Imports	Balance						
Year	Exports	Imports	Balance	Reparations	Interest & dividends	Other services	Total current balance	Net capital flow, in (+) or out (-)	Flow of gold & for. exch. into(-)
1924	7,816	9,664	-1,848	-281	+159	+269	-1,701	+2,913	-1,212
1925	9,572	11,934	-2,362	-1,057	-6	+421	-3,004	+3,240	-236
1926	10,700	9,883	+817	-1,191	-173	+449	-98	+679	-581
1927	11,126	14,016	-2,890	-1,584	-345	+566	-4,253	+4,777	-524
1928	12,644	13,868	-1,224	-1,999	-563	+676	-3,110	+3,172	-62
1929	13,655	13,624	+31	-2,501	-800	+871	-2,399	+2,307	+92
1930	12,192	10,548	+1,644	-1,694	-1,000	+521	-529	+494	+35
1931	9,637	6,779	+2,858	-988	-1,200	+445	+1,115	-2,722	+1,607
1932	5,778	4,724	+1,054	-160	-900	+258	+252	-489	+237

SOURCE: League of Nations, *International Currency Experience* (Princeton, 1944), p. 103.

ments: fifty-nine annuities of RM 2,050 million (\$487 million) each. The welfare clause of the Dawes Plan which provided for an increase in payments as Germany's capacity to pay increased was abolished, leaving the French disappointed. But so were the Germans. The transfer clause which provided for a suspension of reparation transfers, if such transfers endangered the mark, was eliminated so far as the mobilized part of the debt (Dawes and Young loans), and a major "unconditional" portion too, were concerned. And the rest of the annuities were tied to difficult terms. Even the limited transfer clause could not have been invoked any longer without exposing Germany to a "run" by her creditors. Schacht, one of the two German delegates to the conference, signed the Young Plan—and then resigned as president of the Reichsbank, obviously to safeguard his own political future by disclaiming responsibility for the highly unpopular "New Plan" which he had signed.

An economic "balance sheet" of the Versailles Treaty has never been drawn up. The claim that the political debts stymied and upset the world economy has been loudly voiced, especially by German nationalists and American bankers, both groups dressing up their transparent motives in moralistic language. Even as keen an observer as B. M. Anderson, Jr., argued that such payments brought the world to the verge of an abyss. But no one has offered any evidence to support such extraordinary claims.<sup>26</sup> True, the pressure of the political debts was resented by most debtor nations, but this did not produce the alleged "poisoning" of the international climate. In France, it is true, the slogan "*le bôche payera*" induced reckless governmental spending—and eventual disappointment. In Germany, reparations served as a rationale for the 1922–1923 phases of the great inflation that allegedly proved the country's inability to pay. Even after stabilization of the mark, budget deficits were motivated, in part, by the fear that a healthy showing in the national budget would whet the French appetite for more "tribute."

There were other damaging repercussions. Anglo-American sentiment for France was alienated by her rigid insistence on the letter of the Versailles Treaty. The French, in turn, bitterly resented the anti-Versailles and anti-reparation propaganda that was sweeping the Western world. In Germany, reparation payments—the so-called policy of "fulfillment"—were a prime argument of demagogues against the Weimar Republic. Extremists of the Right and of the Left

outdid each other in denouncing reparations and Chancellor Gustav Stresemann's policy of international "understanding" which allegedly was designed to make the German people acquiesce to paying "tribute." The German authorities themselves were politically forced to denounce reparations as the "root cause of the depression" and "the ruin of the economy of the whole world," and to clamor for their revision.<sup>27</sup> But it is noteworthy that until the late spring of 1931 Berlin considered other political issues, such as the Eastern frontiers, armaments, evacuation of the Rhineland, even the customs union with Austria, far more significant than the reparations issue.

At one point in 1929, the reparations problem seemed on the verge of sparking a world-wide panic: when Schacht's maneuvering seemed to wreck the Young Plan conference and the first post-1923 run on the mark developed.<sup>28</sup> But the crisis faded when Germany signed the Young Plan.<sup>29</sup> Even though securities markets throughout the world were already in disarray, and foreign bond prices had declined sharply in New York, the 5½ per cent Young loan (the 1924 Dawes loan carried a 7 per cent coupon) sold at 10 per cent discount and yielded about \$300 million.<sup>30</sup>

The one-year "Hoover moratorium" of June 1931 on all intergovernmental debts other than the service of the Dawes and Young loans struck like a bolt of lightning. A courageous attempt to deal with the crisis, it aroused extraordinary enthusiasm and utopian expectations. But these vanished just as fast when it took three weeks of hard Franco-American bargaining and some concessions to France (continued payments on the unconditional portion of the Young Plan) to put the moratorium into effect. It is characteristic of the widespread emotionalism that this delay was, and still is, frequently blamed for the fact that the moratorium brought no relief whatsoever from the depression.<sup>31</sup>

The crisis deepened; its "root causes" could not be alleviated merely by relieving the external financial pressure on Germany. The debtor's gain, after all, was the creditor's loss. The admission by all concerned of Germany's incapacity to fulfill her "political" obligations augmented the apprehensions of the private creditors. Indeed, the reparations issue became a political football. In 1931 Chancellor Heinrich Brüning needed a diplomatic victory in order to halt the progress of the Nazi Party that had increased its parliamentary strength in the September 1930 elections from 12 to 107 deputies.



President Hoover's move—"boldly" breaking with his own strictly "neutralist" stance in European affairs—was also politically motivated since a breakdown of Germany's credit might lead to a banking crisis in New York.<sup>32</sup> Montagu Norman too had "warned against any disturbance to [Germany's] credit." The French government, fully aware that the Germans were spending more on "pocket battleships" and other largely treaty-violating armaments than on reparations was faced with a rebellious Parliament.<sup>33</sup>

While struggling to be relieved from reparations, the Brüning regime was at the same time anxious to maintain the country's reputation as an "honest debtor." That forced it to adopt deflationary policies in 1930 and during the first seven months of 1931 which were extremely unpopular. Near-chaotic conditions obtained in Germany, promoted by agrarian and industrial "conservative" interests. Brüning's deflationary policy was successful in reducing imports while slightly increasing exports in a shrinking world market. But it helped augment the downward pressure on prices in those markets. With or without delay due to French hesitancy, the Hoover moratorium came too late to save the situation. And even if it had come earlier, it is extremely doubtful whether it could have accomplished significant results.<sup>34</sup>

Indirectly, the political debt transfers did contribute somewhat to the malfunctioning of the gold standard. They constituted a rigid element in the international capital flow, nonresponsive to central bank policy. They injected an artificial element into international relations that tended to disturb the operation of the money markets by directing capital flow in appreciable volume "uphill," from a high interest rate area toward relatively capital-rich regions. And the problem was not amenable to a truly rational (economic) solution. As Montagu Norman wrote to Benjamin Strong on May 3, 1924:

This question is not as it should be, and as Mr. Keynes assumes it to be, a purely economic question. It is almost entirely a political question over which the French Government is forced to tug in one direction and the German in another.<sup>35</sup>

In any case, the excuse put forward by German spokesmen,<sup>36</sup> that the reparations deprived businessmen of incentives, had no foundation. German business produced ample evidence of incentive and initiative while the boom lasted. Without reparations the boom

might have been even more virulent than it actually was. Surely there is no reason to assume that the Weimar regime, anxious to rearm, would have spent less; or that American capitalists would have invested less on the Continent.

The "final" cancellation of the reparations debt by the Lausanne agreement of July 1932—the inter-Allied debts lingered on for another year<sup>37</sup>—had no recognizable effect on the economic or financial scene—nor did it block Hitler's rise to power.

### **C. The Disequilibrating Capital Flow**

Under the traditional gold standard, the short-term capital flow, governed by interest rate and foreign exchange arbitrages, was, as a rule, the regulator of the balance of payments, with gold movements serving as the ultimate balancing items. Before 1914 the "solidarity of the money markets," as it was called at the time, was maintained by a narrow circle of highly skilled professionals. There was scant incentive for the public to speculate in gold or foreign exchange when fluctuations were confined within the range of the gold points. The volume of short-term flow over the borders, other than for genuine trade financing and "legitimate" long-term investment, was moderate even by the standards of the time; short-term interest rate differentials between countries did not attract more than a tiny fraction of each country's liquid resources. A relatively small volume of arbitrage transactions sufficed to eliminate short-term disequilibria in payments balances—usually without "disturbing" retail prices or the cost of living in the respective countries. True, "sensitive" staple prices were frequently although temporarily affected. And central bank discount rate policy could effectively influence a capital flow.<sup>38</sup>

Once a currency is no longer convertible and foreign exchange rates fluctuate freely, interest rate differentials lose their potency. The prospects of rising or falling exchange rates become the controlling consideration, directly affecting the prices of staple commodities. Exchange rate swings of appreciable amplitude draw entire price and income structures into their orbit. Such was the experience of Europe during the interwar period.<sup>39</sup> Disequilibrating capital movements, in huge volumes, guided by broadly fluctuating exchange rates, generated self-aggravating anticipations. Capital flight out of a "sick" currency depressed its external value, thus inciting more

capital flight; the flow of funds into a “strong” currency strengthened its gold reserve and attracted more foreign funds. Scarcely noticed at the time, the operation of “leads and lags” was still another factor tending to enlarge the surplus in one country’s payments balance and the deficit in another’s. Under such conditions central bank policy often served no better purpose than to provide the “speculator” with an indication of the money managers’ intent with regard to the currency’s external value.<sup>40</sup>

The return of the major currencies to the gold standard between 1924 and 1926 was supposed to terminate the restlessness in the exchange, but it did not. International balances kept accumulating in amounts as never before, due to the world-wide increase of the money supply in the shape of convertible currencies.<sup>41</sup> “In the early 1930’s it was estimated that purely speculative funds amounted to £2,000 million (almost \$10 billion).” They were “increased immeasurably by the chaotic conditions in 1931–32.”<sup>42</sup> As interest rate differentials became operative, capital in “huge” volume flowed in two main and partly offsetting directions: from the Western money markets to Berlin and other Central European money markets; and from all over Europe to Wall Street. Even in Central Europe, despite its high interest rates, foreign credits received were in part used by debtors to build up balances or investments in creditor countries. Balances held abroad, wherever they originated, were highly sensitive to actual or potential changes in foreign exchange rates and reacted promptly to suspicions of impending revaluations. The experience of the early 1920’s left behind a deep “moral scar” in monetary matters: the fixed price of gold had ceased to be “sacrosanct.” Readiness to “tinker with the currency” was imputed, at times unjustly, to left-wing (Labor) governments, especially. Confidence in the integrity of the “new gold standard” had been apparently re-established; yet, somehow, it remained precarious.

Capital movements became a decisive element in disturbing, rather than “smoothing out,” the balance of payments of Britain. The extraordinarily high interest rates paid, on occasion for brief periods, by Wall Street on call loans attracted short-term funds from all over, but notably away from London. And the City’s potency as long-term lender was impaired by the decline of its function as a global depository and clearing house. Moreover, the traditional,



quasi-automatic link between Britain's long-term investments abroad and her exports was broken.

Before 1914 sterling's usefulness had been due to the position Britain held as the world's greatest exporter. Other countries now offered alternative sources of supply and *the almost automatic connection between British foreign loans and British exports had been weakened*. Sterling might be sought to make purchases in other countries, and the final outcome of a series of multilateral exchanges might take the form, not of the purchase of a British export, or even of an increase in a sterling balance held by an overseas bank, but of a demand for gold. The Governor of the Bank of England . . . retained the instrument of credit policy and could still protect his currency, if holders showed a tendency to get out of it into other currencies, by making it scarce and dear: but his currency *no longer had the unique attractions it formerly possessed*. (Italics supplied.)<sup>43</sup>

There was a further reason for the failure of the interest rate-gold flow mechanism to correct Britain's position. This brings us back to the fundamental weakness of the new gold standard, touched upon above. The Governor of the Bank of England

*was not even free to use the instrument of monetary policy* to correct such a movement. The depressed condition of much of British industry and of employment (although due mainly to the long-term effects of the war) would be aggravated by credit restriction, and Ministers could be relied on to draw the Governor's attention to this effect, if he had not been aware of it himself. As his explanation of the British situation to Moreau shows, and frequent references in his letters to Ben Strong and other correspondents confirm, he was fully aware of this effect. (Italics supplied.)<sup>44</sup>

In the middle and late 1920's the "stormiest" capital movements of a speculative kind centered around the British pound and the French franc. As it became increasingly probable that sterling would return to the old parity at an early date, capital moved to London from many parts, especially from Paris, while the *tortuous* course of the franc in 1924-1926 drove French capital abroad. With the beginning of the franc stabilization in late 1926, its value rising that winter from two and a half American cents to three and three-quarters cents, the direction of the capital flow was reversed and threatened time and again to deplete the reserves of the Bank of England. Any

weakening of sterling in foreign exchange markets provided an incentive to move out of sterling or to sell it short. On the other hand, the tremendous influx of funds into France, including repatriated flight capital, created an inflationary hazard there. The embarrassed Bank of France had to devise techniques to “neutralize” the excessive growth of its gold and foreign exchange holdings. Artificially low interest rates in France should have induced French capitalists to lend abroad, but they merely increased the inflationary threat on the home front.

The monetary authorities were suffering, also, from a statistical delusion. The total volume of sterling claims held by foreigners was not even known to the Bank of England. Neither the British nor the German central bank was informed about the actual weight of this “Damocles’ sword” hanging over their respective money markets. Dr. Schacht was profoundly “shocked” to learn—as late as May 1927!—that the largest commercial bank in Germany and on the Continent, the Deutsche Bank, carried deposits of foreign banks to the tune of \$500 million—almost equal to the gold-plus-foreign exchange reserve of the Reichsbank itself.<sup>45</sup> The Macmillan Committee dug out the surprisingly high figure of £400 million (almost \$2 billion) as London’s total short-term debt to foreigners—as of March 1931—and added that the City’s claims on foreigners could not be fully ascertained.<sup>46</sup> The publication of the Committee’s report in June 1931, in the midst of Central Europe’s financial crisis, substantially contributed to the panic among sterling holders.

Dr. Schacht tried to clamp down on the long-term borrowing of foreign funds by German municipalities.<sup>47</sup> For example, he “torpedoed” a loan by Lee Higginson to the German federal government. But the municipalities proceeded to borrow abroad on short term. The true dimensions of the total short-term foreign debt of German borrowers—some \$5 billion or more before the run started—came to light *after* the leading Berlin institutions had closed their “barn doors.” Dr. Hans Luther, who succeeded Schacht in early 1930 at the helm of the Reichsbank, put the responsibility for Germany’s overindebtedness squarely on the shoulders of his predecessor.<sup>48</sup> Schacht should have taken steps to dam up the flood tide of foreign short-term funds before it was too late. No later than in early 1927, Schacht became aware that by tolerating extensive borrowing abroad he countenanced a false image of Germany’s “capacity to pay” repa-

TABLE V-3  
London Money Market, Short-Term Foreign Liabilities, 1927-1931  
(£ millions)

	End of year				March
	1927	1928	1929	1930	1931
Deposits and sterling bills held in London on foreign account	419	503	451	435	407
Sterling bills accepted on foreign account	140	201	176	161	153
Net liability of London	279	302	275	274	254

SOURCE: Committee on Finance and Industry, *Report* (1931), Cmd. 3897, p. 112.

rations and was laying the groundwork for a financial crisis.<sup>49</sup> Time and again he issued warnings; yet he relied on the German bankers to conform, ignoring the fact that they had no direct responsibility beyond the scope of their own businesses. Admittedly, he lacked the power to intervene effectively on the domestic scene; the almost ceaseless inflow of gold and foreign exchange would have blunted the edge of any change in discount policy, had he tried to tighten credit.<sup>50</sup> Nor was the weak Weimar regime in a position to stop the credit inflow, dear to the hearts of the powerful vested interests—and of the politicians—even if it had had the insight to do so. Parker Gilbert, the Reparation Agent, added his weighty voice to the chorus of optimists—perhaps with an eye on the interests of “Wall Street,” with which he soon became identified.<sup>51</sup> In monthly report after monthly report, he drew a rosy picture of Germany’s capacity to raise revenues and to transfer them abroad. He knew exactly what he should have done, and did not do it. As Chapter Eight of the Dawes Plan (“Basic Principles”) stated clearly: “Her [Germany’s] earnings from abroad must be equal to the payments she must make abroad. . . . Loan operations may disguise the position—or postpone its practical results—but they cannot alter it. Reparation payments themselves are and can only be financed by an excess of exports.”<sup>52</sup> The foresight of the Dawes Committee—i.e., of Montagu Norman—was admirable; but Parker Gilbert systematically and deliberately vitiated its intention. Patently, he should have started the mechanism



of the transfer moratorium rolling. The international financial crisis of 1931 might have been avoided, or mitigated—but doing so would have spoiled the international bankers' highly lucrative business—and might have sparked a diplomatic crisis. For that matter it was also the *duty* of the German government—of the Reichsbank, especially—to request that Parker Gilbert act along the lines clearly prescribed by the law, i.e., the Dawes Plan.

The gentlemen were playing a highly irresponsible game—all of them. No one wanted to spoil it, although all were uncomfortably aware of the risk. The Germans were anxious to get foreign loans; the creditors to provide them; the French wanted reparations, irrespective of Germany's impending crisis. Montagu Norman congratulated Schacht on December 22, 1928, for having “mainly put an end” to Germany's borrowing, “except short-term borrowing.”<sup>53</sup> Why would Norman believe that. Anyway, the short loans were the worst kind. It is difficult to escape the conclusion that all concerned in responsible positions distinguished themselves in this context through self-deception, if not outright intellectual dishonesty.<sup>54</sup> No one wanted to be blamed or be held responsible for creating a “crisis.” This was the excuse. But in the end the failure to act helped to bring about the greatest financial crisis in modern times.

There was, however, another avenue open to restrain the German debtors. True, it would have taken drastic measures to stop German banks from borrowing short term abroad in an uninhibited fashion; and even more drastic ones, to stop the German municipalities and industrialists from doing so directly. Although far from being a believer in *laissez-faire*, Schacht would not interfere with the “free market,” that is, as he understood it. He had shown his disposition in 1927 by inducing the leading Berlin banks to stifle the virulent speculation on the German stock exchanges by imposing a 25 per cent margin requirement—retroactively!—on security loans. After the “Black Friday” of May 13, 1927, German stock markets languished, and German industry thus felt “compelled” to seek capital abroad. German stock speculation shifted to Paris and New York.<sup>55</sup> But nothing short of very severe measures would have made a dent in the borrowing from abroad—they would have had to be so drastic as to be “intolerable” for an inherently fragile political system.

Actually, the German financial problem was less the volume of foreign loans than the injudicious use made of them.<sup>56</sup> Schacht did

speak up against wasteful practices of federal and local authorities, but was very reluctant to warn against the credit policies practiced by bankers. And he commented only once in public on the expansionism of the German industrialists. A measure of restraint could and should have been applied by the central bank as well as by the government. Nor is there any reason to assume that the price would have been excessively high, if steps had been taken in the late 1920's, which in the end would have eased the impact of the subsequent depression. Any effective steps designed to restrain the inflation-fed boom would, of course, have slowed the growth of wages, social benefits, and profits.

To a large extent, the Reichsbank was responsible for the situation, since it did very little between 1924 and 1929 to moderate the continuous rise of the country's money supply, both cash and bank deposits, which increased at the rate of 12 per cent or more annually during the five-year period. The fact that in the late 1920's the German cost of living was rising<sup>57</sup> in the face of relative price stability in the rest of the gold standard area, was indicative of the disequilibrium caused by the credit expansion which, in turn, rested on a "borrowed" gold base.

On the other hand, the sterling crisis might have been moderated by capital outflow controls. Montagu Norman rejected the advice of Governor Moreau to embargo, or at least ration, British capital exports,<sup>58</sup> because he felt that an embargo could not be made effective. The experience with such measures in the early 1920's, before sterling's stabilization, had not been encouraging.<sup>59</sup> But Norman's chief reason was more significant. Freedom of capital movements is an essential aspect of the gold standard. Substantially impeding that freedom would have been a major step away from his prime objective of strengthening the gold standard mechanism. And it would have been unpopular in Britain, since it would have impaired the City's position as a financial center, at a time when London had to face New York's powerful competition. Moreover, capital exports were supposed to sustain merchandise exports. A reduction of the former was likely to further weaken the latter. This point often is ignored by advocates of capital flow controls. Also "invisible" exports would have been adversely affected.

The City was traditionally the financier of the overseas Empire: loosening the ties would have upset a multitude of economic and

TABLE V-4  
German Money Supply and Prices 1924–1932

Year	German money supply <sup>a</sup> (millions) (1)	German wholesale price index 1910–1914=100 (2)	U.S. wholesale price index 1910–1914=100 (3)	German cost-of-living 1913–1914=100 (4)
1924	5,715	133	149	135.4
1925	7,061	141	161	141.2
1926	8,403	132	150	144.3
1927	9,027	133	143	151.3
1928	10,544	132	144	152.7
1929	10,893	129	141	152.6
1930	10,539	117	118	141.6
1931	10,007	101	89	
1932	8,652	87	74	

SOURCE: Columns (1): League of Nations, *Statistical Yearbooks, 1931–1932, 1935–1936* (Geneva, 1932, 1936); League of Nations, *Commercial Banks, 1925–1933* (Geneva, 1934).

(2) and (3): Ingmar Svennilson, ed., *Growth and Stagnation in the European Economy*, United Nations Economic Commission for Europe (Geneva, 1954), p. 234.

(4): J. Tinbergen, *International Abstract of Economic Statistics, 1919–1930* (London, 1934), pp. 93–94.

<sup>a</sup>Currency in circulation plus short-term (bank) deposits (current and deposit accounts payable within seven days in Big Berlin Banks).

even political relationships. The thesis that London was “overlending” was correct in that the revival of its lending activities was not matched by a genuine payments’ surplus on current account. The volume of British short-term credits to Central Europe did not appear excessive—as long as one ignored the fact that a large portion of them had been invested by the debtors in illiquid assets, and that these loans were piled on top of a huge volume of American and other credits.<sup>60</sup> But the British financial community had unlimited confidence in the managerial wisdom of the Continental institutions, the Germans in particular, and were offering generous loans to the latter until late 1928. The German bankers, in turn, used every opportunity to assure their foreign creditors that their own operational techniques were in accordance with the “golden rule”: short-



term deposits for short-term loans only. The British bankers were not the only ones who had been "brainwashed"; their American colleagues had been even more so, if possible, and so were a major number of masters of "high finance" in other money centers.

The lure of a relatively high interest rate was irresistible, once "suspicion was put to sleep." When, in 1930, suspicions were finally aroused, the British as well as the American bankers faced a painful dilemma. Any serious attempt to withdraw funds from Germany might start a panicky run. The creditors were too deeply engaged.

The dilemmas facing the Reichsbank were equally serious. The great inflation had left German industry with expanded plants, but without working capital. In early 1924, three-month credit to prime borrowers was available only at an interest rate on the order of 25 per cent per annum. The country was in the throes of a serious depression; the Weimar regime was tottering; a major financial stimulus from abroad was required to start domestic recovery and make reparation payments possible. Once the capital imports got under way, Dr. Schacht could not have stopped them without incurring the wrath of every powerful pressure group, from the trade unions to the Federal Association of German Industry and the agrarian federation—who were "backed" by the political parties as well as by public opinion. Nor was Schacht the man to risk his own political future which would have been impaired, indeed, by effective "disciplinary" measures. That he did not try to utilize even the limited powers at his disposal—such as to "neutralize" the excess of gold inflow over reparation transfers—remains nevertheless inexplicable and inexcusable, little as it might have helped to change the course of history.

Actually, the German authorities now considered the foreign creditors as their natural allies—against France. As Germany's foreign debt grew, so did the vested interest of these foreign creditors in Germany's capacity to service the debts. They could be counted on to oppose reparations which pre-empted the debtor's financial resources. This shrewd calculation was successful: anti-French and anti-Versailles sentiment grew in England as well as in the United States. The Hoover moratorium was an acknowledgment of the American stake in Germany's solvency.<sup>61</sup> But by that time, the capital flow from America had dried up.

Still another aspect of the massive capital flow over the Atlantic

deserves attention: that was its role in financing current trade. While the outpouring of funds from the creditor to the debtor countries lasted, the debtors could import. Credit from abroad was substituted for a genuine “international liquidity” derived from exports.

When goods move freely from country to country, revolving credits are adequate for the handling of international commerce. With the post-war restrictions which tariffs have imposed, international trade has, in large measure, gone on a different basis. Long credits have been given by exporting countries because the importing countries could not send back their own products to pay for the imports in adequate volume. With the next season’s exports, additional credits had to be given, and credits to cover interest on the past season’s export credits. *International trade, instead of being a self-liquidating thing, became a thing based on a steadily mounting mass of credits.* In much of Europe, these *export credits represented direct bank advances either to the exporter or sometimes to the foreign buyer.* In the United States, especially, in the period from the middle of 1924 to the middle of 1928, we did it by gigantic taking of foreign securities, based on the expansion of bank credit, but not directly taken by the banks for the most part, though the interior banks did buy many foreign bonds.<sup>62</sup> (Italics supplied.)

The facts are admirably set forth in the foregoing statement of B. M. Anderson, but his interpretation is less than convincing. It was not the inability of the debtors (before 1930) to sell to the creditors that generated foreign loans to finance the debtors’ imports. Rather, it was the excessive inflow of funds that had resulted in rising living costs in the debtor countries and induced them to import much more than they otherwise would have. Thus *the capital flow had a disequilibrating affect.* A precarious equilibrium was established by the flow of goods (export surplus) from creditor to debtor nations, a reversal of the “normal” process. A devastating imbalance was to arise as soon as the international flow slowed down.

For a short while, the New York stock market crash brought relief to Europe. True, Europeans engaged in Wall Street speculation suffered losses; but the more significant thing was the return flow of funds from New York and the end of the flow of speculative capital there. To the gold reserves of European currencies, sterling in particular, this meant a breathing spell, although a short-lived one. The

financial communities from London and Berlin to Buenos Aires would have breathed easier had it not been for the emergence of a "deadly" threat to their stability: the virtual cessation of American capital exports.

#### **D. Balances of Payments and Gold Distribution before the Crisis**

It was a common complaint, after 1926, that the concentration of 50 per cent or more of the world's official gold reserves in two central banks had distorted the balance of payments system and "perverted" the international distribution of monetary gold. "The present distribution of gold," the Macmillan Report of 1931 lamented, "is very generally held to be unsatisfactory; a maldistribution to which is to be attributed a large measure of responsibility for the heavy fall in prices in recent years."<sup>63</sup> This was a novel twist of the gold shortage theorem: world market prices depressed by gold maldistribution, shifting the blame on France and the United States. Their alleged gold-hoarding policies became the favorite scapegoats.

The responsibility of the gold-gaining nations for generating financial crises was supposed to be solidly established—a perfect alibi, ever since, for the politicians who were in reality responsible for the payments' deficits of the gold-losing countries.

The monetary gold stock of the United States rose from \$1.9 billion in early 1913 to the pre-depression high of \$4.6 billion in April 1927, the largest amount any country ever had before 1934. The Federal Reserve System started operations with gold holdings of about \$1.3 billion; they stood at \$3.75 billion by the end of 1928, with almost all of the gain accruing before 1924, i.e., before the stabilization of the leading European currencies.

The Bank of France entered the war with a gold reserve of barely \$700 million (at the old gold parity); it rose to \$1.25 billion in 1928, and to over \$3.5 billion at the end of 1931.

Germany is usually not counted among the great gold gainers of the period. At the beginning of the First World War the Reichsbank held about \$350 million in gold and foreign exchange reserves against total liabilities of \$1.5 billion, a coverage of 23 per cent. During the height of the great inflation in 1923, the value of the Reichsbank's gold holdings actually appreciated faster than the issu-



ance of depreciated paper marks, so that, in dollar terms, total liabilities were “covered” better than 100 per cent by gold reserves. In terms of the new stabilized mark, however, the picture, at the end of 1923, was quite different: gold and foreign exchange holdings amounted to only \$111 million, compared with total liabilities of \$2.25 billion, a coverage of about 5 per cent. But an estimated \$350 million in foreign exchange bills (“Devisen”) were illegally circulating in Germany during the height of the inflation. After stabilization these quickly found their way into the Reichsbank. Between the end of 1923 and 1929 the Reichsbank’s net gold gain was in the order of \$370 million.<sup>64</sup>

A number of countries of lesser importance, Switzerland, Holland, and Spain especially, succeeded in strengthening their gold or gold-plus-foreign exchange reserves even before the onset of the crisis.<sup>65</sup>

The Bank of England was holding on to a gold reserve of around \$700 million throughout the latter 1920’s. It was a precarious position, since surpluses on current account were absorbed by capital outflow. The British balance of payments was under recurrent and increasingly severe pressures, a shortage of “international liquidity.”<sup>66</sup> The surplus of the trade balance, including the “invisibles,” had sufficed to take care of the long-term capital outflow, but only with the aid of short-term credits from abroad. Thus foreigners had built up large sterling balances and French flight capital was a major component. Its repatriation in 1926–1928, together with speculative British positions in French francs, posed a serious menace to the stability of the pound. The situation was patched up time and again by Continental and Sterling Area central banks which were acquiring claims on London as substitutes for gold. All this was in accordance with the gold exchange standard system.<sup>67</sup> Montagu Norman’s policy of helping stabilize foreign currencies with special credits paid “dividends.” The Belgian National Bank, as an example, not only repaid the stabilization loan that was granted by the Bank of England in 1925, but proceeded to place funds in the City.<sup>68</sup>

But New York and Paris, like two magnets, were drawing and retaining gold. Despite the large volume of long-term credits the American capital market was granting Germany, and to a lesser degree, other Continental and raw-material-producing countries, the United States was acquiring gold during most of the 1920’s. The American balance of trade produced large surpluses, aided by the

TABLE V-5  
Gold Reserves of Central Banks and Governments, by Years, 1913-1935<sup>a</sup>  
(millions of dollars of 1929 gold content)

Country	1913	1918	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
United States	1,290	2,658	3,834	4,090	3,985	4,083	3,977	3,746	3,900	4,225	4,051	4,045	4,012	4,865	5,980
England	165	521	746	748	695	729	737	748	710	718	588	583	928	935	973
France	679	664	709	710	711	711	954	1,253	1,633	2,100	2,699	3,254	3,022	3,216	2,596
Germany	279	539	111	181	288	436	444	650	544	528	234	192	92	19	19
Argentina	256	304	466	444	451	451	529	607	434	412	253	249	239	238	262
Australia	22	104	131	130	162	110	106	109	90	75	52	42	3 <sup>b</sup>	4 <sup>b</sup>	4 <sup>b</sup>
Belgium	48	51	52	53	53	86	100	126	163	191	354	361	380	348	361
Brazil	90	26	49	54	54	56	101	149	150	11	...	...	6 <sup>c</sup>	12 <sup>c</sup>	12 <sup>c</sup>
Canada	117	130	127	151	157	158	152	114	78	110	78	84	77	79	112
India	124	64	109	109	109	109	119	124	128	128	162	162	162	162	162
Italy	267	203	218	221	222	224	242	266	273	279	296	307	373	306	207
Japan	65	226	602	586	576	562	542	541	542	412	234	212	212	233	251
Netherlands	61	277	234	203	178	166	161	175	180	171	357	415	371	338	255
Russia-USSR	785	...	45	73	94	85	97	92	147	249	328	368	416	439	495
Spain	92	430	488	489	489	493	502	494	495	471	434	436	436	437	434
Switzerland	33	80	104	98	90	91	100	103	115	138	453	477	386	369	268
All other	483	531	611	616	660	660	705	731	724	699	718	710	827	858	870
Total	4,857	6,808	8,636	8,956	8,974	9,210	9,568	10,028	10,306	10,917	11,291	11,897	11,942	12,858	13,271

SOURCE: Charles O. Hardy, *Is There Enough Gold?* (Washington, D.C.: Brookings, 1936), pp. 92-93.

<sup>a</sup>Data compiled from *Federal Reserve Bulletin*; up to the end of 1932 from vol. 19, pp. 368-372; for 1933 from vol. 20, p. 472; and for 1934 from vol. 21, p. 821. For 1913-1931, forty-seven countries are included in the table; for 1932-1935, fifty countries.

<sup>b</sup>Australia and Siam combined.

<sup>c</sup>Bolivia, Brazil, Ecuador, and Guatemala combined.

Fordney–McCumber protective tariff of 1922. Secretary of the Treasury Andrew Mellon stated in 1926 that 65.2 per cent of United States imports came in duty-free.<sup>69</sup> But it was the duties on the other 35 per cent, among the highest in American history, that constituted an appreciable impediment to European exports, and even more to the agrarian exports of countries like the Argentine. The Smoot–Hawley tariff, the highest ever, which followed in 1930, contributed its share to all-round payments difficulties during the depression. So far as the American duties impeded imports, the exporting countries balanced their foreign accounts by capital imports from the United States; when these dried up, they had to pay in gold, if any, and stop importing. But American tariffs, while high, were by no means insurmountable. They could not have been a significant factor in directly disequilibrating Britain’s foreign accounts, at least not before 1930.<sup>70</sup> Nor was the United States the only country indulging in mercantilist policies. They were universally favored, especially by the “new” nations. To some extent, even Britain had departed from her free-trade traditions by the (moderate) McKenna tariff of 1919, and by subsidizing exports. Protectionist practices generally boomeranged against American interests; in particular some European countries raised their agricultural duties to extraordinary levels. Such was the case in Germany, where the strangulation of agricultural imports for the benefit of the large rye- and sugar-beet-producing estates was rationalized as being part and parcel of “socialist” planning.<sup>71</sup>

The Smoot–Hawley tariff also had its rationale. Wage rates in the United States were higher and more rigid (downward) than in most other industrialized countries; therefore American labor had to be safeguarded against “wage-dumping” by countries employing “cheap labor.” In the 1930’s, this approach was imbedded in Keynesian theory as the doctrine of “maximum utilization of national resources” versus “optimal utilization” by international division of labor.<sup>72</sup> Ultimately, the world-wide artificial maintenance of domestic wages and prices either failed or else reduced the volume of mass purchasing power, shifting the depression’s burden from one industry and one country onto another. It would be extremely difficult to establish how the balance of payments of individual nations were affected by the protectionist practices prevailing before 1930, let alone thereafter. Britain may be singled out as a prime victim of American protectionism, even though the terms of trade were favor-



able to her in the late 1920's, because the prices of importable food and raw materials, all duty-free, began to fall in 1926, before those of exportable manufactures did.

Central and Southern European balances of payments were adversely affected by the virtual prohibition of immigration into the United States. As a result immigrants' remittances dwindled, depriving Italy as well as the Baltic and Danubian countries of an important source of income in "hard money." Also growing population pressure forced these countries to improve their agricultural techniques and to reduce food imports, thus contributing to world-wide overexpansion of farm production.<sup>73</sup> A non-negligible factor was the embargo, until July 1928, on long-term capital outflow from France. After 1930, restrictions on capital exports became near universal.<sup>74</sup>

In the years 1919–1924, the Federal Reserve authorities were worried about the inflationary threat posed by their unprecedented gold "hoard." They made several attempts to resist or neutralize its inflationary impact but at best only deferred it. Contemporary economists considered these very modest attempts at gold neutralization as being a revolutionary departure in money policy, generating the myth of a perpetual prosperity guaranteed by appropriate central bank policy.<sup>75</sup> After 1924, the American gold position was more or less "stabilized" until the 1931 crisis.

In the short eleven months from May 1919 to April 1920, the United States lost \$336 million of gold; but from then until April 1927, it gained every month, with few and minor interruptions. The total gain over eight years amounted to \$433 million but most of it evaporated in the next fifteen months. For the whole period of nine years, mid-1919 to mid-1928, net imports of gold amounted to \$932 million.<sup>76</sup> After 1928 gold holdings of the Federal Reserve System showed only a very modest net gain, less than \$200 million between the end of 1925 and 1931, over half being an increase in foreign-owned dollar balances.

In contemporary monetary jargon, the United States was a "bad creditor," because of its protectionist record and its insistence on collecting its inter-Allied debts.<sup>77</sup> But France was the object of the most vehement denunciations—the apparent aim being to exonerate the feebleness of British policy. This brings us back to the distribution aspect of the gold problem.

TABLE V-6  
U.S. Net Gold Movements, 1919-1931, by Months

	(millions)						
	1919	1920	1921	1922	1923	1924	1925
Jan.	— 1 <sup>a</sup>	— 36	31	25	24	45	— 76
Feb.	1	— 38	42	38	10	34	— 59
March	7	— 30	87	27	7	41	— 25
Apr.	5	4	80	14	12	47	3
May	— 1	8	57	7	46	44	15
June	— 57	21	43	14	22	33	3
July	— 53	— 2	61	44	29	23	7
Aug.	— 43	— 10	84	26	32	10	15
Sept.	— 28	22	64	18	25	— 10	0
Oct.	— 39	91	40	15	31	— 2	25
Nov.	— 49	37	61	18	40	18	— 10
Dec.	— 33	28	30	23	37	— 28	2
	1926	1927	1928	1929	1930	1931	
Jan.	13	72	— 6	— 14	7	50	
Feb.	11	22	— 11	26	62	22	
March	19	11	— 57	35	70	32	
Apr.	— 4	13	— 39	72	68	29	
May	— 5	— 2	— 106	41	26	72	
June	14	— 21	— 51	23	18	158	
July	24	— 7	4	17	— 18	— 7	
Aug.	2	8	10	19	— 16	46	
Sept.	— 7	— 17	2	12	10	— 254	
Oct.	7	— 30	17	14	24	— 449	
Nov.	4	— 90	— 14	— 19	36	122	
Dec.	15	— 72	13	— 83	22	46	

SOURCE: Charles Cortez Abbott, *The New York Bond Market, 1920-1930* (Cambridge: Harvard University Press, 1937), p. 195.

<sup>a</sup>Minus signs indicate exports.

### E. Gold Distribution: The Pre-Crisis Role of France

That the stabilization, on June 26, 1926, of the *nouveau franc* (at frs. 124 to the pound or worth 3.92 cents) left behind an "undervalued" franc, is one of the numerous myths in the monetary history of the

TABLE V-7  
French Balance of Trade, 1925-1930  
(millions of francs)

Year	Imports	Exports	Ratio(%)
1925	44,095	45,755	103.8
1926	59,598	59,677	100.2
1927	53,050	54,925	103.5
1928	53,435	51,374	96.1
1929	58,220	50,139	88.1
1930	52,511	42,835	81.5

TABLE V-8  
French Export Balance of Trade, 1925-1930  
(millions of francs)

Year	Food	Industrial raw materials	Manufactured goods	Total
1925	-5,398	-16,781	+23,839	+1,660
1926	-6,516	-23,651	+30,246	+ 79
1927	-8,494	-16,518	+26,887	+1,875
1928	-6,299	-19,912	+24,150	-2,061
1929	-7,089	-22,557	+21,565	-8,081
1930	-5,936	-19,333	+15,593	-9,676

SOURCE: Alfred Sauvy, *Histoire Economique de la France Entre les Deux Guerres* (Paris: Fayard, 1965), p. 299.

interwar period. Traditionally, France had an import surplus in merchandise trade, excepting for the few years in the 1870's while she was paying off a large war indemnity to Germany. The post-World War I inflation created a new situation. Domestic prices were lagging behind the external value of the franc and accordingly, the country's exports outstripped its imports.<sup>78</sup> Then *de facto* stabiliza-



tion of the franc at the end of 1926 reversed the trade balance back to the traditional pattern. An overvaluation, not an undervaluation, of the franc developed, if one uses the Casselian terminology of "purchasing power parities." The somewhat weakened competitive position of French industry after 1926 was indicated by a declining export surplus in manufactured products.<sup>79</sup> Year after year "invisible" revenues, tourist traffic in particular, had been covering this trade deficit. What brought a "flood" of gold to France was, especially, an influx of capital not offset by French lending abroad.

French monetary authorities were unhappy about the massive capital inflow, including German reparation annuities after 1926. The Bank of France constantly sought ways and means to limit the gold flood, or at least its inflationary impact. The Bank's efforts are documented by its balance sheet of June 29, 1928, immediately after the final legalized stabilization. The relevant items in that context are as follows (in millions of new francs):

TABLE V-9		
Bank of France Gold and Foreign Exchange, June 1928		
	Foreign Exchange (millions)	Gold
Gold coins and bars		28,990 (= \$1,160 million)
Sight balances ( <i>disponibilités à vue</i> ) held abroad	15,559	
Foreign exchange ( <i>devises en réport</i> )	8,936	
Commercial paper discounted abroad	16	
(Other) Negotiable paper bought abroad*	11,686	
Gold plus foreign exchange	36,197	+ 28,990 = frs. 65,187 (= \$2,608 of old gold parity)
Foreign exchange in percentage of total reserves	55.52%	

\*This item was not included in the official statistics of Bank of France foreign exchange holdings. Claims of longer maturity than "on sight" were not considered eligible as gold substitutes. Such were the liquidity standards for Western European central banks!

When the franc was stabilized, 55 per cent (\$1,540 million) of the French central bank's international assets consisted of foreign exchange, \$450 million of it sterling, an extraordinary proportion.

True, the exchange holdings were reduced by \$32 million in the second half of 1928 and by another \$120 million in the first half of 1929, but the Bank of France sold no more sterling until September 22, 1931.<sup>80</sup> In mid-September of that year, its sterling portfolio still amounted to \$300 million, on which it had lost \$92 million, due to the sterling devaluation.<sup>81</sup> At the time of sterling's default, as much as one fifth of the French monetary reserves consisted of sterling, by then a suspect currency. That did not include the \$125-million emergency loan to the Bank of England tendered in August 1931 with no gold clause or any other protective clause attached to it.<sup>82</sup>

It was at Norman's urgent request that the French central bank carried a weak sterling on its back well beyond the limit of what a central bank could reasonably afford to do under the circumstances. No other major central bank took anything like a similar risk (percentage-wise). The Netherlands Bank came closest and was also next in the relative amount of losses suffered as a result of the devaluation of the pound. Indeed, the fact is *never mentioned that in 1928-1931 the sterling portfolio of the Bank of France was at times equal to two thirds of the gold reserve of the Bank of England*. This was notwithstanding the conflicts between the two central banks on account of British attempts to acquire financial supremacy in countries like Yugoslavia, Roumania, and Poland, all France's allies, and despite Poincaré's warning to Moreau in May 1927, that sterling's position had deteriorated and a Labor government might proceed to give up the gold standard.<sup>83</sup>

Moreau's motives were not purely altruistic; his Bank needed earnings and French interest rates were low. Also, loaning funds abroad reduced the threat of inflationary pressure at home. But it was Norman who had persuaded the cautious Moreau to maintain this unique engagement by exposing to the latter in December 1927 the weakness of sterling and the possibility of a devaluation. This was a case of "near-perfect" central bank cooperation, practiced by the French.<sup>84</sup> It certainly compared very favorably with an occasional \$25 million thrown in to support the pound by the Federal Reserve Bank of New York, and contrasted sharply with the Reichsbank's liquidation of the meager sterling portfolio it held.<sup>85</sup> The French officials took a risk the severity of which was no secret to them. Time and again, Moreau advised Norman to strengthen sterling's position by raising his discount rate and embargoing or rationing the capital

outflow from London, but to no avail. The British Governor was up against overwhelming political forces<sup>86</sup>—and he blamed the French for his own difficulties. He did his share in spreading the widely accepted belief that France was the great mischief-maker on the world's financial scene. The fallacious notion of French responsibility for Britain's gold losses survived all vicissitudes of subsequent decades. An article in the British *Economic Journal* of September 1930, "The Import of Gold into France," by T. Balog, was typical of this tendentious distortion of facts. For another example: the usually judicious *Frankfurter Zeitung* of September 13, 1932 (still under the Weimar regime) pointed out ruefully that instead of lending abroad, the French had been accumulating gold—over \$3 billion, by that time—but failed to mention the costly sterling devaluation of the year before, or the fact that world-wide bankruptcies and exchange restrictions were staring any would-be investors in the face.<sup>87</sup> Could French capitalists be expected to rush into foreign investments under such circumstances?<sup>88</sup>

The Germans, of course, had their own reasons for discrediting the French at every turn. But why did the wartime pro-French sympathy of the Western world turn into a furious francophobia, especially during the 1929–1933 crisis? French insistence on reparations disturbed the peace of Europe. Poincaré's futile attempt to make the Germans pay at bayonet point, literally, was outrageous by the political standards of the English-speaking nations. By insisting on the letter of the Versailles Treaty, France succeeded in isolating herself morally as well as, to a large extent, diplomatically. And she antagonized, unwittingly, a majority of European nations, Britain in particular, by the financial attitude of her private sector, for which her government and central bank were scarcely responsible.

During the twelve-year inflation (1914–1926) with fluctuating, mostly rising, prices in francs for gold and foreign exchange, a great deal of French capital sought and found a safe haven abroad. Anticipating sterling's return to gold, London was from 1923 to May 1926 the favorite place of refuge. Then, in 1926, with the budget reform initiated by Poincaré, the reverse process came into operation, this time to London's detriment. French capital came out of many hiding places, including gold hoards, and a huge volume of liquid funds accumulated in Paris in private hands during the period of *de facto* stabilization, as mentioned above. But after the stabiliza-



tion French interest rates were Europe's lowest, next to the Swiss.<sup>89</sup> Accordingly some of these funds went back once again to London, attracted by higher interest rates and by the mobility of short-term credit instruments on the well-organized money market of the City. Then the Bank of France shifted incoming sterling to Paris banks by swap operations with exchange rate guarantees.<sup>90</sup>

The *privately* owned French funds would later be fatal to sterling, for when the German banking system "collapsed" in mid-July of 1931, French capitalists became worried about the safety of their sterling claims. Then the "run" on the pound began. Of course, French capitalists were not the only ones who ran for safety, but it seems that the bulk of the requests for converting sterling balances and bills into gold came from Paris, where most of the claims had been accumulating.<sup>91</sup> While the actual volume held privately is not known, the amount of it added to the known volume of sterling in the Bank of France provided the true "*base*" of the British monetary system, even without counting the huge amounts of other foreign claims. After World War I, as in the decade before, Britain's short-term debts to foreigners must have been about three times the Bank of England's gold reserve, a situation remarkably analagous to the status of the American dollar in 1968. This analogy between Britain's pre-1914 and America's post-1948 position has been emphasized by Lindert,<sup>92</sup> overlooking the fact that in the case of pre-1914 Britain the accumulation of sterling was due to its strength—world-wide, genuine confidence—whereas the case of the United States resulted from payment deficits. In 1931 the withdrawal from London of privately owned claims brought the sterling crisis to its climax. Apparently, public opinion outside France confused and still confuses these private claims with the official French sterling holdings which were not withdrawn until after the pound's devaluation.

Since 1927, the French authorities have been criticized for being noncooperative, for not channeling French capital into medium- and long-term investments abroad. Although France lifted the embargo in mid-1928, French capital exports, other than the short-term variety, did not revive. This, again, was a matter determined by the French public, not by the authorities, and the French capitalist had ample reasons for being cautious. He had once been an avid investor in bonds issued by foreign governments.<sup>93</sup> But the postwar losses suffered on such bonds were appalling—considering especially the

fact that the annual return on foreign bonds had amounted to about 5 per cent of France's national income.<sup>94</sup> What countries were attractive to the French saver in 1928–1929 as investment outlets? German bonds offered high yields; but can the Frenchman be blamed for not wanting to come in on the tail end of the German boom and to finance either Germany's reparation payments or her rearmament? Some of the European countries farther east and southeast were hostile to France but for the most part they were simply poor risks due to budgetary disorders, domestic political troubles, as for instance in Poland, and to the fact that they were at loggerheads with one another. French investments in British Empire countries and in Latin America were not necessarily welcome to London and New York. The Far East was in a turmoil and the French colonies offered a limited scope for development.

If the Great Depression hit France much later and less severely than Britain and the United States, this was largely because the French investor had been reluctant to extend credit indiscriminately. His judgment was fully vindicated by the events of 1930–1931 when the capital flow out of the United States was reversed.

### Notes to Chapter Five

1. India had a "chronically" favorable balance of payments due to surpluses in merchandise trade and to the excess of capital inflow (from Britain) over interest and dividend outflow. See J. M. Keynes, *Indian Currency and Finance* (London, 1914); Kemmerer, *Modern Currency Reforms*, chaps. 1–7.
2. See chap. 4, sec. E, above.
3. See Peter H. Lindert, *Key Currencies and Gold 1900–1913* (Princeton: Princeton University Press, 1969), chap. 1.
4. See Clarke, *Bank Cooperation*, p. 35.
5. Ibid., p. 39: "... every one of the nations should re-establish the gold standard . . . and re-establish its own domestic autonomy in monetary matters without any such dependence upon other markets as implied by the gold exchange standard. Important balances in London or New York of course may be highly desirable, but the most desirable thing is autonomy and self-reliance and good conduct on sound monetary principles at home." (Strong's letter to Owen D. Young, June 11, 1928.)
6. Lindert (*Key Currencies*) seems to have missed this important distinction between the prewar and the postwar gold exchange standard.
7. In the years 1928–1931, the Bank of France was holding 40 per cent or more of all foreign exchange held by the twenty-four leading central banks. (League of Nations, *International Currency Experience*, p. 41, and Appendix II.)
8. Noted by Mlynarski, *Gold Standard*, pp. 24–25.

9. One of the first central banks to run out from under both sterling and the dollar was the Bank Polski; it reduced its foreign currency pile (mostly bank notes) from 900 million zloties in 1927 to 213 million in 1931 and 160 million in 1932. See M. Palyi and Quittner, *Handwörterbuch des Bankwesens* (Berlin: Springer, 1933), p. 447; Brown, *International Gold Standard*, p. 745.
10. Purchases of sterling by some minor European central banks in 1928–1930 more than offset the 1929 French liquidation of sterling balances.
11. See chap. 5, sec. C, below.
12. See chap. 5, sec. C, below, and chap. 7, below.
13. Clarke, *Bank Cooperation*, p. 28.
14. Boyle, *Montagu Norman*, p. 167
15. Reparation Committee, *Report of the First Committee of Experts in the Experts' Plan for Reparation Payments* (Paris, 1926).
16. On January 1, 1924, Schacht persuaded Norman to provide £5 million, plus £15 million in revolving credits from London merchant bankers, for the Gold Discount Bank, a branch of the Reichsbank. It was to issue notes denominated in (gold) sterling; by this clever move, Schacht won Norman's undying friendship.
17. See R. Stucken, "Die Deutsche Bankenkrise von 1931," *Kredit und Kapital* (Berlin, 1968), p. 4.
18. Reparation annuities under the Dawes Plan:

1924–27 (mos.)	583 Mill. RM
1925/26	1,129
1926/27	1,383
1927/28	1,646
1928/29	2,187
1929/30	1,042

Total 7,970 Mill. RM = \$1,898 Mill. (gold)

19. His official title was "Agent General for Reparation Payments."
20. See M. Palyi, "Finanzierung der Reparationen durch Auslandsanleihen," in *Das Reparationsproblem* vol. 1 (Berlin, 1929), pp. 363–393.
21. Table V—1, above, summarizes the inter-Allied debt to the United States as of March 1935. By agreement with each debtor country in the 1920's, the debts were consolidated and interest charges reduced to 3½ per cent in most cases. See Moulton and Pasvolski, *War Debts and World Prosperity* (Washington, D.C.: Brookings 1928).
22. J. M. Keynes, "The German Transfer Problem," *Economic Journal*, March 1929.
23. Actually, the idea of a committee of experts to ascertain Germany's capacity to pay had been suggested earlier by Secretary of State Charles Evans Hughes (August 29, 1922).
24. See Table V-2.
25. See chap. 5, sec. C, below.
26. About the reparation crisis of 1929–1930, see M. J. Bonn, *Der Neue Plan als Grundlage der Deutschen Wirtschaftspolitik* (Munich Leipzig: Duncker & Humblot, 1930); Hans Luther, *Vor dem Abgrund* (Berlin: Propylaen Verlag, 1964); R. E. Lücke, *Von der Stabilisierung zur Krise* (Zurich: Polygraphischer Verlag, 1958); Moulton and Pasvolski, *War Debts*.
27. For a valiant analysis of the Versailles Treaty and its economic implications mainly against the criticism raised by J. M. Keynes, *The Economic Consequences of the Peace*, a world-famous pamphlet, see Etienne Mantoux, *The Carthaginian Peace* (Oxford University Press, 1946).
28. E. W. Bennett, *Germany and the Diplomacy of the Financial Crisis, 1931* (Cambridge: Harvard University Press, 1962, chap. 5) See M. J. Bonn, *Wandering Scholar*, passim, and especially Erick Eyck, *A History of the Weimar Republic*, vol. 1, (Cambridge: Harvard



- University Press, 1964)—about the misinterpretations of the Versailles Treaty that, according to distinguished German scholars, “would deliver countless generations of our people to misery and slavery.”
29. Sir Frederick Leith-Ross, of the British Treasury, remarked that the efforts of the Young Committee were “not always facilitated by the tantrums and exhibitionism of Dr. Schacht.” (*Money Talks, Fifty Years of International Finance* [London: Hutchinson, 1968].)
  30. Born, *Die Deutsche Bankkrise*, p. 18.
  31. Nor did the Lausanne agreement of 1932 that suspended reparation payments “forever” (except for a few items of a total capitalized value of 3.24 billion gold marks) produce a more lasting effect.
  32. The political background of the German crisis and of the Hoover moratorium has been splendidly shown by Bennett (*Germany*).
  33. A partial reduction of reparations by resorting to the “alleviations” offered in the Young Plan might have been a wiser move than the Hoover moratorium proposals.
  34. French resistance to the Hoover moratorium, Bennet points out, was due to Hoover’s diplomatic blunder: he informed the British in advance, but not the French.
  35. Quoted by Clay, *Lord Norman*, p. 196.
  36. See Lüke, *Von der Stabilisierung zur Krise*, pp. 55 ff.
  37. With the exception of Finland, all inter-Allied debtors either repudiated their obligations (France) or simply defaulted. See Leith-Ross, *Money Talks*, chap. 14.
  38. See chap. 1, sec. E, chap. 2, sec. C, above.
  39. See chap. 2, sec. B, above.
  40. *Flexible and fluctuating exchange rates are a disequilibrating force*, contrary to the claim that they bring about equilibrium in the respective payments balances, [as is] frequently voiced by economists. These economists assume too easily that an exchange rate is a price like all other prices, that exchange markets are markets like all other ideal markets, flexible, smoothly-working, and free from speculative or other convulsions, and that a free exchange market therefore can be or is likely to be an “orderly” market. In fact, *currencies*, as standardized, homogeneous commodities not subject to storage charges, transportation costs, or obsolescence, *lend themselves* peculiarly to speculation, and the absence of any objective and tangible basis for their value, such as real costs and real demand which can change only slowly through time, *give speculators the prospect of large profits* because of frequent and marked changes in value and the capacity to a large extent of making their predictions come true. The changes in internal price structures, moreover, which result from changes in exchange rates, while they may be in an equilibrating direction as far as international balance of payments are concerned, are erratic and arbitrary as far as internal consequences are concerned. (Italics supplied.) (Jacob Viner, *International Trade and Economic Development* [Glencoe, Ill.: Free Press, 1952], pp. 88 ff.)
  41. See chap. 8, sec. B, below.
  42. E. E. Jucker-Fleetwood, “Montagu Norman in the Per Jacobsson Diaries,” *Quarterly Review* (National Westminster Bank), November 1968, p. 55.
  43. Clay, *Lord Norman*, p. 233.
  44. *Ibid.*; see also chap. 2, sec. C, above.
  45. On Schacht’s request, the Deutsche Bank managed to “consolidate” \$100 million foreign debt. (Lüke, *Von der Stabilisierung zur Krise*, p. 235.)
  46. See Table V-3.
  47. In 1926, Schacht suspended the preferential treatment of German bonds issued abroad. (Brown, *International Gold Standard*, vol. 1, p. 636.)

48. Luther, *Vor dem Abgrund*.
49. See chap. 5, sec. A, above.
50. In 1927, he made an abortive attempt to lower interest rates, instead of raising them.
51. The House of J. P. Morgan, which Gilbert was to join, had avoided participation in any syndicate issuing German bonds, except for the official Dawes and Young loans. It should be borne in mind that, as clearly indicated in Moreau's *Souvenirs*, Gilbert was fully cooperating with the French—and with J. P. Morgan, their international bankers.
52. Reparation Commission, *Report* p. 45.
53. Clay, *Lord Norman*, p. 244.
54. On the above, see Hjalmar Schacht's self-serving autobiography, *76 Jahre Meines Lebens* (Bad.: Wörrishofen, 1953), pp. 279 ff., and especially Lüke, *Von der Stabilisierung zur Krise*, pp. 235 ff. This writer has drawn, also, on his own observations as an observer "on the spot," and is obligated for valuable information tendered personally (letter dated January 31, 1969) from Dr. Wilhelm Vocke, who was for twenty years the closest collaborator of Schacht's, then became the first president of the New German central bank (1948–1957). This writer, however, is solely responsible for the above interpretations, which were hinted at also by Per Jacobssen; see Jucker-Fleetwood, "Montagu Norman," *Westminster Review* (November 1948).
55. See chap. 7, below.
56. See chap. 6, sec. A and sec. E, below.
57. See Table V-4.
58. Moreau, *Souvenirs*, passim.
59. Clay, *Lord Norman*, p. 145.
60. See chap. 6, sec. A, and chap. 7, sec. A, below.
61. See chap. 5, sec. B, above.
62. B. M. Anderson, "Gold," *Chase Economic Bulletin*, March 16, 1931, pp. 19–20.
63. P. 67. See also J. W. Gantenwein, *Financial Questions in United States Foreign Policy* (New York: Columbia University Press, 1939), pp. 19–20; Brown, *International Gold Standard*, passim.
64. Lüke, *Von der Stabilisierung zur Krise* p. 34.
65. See Table V-5.
66. See chap. 3, sec. D, and chap. 4, sec. C, above.
67. See chap. 5, sec. A, above.
68. Clay, *Lord Norman*, p. 257.
69. *New York Herald Tribune*, December 25, 1926.
70. See chap. 3, sec. C, above.
71. J. B. Cundliff, *The Commerce of Nations* (New York: Norton, 1950), chap. 15. Military considerations—agricultural self-sufficiency for wartime—served the same purpose they did before 1914.
72. See M. A. Heilperin, *The Trade of Nations* (New York: Knopf, 1947).
73. H. C. Taylor and A. D. Taylor *World Trade in Agricultural Products* (New York: Macmillan Co., 1943), pp. 263–264.
74. See Mlynarski, *Gold Standard*, pp. 54–55.
75. The illusion of gold neutralization owes its origin and perpetuation to the fact that in 1920–1924 outstanding Federal Reserve credit declined by about \$2 billion—all but a negligible \$140 million of which was due to the reduction of member banks' borrowings. See chap. 8, sec. C, below.
76. Table V-6. The Federal Reserve System also gained gold out of domestic circulation and production.
77. O. M. W. Sprague, Harvard professor and advisor to the Bank of England, denounced the

United States before the Gold Commission of the League of Nations for being inconsistent in its capital exports. He overlooked that such "inconsistency" was a typically cyclical phenomenon.

78. Table V-7. The prewar parity of the French franc was \$0.193.

79. Table V-8.

80. *Rapport de la Banque de France sur l'Exercice, 1931*. The French sales of sterling in 1928–1929 were offset through sterling purchases by a number of minor countries. By January 1931, the balances held in New York by the Bank of France amounted to \$780 million. See Friedman and Schwartz, *U. S. Monetary History*, p. 398.

81. About the losses of the Bank of France, see W. A. Morton, *British Finance, 1930–1940* (Madison, Wis.: University of Wisconsin Press, 1943), p. 46.

82. After sterling's devaluation, the Bank of France liquidated all but \$176 million of its foreign exchange holdings, totaling \$1,027 million. This total did not include the item negotiable paper bought abroad: \$46 million.

83. See Moreau, *Souvenirs*, p. 319.

84. The "perfect cooperation" had contributed to the speculative excesses of 1927–1929. As the Bank of France deposited pounds and dollars in London and New York, respectively, the funds became available for stock market credits. See Franz Aschinger, *Raymond Poincaré als Währungs und Finanzpolitiker* (Ph.D. diss., University of Basle, 1952), p. 392. Still worse, the pounds Moreau had placed in London were used in part to buy French francs, as has been pointed out by an outstanding banker, Raymont Philippe, *Le Drame Financier de 1924–1928*, 4th ed. (Paris: Gallimard, 1931), p. 134.

85. See chap. 4, sec. E, above.

86. See chap. 2, sec. C, above.

87. The official French discount rate that had been raised to 7½ per cent on July 31, 1926 (prelude to stabilization), was reduced to 3½ per cent on January 19, 1928, and lingered between 2½ per cent and 3 per cent until mid-1935. Also, the French capital market was opened up in 1928 to foreign issues; the tax on foreign securities was reduced, and the Bank of France induced the commercial banks to hold acceptances of foreign institutions. As late as 1932, three bond issues of foreign authorities, Belgium and Czechoslovakia among them, were sold on the Paris market, but all three were of moderate size. See A. Aftalion, in the *Selected Documents on the Distribution of Gold* (League of Nations), p. 16.

88. One spurious attack on French money policies came from an unlikely quarter, the League of Nations. Its splendid volume on *International Currency Experience* (p. 31) charged that "France's *de facto* adherence to the international exchange standard lasted less than two years" (to mid-1928), due to the stabilization law that prohibited counting foreign exchange purchased after the stabilization as part of the Bank's "35 per cent minimum cover requirement." But the figures produced by the same book and quoted above showed that French adherence to the gold exchange standard lasted until the pound's devaluation broke up the whole system, in 1931.

89. From over 5.77 per cent in August 1926, French commercial bill rates fell to 2.04 per cent in August 1927—still another form of (automatic) French "cooperation." See *Federal Reserve Bulletin*, October 1927, p. 723.

90. These swap operations are described in Moreau's *Souvenirs*.

91. About the German and British banking crises, see chap. 7, sec. A and sec. B, below. This writer was informed by the Banque de Paris et des Pays Bas, the third largest French bank at the time, that by September 20, 1931, when sterling's departure from the fixed gold price was announced, the bank's clients had already liquidated all of their sterling holdings, totaling a "huge amount."



92. Lindert, *Key Currencies*.

93. Table IV-2, above.

94. The French government provided partial compensation to the holders of Czarist securities, at the expense of French taxpayers.

*Prelude to the Catastrophe: 1929–1931***Introduction**

EVER SINCE THE collapse of the great boom of the 1920's, experts on both sides of the Atlantic have searched for the cause—or causes—of the debacle. Most certainly there was no single cause.

The volume of international credit expanded sharply during the 1920's, and many loans, especially short-term loans, were made without the proper safeguards. But the total international indebtedness was not excessive in 1929; at least not in relation to the total volume of world trade. On the other hand, while few debtor countries actually overborrowed, many of them failed to use the borrowed funds wisely. Germany, the largest international debtor, applied the foreign exchange proceeds of the more than 150 dollar and sterling loans contracted between 1924 and 1930 to finance reparation payments and to support a chronic import surplus. She did little to strengthen her capability to meet foreign obligations out of current revenues.

The situation was similar in many of the raw-material-producing countries. The world-wide prosperity was financed through more and more credits, but once the stream of foreign loans ended, the debtor nations were unable to raise the necessary foreign exchange to maintain debt services, and the boom collapsed.

Far more important than the fact that a large portion of the international loans was used to support an increase in the standard of living rather than to strengthen the borrowers' productive and export capacity, was the vast expansion of the domestic credit. In debtor countries, the influx of foreign loans formed the basis for the domestic credit expansion. In creditor countries, foremost among them the United States, the credit expansion was largely self-generating: stock exchange and real estate loans resulted in rising prices which in turn permitted a further expansion of credit. Inventory, commodity, and real estate speculation was rampant throughout the world, but especially so in the United States, where the runaway stock market boom added greatly to the paper prosperity. Most of the experts seemed blind to the dangers, and the people were only too happy to accept the idea that the Federal Reserve System had the power to prevent both inflation and deflation. Political intervention in the form of price support programs and increasing autarchic policies resulted in a world-wide overproduction of raw materials, whose prices were maintained—precariouly—by national and international support actions.

Relative price stability, rapid technological progress, and a vast industrial expansion seemed to justify the confidence of the experts and the optimism of the people, seemingly unaware that much of the prosperity was financed, directly or indirectly, by pyramiding credit upon credit. Once the structure began to crumble, the depyramiding process fed upon itself, as paper values vanished, marginal collaterals no longer covered the amount of the loans, and the domestic and international credit systems became frozen. (G. C. Wiegand)

#### **A. Flaws in the International Credit Structure**

How large was the volume of outstanding international credit at the end of the boom? A belated appraisal by the League of Nations came up with a statistical *curiosum*. In twelve years, 1919–1930, six main creditor countries granted a net amount of \$19 billion new credits, whereas twenty-five debtor countries borrowed \$11 billion, quite a discrepancy.<sup>1</sup> Yet even the larger figure does not seem excessive considering that a huge volume of prewar debt had been wiped out<sup>2</sup> and that an appreciable part of the new debt had been offset by reparation annuities and other intergovernmental capital trans-



TABLE VI-1  
Net Inward (+) or Outward (—) Capital Movement by Creditor Countries, Measured by Estimated Deficits  
or Surpluses of Goods, Services and Gold; 1919–1938  
(millions of U.S. dollars)

	Belgium	France and her colonies <sup>a</sup>	Ireland	Netherlands	Sweden	Switzerland	United Kingdom	United States
1919	—	+1,420	—	—	+152	—7	—	—3,990
1920	—	+935	—	+50	+192	+112	—881	—2,912
Total to date		+2,355		+50	+344	+105	—881	—6,902
1921	—	—394	—	—18	—45	+45		—878
1922	—	—268	—	+29	—39	+1	—682	—376
1923		—187	—	+4	—1	+33	—700	—162
1924	—	—535	—	—49	—10	—32	—380	—731
1925	—	—450	—	—70	—20	—48	—261	—784
Total to date		+521		—54	+229	+104	—2,904	—9,933
1926	—	—483	—	—67	—33	—54	—126	—352
1927	—	—504	—	—95	—65	—92	—385	—829
1928	—	—236	—	—73	—19	—94	—569	—1,250
1929	—103	+20	—5	—75	—71	—86	—574	—628
1930	—	+257	—	—66	—26	—36	—112	—380

Total to date <sup>c</sup>	- 103	- 425	- 5	- 430	+ 15	- 258	- 4,418	- 13,272
1931	—	+ 791	+ 15	+ 259	+ 22	+ 369	+ 313	- 330
1932	—	+ 917	- 1	+ 76	- 18	+ 94	+ 179 <sup>b</sup>	- 116
1933	—	+ 39	+ 6	- 15	- 37	- 19	<sup>b</sup>	- 280
1934	—	+ 172	+ 32	- 29	- 73	- 94	+ 35 <sup>b</sup>	+ 837
1935	- 101	- 941	+ 18	- 111	+ 1	- 224	- 158 <sup>b</sup>	+ 1,876
1936	- 104	- 1,182	+ 18	- 25	+ 22	+ 220	+ 90 <sup>b</sup>	+ 1,365
1937	—	- 166	+ 37	+ 181	- 48	- 33	+ 277 <sup>b</sup>	+ 1,302
1938	—	+ 207	+ 23	- 143	+ 53	+ 102	+ 269 <sup>b</sup>	+ 690

<sup>a</sup>Excluding French Indochina before 1932.

<sup>b</sup>United Kingdom: The figures for 1932-1938 represent the inverted balance on account of goods and services, i.e., not including gold, since the gold movement during these years to a large extent represented gold sent to the United Kingdom and held there for foreign account. Government transactions are considered services although they include certain capital operations.

<sup>c</sup>Total through 1930 for the eight nations was - \$18,896

actions which were counted as “service” items, not as part of the capital flow.<sup>3</sup> Among creditors, the United States accounted for about 70 per cent (\$13 1/2 billion of these credits); the United Kingdom was for the first time in a century a poor second (\$4.4 billion), with the Netherlands, Belgium, Switzerland, and France limping farther behind, each with a bare \$400 million or less. A new global debt structure had been created. Germany became the world’s largest debtor nation: by 1931, she had piled up \$4.1 billion net liabilities to foreigners. Only three other countries incurred as much as, or close to, a billion-dollar new debt: Australia, \$1.4 billion; Argentina, \$1.1 billion; and Japan, \$900 million. Canada, China, India, Hungary, and the Union of South Africa came in the \$300 million to \$500 million range. Among another twenty debtor countries, Italy was first, having added a mere \$160 million to her foreign liabilities. Patently, these statistics, the most “complete” ones available, are something less than conclusive; the figures are residues of the respective balances of payments after “current” items. Czechoslovakia was classified as a debtor, whereas the figures indicate that in the period under review (1921–1930) she was a net exporter of capital to the tune of \$250 million.

Balance of payments research was in its infancy, especially in the “less developed” countries.<sup>4</sup> The primary producers constituted the weakest link in the world monetary system; they became the prime victims of a crisis in which raw material exports were greatly reduced in volume as well as in value, by about 25 per cent and 50 per cent, respectively, while the burden of servicing their external debts was fixed.<sup>5</sup>

The six minor Central European countries discussed at the Stresa conference of the League in 1933 shared a common origin, having been carved out, wholly or in part, of the Habsburg Monarchy (see Table VI-2). Industrially, Czechoslovakia was the most advanced. She was the first to embark on stabilizing her currency (1919): from her inception she adhered to conservative monetary policies. It should not be surprising to find that she withstood the depression best among them, for she had the smallest external debt. In both 1930 and 1931, her rising export surplus more than covered the service charges on the external debt. Austria fared worst. With the smallest population she had year after year the largest trade deficit—double and triple the cost of servicing her foreign obligations. Austria had



TABLE VI-2  
Foreign Trade Balance, Foreign Debt and Debt-Servicing Payments, 1929–1932  
(millions of Swiss francs)

		Trade surplus or deficit	Total foreign debt (1932)	Foreign debt service charges 1931–1932	
Austria	1929	–782			
	1930	–622			
	1931	–622			
	(Jan.–June) 1932	–393	2,423	214	(1932)
Czechoslovakia	1929	+78			
	1930	+276			
	1931	+213			
	1932	–116	2,037	105	(1931)
Hungary	1929	–23			
	1930	+80			
	1931	+16			
	1932	–4	3,774	248	(1931)
Poland	1929	–176			
	1930	+108			
	1931	+242			
	1932	+129	4,457	268	(1932)
Roumania	1929	–14			
	1930	+170			
	1931	+192			
	1932	+139	5,266	203	(1931)
Yugoslavia	1929	+25			
	1930	–15			
	1931	–			
	1932	+16	3,269 <sup>a</sup>	124 <sup>a</sup>	(1932)

SOURCE: League of Nations, Commission d'étude pour l'Union européenne, *Rapport de la Conférence de Stresa pour la Réconstruction Economique de l'Europe Centrale et Orientale* (Geneva, 1932). (\$0.19 of old gold parity = 1 Swiss franc.)

<sup>a</sup>Public debt only.

the sympathies of the West and was helped along by the Bank of England.<sup>6</sup> The French, too, were investing in Austrian banking; they tried to “buy off” the threat of an Austro–German rapprochement that was a nightmare to French diplomacy.

The other four Central European countries had to pay a very high “price” for prospering on money borrowed previous to 1929. Their treasuries were empty by 1931, literally; their gold and foreign exchange reserves were practically wiped out, and the same was true

of Latvia, Bulgaria, and Greece. Foreign credit had provided the debtors with the gold and foreign exchange that served as a base for inflating the domestic money supplies and financing public works and excessive farm production. The breakdown of the respective national credit systems precluded, in turn, the international flow of capital when it was most needed, in the depression.

Some problems inherent in the international capital flow during the 1920's have already been discussed.<sup>7</sup> Global figures may be unimpressive compared to the colossal developments in the post-World War II era, but they were very impressive in 1931, when entire credit structures "collapsed." Ever since, it has been accepted gospel that within a decade an excessively large volume of international obligations had accumulated beyond the debtors' "capacity to pay." That the burden would be too heavy, was not in every case evident before the depression. The total volume of foreign credit was not so large as to qualify per se as "irresponsible" or "reckless."<sup>8</sup> True, relatively high interest rates should have restrained lenders as well as borrowers. German industrial firms and public bodies paid on the average as much as 9 per cent, including underwriting commissions and other charges, for long-term loans from America,<sup>9</sup> whereas before 1914 Russia had borrowed in Paris at 5 per cent or thereabouts. Superficially, there was nothing wrong with a global volume of *new* international indebtedness of about \$20 billion outstanding at the end of 1929—not including a relatively moderate volume of direct investments. It is a reasonable assumption that the short-term portion amounted to little more than \$10 billion which, in comparison with the dollar volume of world trade of about \$68 billion in 1929, was certainly not excessive.

Considering that a great deal of prewar debts had been cancelled or had greatly depreciated, and that prices had doubled since 1913, a net increase of less than \$10 billion, in twelve years, of the outstanding foreign long-term credits should not have been unduly large. Nor can it be denied that the credits were to a large extent of the "productive" type. In fact, there were three types: 1) stabilization loans to provide weak central banks with "breathing space"—minimal "international liquidity"; 2) short- and long-term loans of a commercial nature, sometimes furnished with a guarantee by the borrowing country's authorities; and 3) loans to public authorities. By 1930, the first type of loans had been repaid for the most part and scarcely

TABLE VI-3  
Movement of Private Long-Term Investment Funds (Net), 1919-1934 (U.S.)  
(\$ millions)

Year	New security issues floated <sup>a</sup>	Direct investments abroad	Foreign stocks and bonds bought from foreigners	American stocks and bonds bought from foreigners	Foreign stocks and bonds resold to foreigners	American stocks and bonds sold to foreigners	Bond redemption and sinking fund payments and receipts	Net movement
1919	-357	-300	-39	-195	b	b	+515	-376
1920	-461	-200	-481	-258	b	b	+571	-829
1921	-547	-200	-227	-227	+48		+255	-671
1922	-685	c	-326	-326	+216		+78	-717
1923	-380	c	-54	-54	+412		+23	+1
1924	-852	c	-114	-114	+319		+34	-602
1925	-948	c	-90	-90	+411		+140	-487
1926	-999	-157	-115	-509	+286	+635	+257	-602
1927	-1,201	-178	-154	-650	+395	+831	+234	-723
1928	-1,111	-258	-559	-1,135	+449	+1,661	+291	-662
1929	-631	-261	-353	-1,054	+474	+1,489	+199	-137
1930	-822	-183	-360	-916	+806	+1,035	+173	-267
Total to date							-6,072	
1931	-212	-182	-347	-495	+659	+589	+207	+219
1932	-27	-33	-225	-305	+385	+300	+122	+217 <sup>d</sup>
1933	-10	-34	-685	-580	+565	+760	+73	+89 <sup>d</sup>
1934	—	-22	-405	-480	+510	+480	+89	+172 <sup>d</sup>

SOURCE: Amos E. Taylor, *The Balance of International Payments of the United States in 1934* (Washington, D.C.: U.S. Department of Commerce, 1935), p. 76.

<sup>a</sup>Excludes underwriters' commissions, discounts, and refunding.

<sup>b</sup>Included in figures for purchases of American and foreign stocks and bonds, which are net figures.

<sup>c</sup>Not estimated.

<sup>d</sup>Excluding the net estimated transfer of funds in arbitrage operations.



TABLE VI-4  
World Trade, Selected Years, 1913–1929  
(\$millions)

1913	\$37,865
1925	62,872
1926	60,427
1927	65,048
1928	67,380
1929	68,460

SOURCE: League of Nations, *Memorandum on International Trade and Balance of Payments, 1913–1927* (Geneva, 1927); League of Nations, *Statistical Yearbook, 1931–1932* (Geneva, 1932), p. 201

affected the total outstanding at the end of the period. The third category absorbed only the smaller part of the total, although it was higher in Germany and some of the Latin American countries than in most other major debtor countries. The image of the 1920's as an era in which rapacious and ruthless international bankers induced impoverished peoples of the Continent to rush into foreign debt—is not supported by statistical evidence. What does appear abnormal is America's overwhelming role as international investor, and Germany's as borrower. But it should be remembered that reparation payments had offset a major part of Germany's capital imports; and that the United States, in the end, was receiving the lion's share of those payments. Furthermore, the latter came out of the war and postwar turmoil with a gold reserve larger than any country every before possessed, enhancing its credit potential, whereas an impoverished Europe, Germany in particular, was in dire need of capital.<sup>10</sup> What, indeed, may one ask, is wrong with the "model" of capital flowing from lower to higher rate levels?

In this case, as in many others, statistics, net figures in particular, do not tell the relevant story. The gross foreign debt of Germany was

well over \$5 billion, but over a billion dollars had been invested abroad by Germans and was partly unavailable in the panic. And foreign, largely American, capital was the pillar on which the global credit expansion of the 1920's rested. Since domestic credit structures had been rapidly expanded in the debtor countries, prosperity—and reparation payments—could not be maintained without continued large-scale capital exports from the United States. But the flow of capital ebbed in 1928 and virtually stopped thereafter. Now, the misallocation of imported capital boomeranged.<sup>11</sup> Germany, for one, had used the foreign exchange proceeds of the foreign credits primarily to pay reparations—an unproductive use if ever there was one, and to pay for imports of foodstuffs and raw materials. Excessive inventories in commodities became a factor leading to the depression.<sup>12</sup> On the other hand, the counterpart value in domestic currency of the borrowed and retained foreign exchange generated a level of liquidity on the German money market that permitted price and wage boosts, while the trade balance was further deteriorating. Unwittingly, the foreign creditors “prefinanced,” as it were, the coming crisis. Germany's productive capacity had indeed been expanded and become more efficient but nowhere in proportion to the input of borrowed capital—borrowed both abroad *and* at home.

The crucial points are, first that the domestic systems of the debtor countries had been greatly expanded under the stimulus of foreign loans and could not make sudden adjustments without fresh credit injections from abroad; and second that the credit structures of the chief creditor countries had in turn become too weak to withstand the repercussions of the debtors' breakdown. That breakdown was a “deadly” shock only because the creditors themselves were overextended. All this leaves one basic question unanswered. How was it possible that West–East lending could proceed as long as it did despite the “handwriting on the wall?” Surely, lenders and borrowers alike were blinded by the glaring “lights” of the prevailing optimism and were captives of mass suggestion.<sup>13</sup> Actually, the speculative excesses on the international scene were but a faint reflection of the turbulence on the American security and real estate markets.

But there was more to it than that. For, what the creditors saw at the time, was most encouraging. The revitalizing effect of capital infusions on the economies of Germany and other debtor countries

was almost instantaneous and in any case reassuring. Smoke climbed from factory chimneys, employment and living standards rose rapidly. It was easy to overlook “some” mistakes in capital allocation in view of a spectacular and apparently healthy progress in general. And the profits were tremendous, especially the profits of the “intermediaries” who were directing the capital flow.

With few exceptions, the American bankers who were conducting the international credit transactions were the same ones who were backing the speculative “craze” on Wall Street. Overwhelmingly, they were thinking, as was the American investor also, in terms that Keynes later labeled the “macro-economic” viewpoint, that is, in “aggregates” which were growing by leaps and bounds, and they were forgetting about “quality.” The bankers were fascinated by instant profits, as were the rank and file of stock market speculators, and had few thoughts beyond immediate appearances. And the “invisible” profits in international finance were tremendous.

The Stinnes loan of 1924, a \$20-million bond issue, set the pattern. The issuing syndicate received an adequate commission but also something in addition, that is missing in the statistical records. The recipient of the loan was an *ad hoc* constructed American corporation, Hugo Stinnes, Inc., capitalized with 503,000 shares. The underwriting syndicate received a “bonus,” free of charge, of 250,000 shares and half of that amount, 125,000 shares, went to the syndicate leaders, Halsey, Stuart, and Company of Chicago—who eventually sold their part of the “package” to a German group headed by the Deutsche Bank in Frankfurt for \$6 million.<sup>14</sup>

This extraordinary remuneration had its “justification.” Although the underwriting of the Stinnes bonds came on the heels of the successful distribution of the \$100 million Dawes loan, it did involve considerable risk. It was the first private issue after the war floated by a German firm, one, moreover, that was in serious financial straits. Hugo Stinnes, Germany’s greatest “inflation profiteer,” had built an oversized, unorganic “conglomerate.” He died before the inflation ran its course and left his huge combine without working capital and without adequate management. To escape from the clutches of the ultimate domestic creditor, the Danat Bank,<sup>15</sup> Germany’s second largest, the Stinnes family borrowed on short-term 90 million marks in sterling in London. So far the story is related in Schacht’s



memoirs.<sup>16</sup> The Danat Bank, more precisely its chief executive, Jacob Goldschmidt, had been the associate of Stinnes in building up the “conglomerate,” as well as using “economic power” to keep the Weimar Republic on the reckless inflationary course that permitted the smart manipulators to outwit the average German industrialist and banker. After the mark’s stabilization, the Goldschmidt group was waiting for the bankruptcy of their former associate’s estate. It was at this point that American investment bankers stepped in. The Stinnes family was more than willing to pay a high price to be rescued when the sterling credit matured; and the American bankers may have “deserved a kicker,” as an extra reward for taking the risk.

However, this sort of a “sweetener” became a feature of transatlantic credit deals. “Bonuses” in the form of free-of-charge stock options were offered to American bankers, or were demanded by them. Small wonder that they became increasingly anxious to participate in such “juicy” deals with apparently less and less risk involved—and asked the debtors fewer and fewer questions. This was a significant example of unhealthy profit maximization, characteristic of the “spirit of the 1920’s.”

While the boom grew “bigger and better” and the quality of German loans deteriorated, the American bankers grew increasingly optimistic,<sup>17</sup> notwithstanding some widely publicized warnings of S. Parker Gilbert, the Reparation Agent. In the case of only too many foreign loans of the 1920’s, the provisions for debt service were at best vague. Bolivia, for instance, pledged 80 per cent of her total tax revenues for the service of just one loan with apparently no questions asked on how the government could function on the remaining 20 per cent. Government and corporate borrowers relied on a perpetual flow of new foreign funds to provide the necessary foreign exchange to pay the service on the existing debt. This light hearted optimism, the complete disregard of adverse possibilities, was a characteristic feature of the utopian confusion pervading the New Era. Once the capital flow broke off, debtor countries, from Germany to Argentina, found themselves burdened with inordinate volumes of international debts and with interest charges which they could meet only by resorting to a politically “intolerable” deflation. Abandoning their adherence to the gold standard, in other words, defaulting in part on their debt to foreigners, was to become the “practical” alternative.

### B. The American Debt Behemoth

However important its role may have been, international credit expansion was a minor phenomenon in comparison with the inflation of domestic debts, especially in the United States. During the boom, this two-dimensional growth of debt, domestic and external, was considered a token of healthy progress. It took massive liquidations to bring home a belated understanding of the role of the internal debt structure in the business cycle. This understanding was reflected in a new version of the “naive,” rigidly quantitative interpretation of the value of money. Belatedly, Irving Fisher had recognized major changes in the volume of debts as “independent variables,”<sup>18</sup> equal in potency to changes in the volume of money in determining prices and employment.<sup>19</sup>

The growth of indebtedness bordered on the fantastic, in the light of previous experiences. In the United States, estimated total new debts rose from \$82.1 billion at the end of 1916 to \$191 billion thirteen years later, a better than 125 per cent increase.<sup>20</sup> Federal deficits helped to finance the war; the federal debt skyrocketed from \$1 billion in 1914 to \$25.6 billion in 1919. Thereafter, it declined, bottoming out at \$16.5 billion in 1929. Simultaneously growing state and local debt made up the difference,<sup>21</sup> rising from \$4.4 billion on the eve of America’s entrance into war, to a peak of \$16.7 billion at the end of 1933.<sup>22</sup>

After 1919 it was the private sector of the economy that was largely responsible for the debt expansion. Net private indebtedness more than doubled between 1916 and 1929, from \$77 billion to \$161 billion. In October 1929, before the stock market crash brought about a substantial liquidation, the total net debt came closer to \$200 billion.<sup>23</sup> Even in terms of year-end data, and despite an appreciable reduction of the federal debt, the total of debts of all kinds rose from \$135 billion to \$186 billion in the nine years to the end of 1929, while in the same period, the “prime” money supply—currency plus bank deposits—grew by almost 50 per cent from \$44.7 billion to \$63.8 billion.<sup>24</sup> Indebtedness outgrew the gross national product, too, as indicated by the figures in Table VI-6.

“Trading on the equity” was an earmark of corporate financing in the New Era.<sup>25</sup> The increase of corporate debt by more than 50 per cent, or by \$30 billion, in seven years prior to the end of 1929 was



the more remarkable in view of the flourishing stock market that provided equity capital at relatively low yields in comparison with prevailing interest rates of 5 per cent and higher. Yet, in 1927, as an example, new corporate issues of bonds and notes amounted to \$18 billion, as against only \$700 million new issues in common stocks.<sup>26</sup> The syndrome of overindebtedness went unrecognized as long as the stock market indicated the prospect of a sustained high level of profits. As late as 1930, even such an outstanding expert of the American financial scene as Dr. W. W. Stewart, economist of the New York Federal Reserve Bank, saw no threat to the liquidity and solvency of corporations. He assumed that they had been financing themselves by issuing shares of stock rather than debentures and bonds.<sup>27</sup> In reality, year after year, except in 1929, the dollar volume of corporate bond issues outran that of new share issues.<sup>28</sup>

A number of major industrial and commercial firms became illiquid, to say nothing of a great many smaller ones, as the irresistible force of falling prices collided with a vast volume of immovable indebtedness. The shortsightedness of incurring debts in preference to equity financing was due, in part, to the desire of corporate managements to avoid the "dilution" of their share capital, which would have affected its market value adversely. The chief reason, however, was the availability, in tremendous volume, of institutional funds which were seeking investment in long-term debt instruments, considered as riskless media. But managements paid too little attention to the credit-worthiness of the often highly inflated collateral values. Once the depression hit, recourse to the stock market was no longer feasible on a major scale. As the narrow margin of equity on which corporate debts rested faded away, bond prices tumbled, too.

An important fraction of business debt was owed to commercial banks. According to figures provided by the Bureau of Internal Revenue, small and medium-sized firms resorted relatively much more to short-term bank loans than did big corporations.<sup>29</sup> A similar situation, if not worse—a disproportionately large volume of corporate debt and insufficient equity capital—obtained in Germany as well. When the stock market broke, the banks pressed for debt liquidation in order to protect both their liquidity and their solvency. Many large metropolitan banks had permitted their portfolios to be overloaded with loans, and especially with corporate bonds, leaving themselves little elbow room for credit maneuvering on the down-



TABLE VI-5  
Net Public and Private Debt, End of Calendar Year, 1916-1933<sup>a</sup>  
(\$ billions)

End of year	Private									
	Public			Individual and noncorporate						
				Farm <sup>d</sup>			Multifamily residential		Other non-farm	
	Total public and Private	Total	Federal <sup>b</sup>	State <sup>c</sup> and local	Total	Corporate	Production	Mortgage <sup>e</sup>	1-4 family and residential	commercial Financial <sup>f</sup>
1916	82.1	5.0	1.2	4.4	76.5	40.2	2.0	5.8	8.4	20.1
1917	94.4	12.0	7.3	4.7	82.4	43.7	2.5	6.5	9.3	20.4
1918	117.4	25.9	20.9	5.0	91.5	47.0	2.7	7.1	9.6	25.1
1919	128.0	30.8	25.6	5.2	97.2	53.3	3.5	8.4	10.1	21.9
1920	135.4	29.6	23.7	5.9	105.8	57.7	3.9	10.2	11.7	22.3
1921	135.8	29.6	23.1	6.5	106.2	57.0	3.3	10.7	12.8	22.4
1922	140.0	30.5	22.8	7.7	109.5	58.6	3.1	10.8	14.1	22.9
1923	146.3	30.0	21.8	8.2	116.3	62.6	3.0	10.7	16.3	23.7
1924	153.0	30.0	21.0	9.0	123.0	67.2	2.7	9.9	18.6	24.6
1925	162.6	30.3	20.3	10.0	132.3	72.7	2.8	9.7	21.3	25.8
1926	168.8	29.9	19.2	10.7	138.9	76.2	2.6	9.7	24.0	26.4
1927	177.3	29.7	18.2	11.5	147.6	81.2	2.6	9.8	26.9	27.1

1928	185.9	29.8	17.5	12.3	156.1	86.1	2.7	9.8	29.6	27.9
1929	190.0	29.7	16.5	13.2	161.2	88.9	2.6	9.6	18.0	28.9
1930	191.0	30.6	16.5	14.1	160.4	89.3	2.4	9.4	17.9	27.3
1931	181.9	34.0	18.5	15.5	147.9	83.5	2.0	9.1	17.2	22.4
1932	174.6	37.9	21.3	16.6	136.7	80.0	1.6	8.5	15.8	17.6
1933	168.5	41.0	24.3	16.7	127.5	76.9	1.4	7.7	14.6	15.2

SOURCES: U.S. Department of Agriculture, Agricultural Research Service; Board of Governors of the Federal Reserve System; U.S. Department of the Treasury; U.S. Department of Commerce, Bureau of the Census, and Office of Business Economics.

<sup>a</sup>Data for state and local governments are for June 20 of each year.

<sup>b</sup>Includes categories of debt not subject to the statutory debt limit. Net federal government debt is defined as the gross debt outstanding less federal government securities held by federal agencies and trust funds, and federal agency securities held by the U.S. Treasury and other federal agencies. It thus equals federal government and agency debt held by the public.

<sup>c</sup>Includes state loans to local units.

<sup>d</sup>Comprises debt of farmers and farm cooperatives to institutional lenders and federal government-lending agencies; farmers' financial and consumer debt is included under the "non-farm" category.

<sup>e</sup>Includes regular mortgages, purchase money mortgages, and sales contracts.

<sup>f</sup>Comprises debt owed to banks for purchasing or carrying securities, customers' debt to brokers, and debt owed to life insurance companies by policy holders.

TABLE VI-6  
Gross National Product and Total Net Debt 1916-1929  
(\$ billions)

Year or Year End	GNP	Debts	Debt to GNP
(1)	(2)	(3)	(4)
1916	49.0	82	1.67
1919	68.8	128	1.86
1925	83.4	163	1.95
1929	93.6	191	2.04

SOURCE: Column two: S. Kuznets, *National Income and Capital Formation 1919-1935* (New York: National Bureau of Economic Research, 1937), p. 8; column three: U.S. Department of Commerce. Note that the growth of the GNP was financed by incurring debts: two dollars additional debt for each dollar added to the GNP (at current prices).

swing. And their security affiliates took severe beatings on the "crashing" security markets. In any case, overgrown bond portfolios became the Achilles heel of the metropolitan banks.

Actually, the American industrial debt structure had started to break up as early as in 1920. Between 1920 and 1928, private bondholders' losses due to corporate reorganizations and liquidations amounted to \$1.7 billion, an annual 4.7 per cent average of the outstanding volume.<sup>30</sup> The quality of the new domestic bond issues deteriorated as the boom progressed: in 1931, of the total number issued in 1920-1922, 10.1 per cent were in default; and of those issued in 1929, 31.8 per cent.<sup>31</sup>

The salient fact was not the total volume of *corporate indebtedness*, which rose from \$40.2 billion in 1916 to \$88.9 billion at the end of 1929, and to \$89.3 billion a year later, but rather its *unequal distribution* among debtors. By all indications a relatively small number of firms carried the "lion's share" of the corporate debt. A similar situation obtained with regard to the \$72 billion increase of "individ-



TABLE VI-7  
Bond and Stock Flotations Showing Inflationary Rise, Culminating in 1929  
(\$ billions and fractions)

	State and municipal securities	American Corporations				Farm loan bonds	Foreign stocks and bonds	Canada stocks and bonds	Total bonds, stocks
		Bonds and L. notes	Short notes	Pref. stock	Com. stock				
1920	0.7	1.1	0.6	0.5	0.6	—	0.3	0.2	4.0
1921	1.2	1.8	0.2	0.1	0.2	0.1	0.4	0.2	4.2
1922	1.1	2.2	0.1	0.3	0.3	0.4	0.5	0.3	5.2
1923	1.1	2.2	0.2	0.4	0.3	0.4	0.3	0.1	5.0
1924	1.4	2.3	0.3	0.3	0.5	0.2	1.1	0.2	6.3
1925	1.4	2.7	0.3	0.6	0.6	0.2	1.1	0.2	7.1
1926	1.4	3.1	0.3	0.5	0.7	0.1	1.0	0.3	7.4
1927	1.5	4.5	0.3	1.0	0.7	0.2	1.3	0.4	9.9
1928	1.4	3.2	0.2	1.4	2.1	0.1	1.3	0.3	10.0
1929	1.4	2.4	0.2	1.7	5.1 <sup>a</sup>	...	0.4	0.4	11.6
1930	1.5	2.8	0.6	0.4	1.1	0.09	0.7	0.4	7.6
Total	14.1	28.3	3.3	7.2	12.2	1.8	8.4	3.0	78.3
Deduct:	Refunding bonds (only \$277,000,000 municipals)								
	25% additional for municipals, presumably for refunding								
	All short-term notes (presumably refunded)								
	All American stocks, common and preferred								
	All foreign securities (including Canadian)								
	Balance, American bonds and long-term notes for new capital								
	33.8								

SOURCE: Arnold G. Dana, "Prosperity" Problems (New Haven, May, 1931), p. 49—compiled from *Commercial and Financial Chronicle*, 1920–1931.

<sup>a</sup>Includes investment trusts, \$2,200,000,000 against \$790,000,000 in 1928 and \$174,000,000 in 1927.

ual" debts over the same thirteen years. A study published in 1937 by The Twentieth Century Fund, using data provided by the Internal Revenue Service, came to the conclusion that in 1929 people in the income bracket of \$5,000 and above were creditors on balance, whereas those with incomes of less than \$5,000 constituted a group of net debtors. In most private credit categories, the weaker shoulders were far more heavily burdened, relatively, than the stronger.<sup>32</sup>

The debt tower became wobbly for several reasons. It will suffice to list the most significant ones.

1) Ample information is available to indicate that the share of short-term debt in the total was disproportionately high. At the end of 1930, probably more than one third of the corporate debt was of the short-term variety, despite appreciable liquidations after October 1929.<sup>33</sup> Reliance on short-term credits was due, in part, to interest rate considerations. In the case of farm mortgages, the prevalence of three- to five-year single payment loans, and of even shorter terms on "personal" loans to farmers, was a source of debt delinquency and defaults. These, in turn, brought disaster to thousands of small country banks.<sup>34</sup>

The unconscionable rise of farm debts was originally sparked by the wartime inflation of product prices. Land values rose accordingly, promoted and sustained by easy access to credit at interest rates of up to 10 per cent. After the "bust" of 1921, the expansion of farm production was resumed and so was the growth of land values and farm debts.

2) Business cycles in the United States have been characterized by extraordinary swings in building activity in the major cities, accompanied by changes in mortgage bond flotations from large volumes to their virtual cessation.<sup>35</sup> Historically, the length of dwelling construction cycles varied between fifteen and nineteen years and averaged between seventeen and eighteen years.<sup>36</sup> The urban real estate boom of the 1920's was the upward leg of such a cycle. It was fed by extraordinary expectations and ample credit; it was not deterred by high interest rates or by rising construction costs. Prime victims among institutions operating in the urban real estate field were savings and loan associations. Their "savings balances," which increased from \$1.74 billion in 1920 to \$6.3 billion in 1930, shrank by several billion thereafter.<sup>37</sup> But the commercial banks were heavily affected, too, especially those of the "outlying" category. A conspicu-

TABLE VI-8  
Apparent Debt Position of All Reporting Corporations, Excluding Credit Institutions  
December 31, 1930  
(\$ billions)

Class of corporation	"Cash"	Receivables	Short-term debts	Long-term debts	Tax-exempt holdings	Apparent excess + or deficiency — of debts receivable over payable			Including "cash"
						Short-term	Long-term	Combined	
All reporting corporations	9.88	27.91	27.42	48.28	4.09	+0.49	-44.19	-43.70	-33.82
Railways	0.47	0.73	1.53	12.37	0.01	-0.80	-12.36	-13.16	-12.69
Other "utilities"	1.09	3.17	3.37	14.61	0.21	-0.20	-14.40	-14.60	-13.51
"Industrials"	8.32	24.01	22.52	21.30	3.87	+1.49	-17.43	-15.94	-7.62
Groups of "Industrials":									
Manufacturing	3.96	8.73	6.85	5.88	1.80	+1.88	-4.08	-2.20	+1.76
Trade	1.27	5.65	5.03	1.33	0.24	+0.62	-1.09	-0.47	+0.80
Real estate and service	0.60	2.41	3.79	9.56	0.19	-1.38	-9.37	-10.75	-10.15
Finance	1.90	5.44	4.61	3.00	1.33	+0.83	-1.67	-0.84	+1.06
Miscellaneous	0.59	1.78	2.24	1.53	0.31	-0.46	-1.22	-1.68	-1.09

SOURCE: Bureau of Internal Revenue, *Statistics of Income*(1930), pp. 266-267, compiled by A. G. Hart, *Debts and Recovery*, pp. 333-334.



**TABLE VI-9**  
Estimated Home Mortgage Debt by Types of Creditors, for Selected Years, 1925-1934

Type of creditor	Amounts held (\$ billions)			Percentages of total held		
	1925	1930	1934	1925	1930	1934
Total home mortgage debt	13.2	21.2	17.7	100.0	100.0	100.0
Credit institution holdings:						
Building and loan associations	4.1	6.3	3.6	31.0	29.7	20.3
Savings Banks	2.4	3.3	3.0	18.2	15.6	17.0
Life insurance companies	0.9	1.8	1.5	6.8	8.5	8.5
Commercial banks	0.8	2.4	1.2	6.1	11.3	6.8
Home Owners' Loan Corporation	—	—	2.2	—	—	12.4
Total credit institutions	8.2	13.8	11.5	62.1	65.1	65.0
Individuals, etc.	5.0	7.4	6.2	37.9	34.9	35.0
Assumed duplication deducted						
from above building and loan figures	0.5	0.7	0.4	3.8	3.3	2.3
Nominal total mortgages	13.7	21.9	18.1	103.8	103.3	102.3

SOURCE: Hart, *Debts and Recovery*, p. 332.

**TABLE VI-10**  
Relation of Agricultural Loans to Total Loans  
Held by Banks in Stated Years, 1914-1934

Year	Total loans of all banks (\$ millions)	Ratio of personal and collateral loans to farmers to total loans (per cent)	Ratio of agricultural loans, including loans on farm real estate, to total loans (per cent)
1914	\$15,257	10.5	15.4
1918	22,404	11.2	15.7
1920	30,655	12.6	17.3
1923	30,797	9.6	14.1
1931	35,384	5.5	8.1
1934	20,474	3.9	6.4

SOURCE: Norman J. Wall, "Agricultural Loans of Commercial Banks," *Federal Reserve Bulletin* (April 1936), p. 238.

ous crash of speculation in Florida land occurred as early as in 1926; yet it had almost no effect in cooling down the overheated, nationwide speculation in land values.

3) It is a debatable question whether, and how far, the apparently “limitless” availability of funds was responsible for the virulence of stock exchange speculation. In any event, brokers’ loans totaled \$8.5 billion at their peak in September 1929, as reported by the New York Stock Exchange. At their depression low, in July 1932, they amounted to a bare \$242 million. Very drastic, too, were changes in the amount of bank loans against stock exchange collateral. In June 1929, excluding the brokers’ loans financed by member banks, collateral loans of all commercial banks totaled \$9.1 billion. They shrank to \$5.7 billion in June 1932 and to \$4.1 billion in June 1934.<sup>38</sup> In short, in 1929, \$18 billion, or *more than 10 per cent of the (net) outstanding nongovernmental debt*—more than 25 per cent of total commercial bank resources!—*served to “monetize” and write up the market value of common and preferred shares of stock.* With the liquidation of security loans to the tune of \$12 billion, market values plummeted by a multiple of that amount.

4) The vulnerability of the American credit, i.e., debt-creating, system was greatly enhanced by peculiar features of its banking structure, unit banking, in particular. The difficulties centered in the small “outlying” and country institutions, many of which were commercial banks in name rather than in function. Country banks in the agricultural areas started in flocks to fail in the depression of 1921; the number of fatalities rose year after year, as farm product prices and sales “softened,” and reached a peak in the depression. More than one half of the 30,000 banks operating in 1921 had closed by the end of 1933, more than 8,000 between December 1930 and June 1933, *wiping out \$14 billion of deposits* in those two and a half years. The proliferation of small banks was due in part to *lax policies* in granting permission to open banks; all too frequently they lacked adequate capital and management. Very few banks failed, or were liquidated, which had more than \$50 million deposits.<sup>39</sup>

Domestic debts were rising in the 1920’s throughout the “capitalistic” world, especially in Austria, Germany, and the Netherlands. But the data available for any country except the United States are not very reliable. The apparently extraordinary rise in domestic indebtedness in the United States, as compared with that in Western

Europe, probably goes a long way to explain the formidable severity of the crisis on this side of the Atlantic in comparison with that in Europe's industrial countries other than Germany. Just to mention one significant item: consumer installment credit, a "by-product of the automobile," was virtually nonexistent in Europe.

Excessive debt accumulation, with the relatively weakest economic units often most heavily loaded, was, of course, the reciprocal of the credit expansion that "heated" the prosperity. It was a prime ingredient in the financial condition that was to overtake a large sector of the economic system: illiquidity. It was, indeed, an illiquid, overexpanded colossus of debts, rather than an excessive money supply, on which the price structure of the late 1920's rested.<sup>40</sup>

### C. "Hand-to-Mouth"—into the Abyss

"Hand-to-mouth buying" was one of the favorite slogans of the New Era.<sup>44</sup> American business was supposed to have succeeded in rationally planning and adjusting inventories, thus "stabilizing" trade and eliminating the accumulation of excessive stocks. This was the era, incidentally, in which graduate business schools sprouted. By implication, this new managerial technique was to have called finis to the scourge of inventory cycles; a "scientific" base and an essential premise for the belief in "perpetual prosperity" had been provided.

Even today, inventory statistics are notoriously deficient for reasons of inherent difficulties, but they were far more deficient in the past. Besides, their evaluation is a matter of market conditions; normal levels of inventories become excessive when sales decline. In the estimate of the Department of Commerce, the grand total of American non-farm inventories rose from \$8.4 billion 1912 to \$24 billion in 1922, while prices were doubling, and to \$28.4 billion in 1929,<sup>42</sup> while prices were fairly constant. In the late fall of 1928, the Deutsche Bank and Disconto Gesellschaft, the largest commercial bank on the Continent, sent out questionnaires to some 800 German firms, representing about 10 per cent of the country's manufacturing industry. The results published in the January 1, 1929, issue of the Bank's monthly *Mitteilungen*<sup>43</sup> indicated that the reporting firms had accumulated about \$35 million worth of inventories (at 1928 prices) *in excess* of the volume corresponding to the customary sales-inventory ratios. Projected on the national scene, this meant a total of



"excess" stocks in the order of \$350 million in the hands of manufacturing firms alone; the grand total of "surplus" inventories in Germany may have been close to \$500 million, and was rising in 1929. A similar situation obtained in other Central European countries, aggravated by large holdings by farmers of their own products. By the same token, world-wide "excess" inventories may be estimated at \$5 billion, or more, in mid-1929 (at then current prices).

The inordinate agglomeration of inventories in Germany was made possible by the credit practices of the banks.<sup>44</sup> The Deutsche Bank inquiry was prompted by the fact that its "current account" (*Kontokorrent*) loans, which constituted the bulk of its outstanding credit and which financed chiefly inventories, had become alarmingly "slow." The debtor firms' response to bankers' admonitions, and "pressures," was to assert their inability to sell either at home or abroad. Price-cutting was taboo until late 1929.

There is ample reason to assume that the inventory situation was similar in most industrial countries. By 1928, if not before, the unwieldy inventories in the industrial sectors began to slow down the demand for raw materials, yet raw material output kept growing in the face of unsalable stocks. A bad situation grew worse because of public policies which had stimulated production of staple commodities. The common object of all such interventions was to increase the producers' incomes by raising, or maintaining, raw material prices. One method consisted in stockpiling supplies. In 1922, a British producers' cartel had put in operation the Stevenson scheme to maintain the price of rubber by curtailing its output in Malaya and Ceylon. This scheme had to be abandoned in 1928 because the guaranteed price induced greatly increased "native" plantings. The acreage of rubber trees expanded by 30 per cent between 1919 and 1925, and kept expanding thereafter. With new techniques of cultivation, such as bud grafting, raising the output per tree, production outpaced consumption by 50 per cent even in the midst of prosperity.

Equally unsuccessful were other international "valorization" schemes to curtail production.<sup>45</sup> They encountered severe administrative and financial difficulties when prices started to slip. In fact, by inducing more production, the price support plans actually contributed to the debacle. Overhanging "buffer stocks" helped to confuse and depress the markets, as in the case of the international tin cartel. In 1913, world tin production amounted to 136,000 metric

tons; it rose to 199,000 tons in 1929, while the London price was forced down to £204 from £291 in 1926.<sup>46</sup> Major contributing factors were the application of modern dredging methods in Malaya, and the opening of new mines in Bolivia and Nigeria.

The cement output of the world grew from 47,000 tons in 1923 to 73,000 tons in 1929.<sup>47</sup>

Copper is another example:

In 1920 the *world output of copper* was slightly less than it had been in 1913, but during the next nine years it *doubled*. The increased output came largely from *new mines* in Chile and the Belgian Congo and from the application of the *selective flotation* process in old mines in the United States and in new mines in Canada and Mexico. In 1937, the world output of copper was 26 per cent greater than it had been in 1929. During that period, from 1929 to 1937, however, the output in foreign countries increased 65 per cent whereas in the United States it fell off 17 per cent. The new mines in foreign countries that came into production before 1929, particularly those in Canada and Africa, had expanded their output and in addition several rich new mines were opened up in Northern Rhodesia in 1931–32.<sup>48</sup>

Metal production of all sorts profited by the introduction of the selective flotation process, lead and zinc in particular. The output of old mines grew; new mines came into fully equipped operation. New sources of lead supply opened up in Newfoundland, British Columbia, and Australia. "The world production of lead was about the same in 1922 as in 1913; between 1922 and 1929 it rose 64 per cent." Similarly, between 1924 and 1929, the annual world output of zinc increased by 44 per cent; again, thanks to new mines in Canada and Australia, plus other technical innovations.

The automobile age brought a tremendous increase in the demand for petroleum; yet, supply ran ahead of the demand. New methods of scientific exploration and rotary drilling were introduced in 1926, bringing about a 35 per cent increase in petroleum output within two years.

The world sugar output in the crop year 1922–1923 was approximately the same as in 1912–1913; by 1930–1931, it was 56 per cent greater and rose by another 4 per cent during the depression years.<sup>49</sup>

Extraordinary technological progress, meaning a rapid expansion of productive facilities at declining costs per unit of output, was the

earmark of the mining, drilling, farming, and plantation industries throughout the 1920's and beyond.

Most severely hit by the demoralization of staple commodity markets were the “mono-culture” countries—including virtually all of South America. The origins of the excessive production in those countries have to be traced back to the price inflation of 1917–1920. The partial correction of prices in 1920–1921 did not change the producers’—and speculators’—expectations. “Between 1920 and 1924, over 100 million coffee trees were planted in Brazil”; they reached maturity after 1927 near the onset of the depression. Then, between 1926 and 1933, the planting of a billion (!) new trees raised the Brazilian crop by another 33 per cent, and at the same time, production expanded in Colombia and elsewhere.

By 1929, farm products of the temperate zone were being

TABLE VI-11  
World Wheat Carry-Over and Exports, 1927–1935  
(millions of bushels)

Crop year	USA	Carry-over Canada	World World	World net exports	European imports	Extra- European imports
1927–1928	126	91	707	823	662	131
1928–1929	250	127	976	947	703	225
1929–1930	308	128	921	629	483	129
1930–1931	341	141	1,010	836	608	179
1931–1932	401	136	1,002	794	582	188
1932–1933	399	218	1,100	629	449	166
1933–1934	286	204	1,158	553	402	122
1934–1935	152	215	885	532	381	146

SOURCE: League of Nations' data; see also Svenska Handelsbanken, *Index*, February 1936.

“squeezed” between expanded acreages, improved technology, subsidized exports, and inelastic demand. Wheat was a prime example (see Table VI-11). World exports of wheat rose from 823 million



bushels in 1927–1928 to 947 million bushels in 1928–1929; and the carry-over jumped from 707 million to 967 million bushels. Thereafter, exports declined to 553 million bushels in 1933–1934, whereas the world carry-over reached a record 1.2 billion bushels. A major factor was the spread of farm machinery in the American wheat fields; the age of “farming without farmers” was dawning! In 1929, there were 827,000 tractors in use on American farms, against barely 85,000 in 1918.<sup>50</sup> The tractor and the combine “have effected substantial cost savings in wheat production, in some cases as much as 15 or 20 cents per bushel.”<sup>51</sup> In Europe, cheap artificial fertilizers came into use, thanks to the Haber ammonia process, invented in 1908.<sup>52</sup>

Technology played no major role in the rapid growth of butter production, but butter in cold storage soared from 91,000 metric tons in 1929 to 130,000 tons at the end of 1933.

Technology did, however, affect cotton. In 1929–1930, the global cotton crop was 45 per cent greater than in 1922–1923, although the demand was smaller. At the end of the crop-year 1931–1932, global carry-over was 7.6 million bales, triple the “normal.”<sup>53</sup> In addition to the extensive use of tractors and tillage equipment, the very effective device of “sledding” was introduced in 1926. Meanwhile, synthetic rayon was invading cotton’s markets.

Within the continental United States the year-to-year growth of wheat carry-over was spectacular. In the crucial years from 1926 to 1930, the growth was nearly three fold (!), with the biggest percentage jump coming between 1927 and 1929 (see Table VI-11). Chicago contract (cash) wheat prices were sagging even before the New York Stock Exchange crash. The highest price for the best grade in 1913 was \$1.09½; it reached \$3.50 in 1920, but was down to less than half, \$1.70, in 1928 and fell to \$1.48 in 1929.<sup>54</sup>

In short, the great crisis started in the sphere of staple commodities. Virtually all prime staples were caught in the upsurge of technological progress, wool being one of the few exceptions.

Mention has barely been made of the basic chemicals. Take the economic “explosion” of the synthetic nitrates as an example.<sup>55</sup> With rapidly growing surpluses—stimulated by the expectation of both indefinitely rising sales and declining costs—prices had to break. Break they did: fiber prices in particular, as shown in Table VI-12 which was presented on May 23, 1930, to the Macmillan Committee by Sir Henry Strakosch. But the break in commodity prices in the

TABLE VI-12

World Wholesale Prices of Individual Commodities, 1929-1930  
[per cent of increase (+) or decrease (-)]

<u>Cereals and Meat</u>		Silk	-22.2
Wheat, foreign	-12.9	Flax	-32.6
Wheat, English	-5.1	Hemp	-18.4
Flour	-4.3	Jute	-26.1
Barley	-23.6	<u>Minerals</u>	
Oats	-40.9	Pig Iron	+0.7
Maize	-32.9	Steel Rails	—
Rice	-9.8	Iron bars	+4.9
Potatoes	-48.0	Tinplates	—
Beef, English	+12.6	Coal, Welsh Exp.	-7.0
Beef, Argentine	-4.9	Coal, Durham gas	+8.2
Mutton, English	+5.0	Coal, household	-2.3
Mutton, New Zealand	-10.0	Lead	-21.9
Bacon, Danish	-2.7	Tin	-22.7
<u>Other Foods</u>		Copper	-25.8
Tea	-3.6	Spelter[a zinc alloy]	-31.9
Coffee	-4.4	<u>Miscellaneous</u>	
Cocoa	-6.2	Timber, English	—
Sugar, cane	-6.5	Timber, Swedish	-5.3
Sugar, refined	-6.4	Cement	—
Cheese, Canadian	-7.7	Hides	-14.3
Butter, Danish	-10.2	Leather	-4.5
Coco Oil	-4.3	Petrol No. 1	—
Tobacco	+2.3	Petroleum oil	—
<u>Textiles</u>		Fuel oil	—
Cotton A	-21.8	Linseed oil	+39.7
Cotton E	-26.5	Tallow	-3.3
Cotton yarn	-22.7	Rubber	-30.7
Cotton cloth	-12.5	Soda, crystals	—
Wool, English	-34.6	Sulphate of ammonia	-24.1
Wool, Australian	-41.2	Creosote	-28.6
Wool tops	-40.9		

SOURCE: Macmillan Committee on Finance and Industry, *Minutes of Evidence*, vol. 2 (London, 1931), p. 32.

twelve months preceding the end of March 1930 was not the beginning, much less the end, of the debacle. It should be borne in mind that the inventories of finished and semi-finished products had a high "content" of staples. The inventory crisis that was building up on an unprecedented scale was thus primarily one of raw materials.

By presenting his picture of recent price deterioration, Sir Henry Strakosch, a collaborator of Montagu Norman's, was pursuing a definite objective: to show what had happened because, he alleged, there had been no "central bank cooperation." His point was that, had such cooperation along the lines of the Genoa resolutions of 1922<sup>56</sup> been established, the crisis would have been avoided. He was putting the blame on the world's monetary authorities for not following the ideas of Norman and his associates. This contention calls for further comment.

#### **D. The Commodity Dilemma and the Crisis Quandary**

Several observations emerge from the foregoing data. Inventory and commodity speculation was rampant in the 1920's, paralleling the "gambling" on the security markets. The latter was more spectacular, of course, but the former was equally virulent and had a much broader radius, although not infected by corrupt practices as was Wall Street.<sup>57</sup> The two extravagances mutually stimulated each other, and later on each exacerbated the decline of the other. Both were largely financed by short-term bank credit. Raw materials were the basic components of the overextended inventories, as well as the media of vast volumes of forward contracts.

It was probably no mere accident that the last pre-crisis spurt of the New York Stock Exchange, culminating on September 4, 1929, followed a mild revival of a number of commodity prices.

The rapid accumulation of commodities and the softening of their prices became generally "visible" no later than 1928; in fact, the downswing started between late 1925 and mid-1926. The latter year can be considered as the turning point, the curtain raiser of the depression, heralded by the collapse of the Florida land boom in the same year and by a succession of country bank failures. Business in general, and the security markets in particular, virtually overlooked these ominous developments. So have the historians of the 1929 stock exchange crash.<sup>58</sup> But there can be scant doubt that the "revelation"



of a “creeping crisis” of overproduction in raw commodities was a factor inducing some operators to liquidate their bullish positions on the stock exchanges. The chain reaction was to follow. As a matter of fact, pessimistic remarks by the Boston-based investment advisory service of Roger W. Babson about certain raw materials are now considered by some to have been among the factors that sparked the 1929 panic on the New York Stock Exchange.

How “overspeculated” the commodity markets were became painfully apparent when stock market losses forced the famous speculator, Arthur W. Cutten, and other *confrères*, “to dispose of contracts for many millions of bushels” in the Chicago Wheat Pit and at Winnipeg.<sup>59</sup> That the irrational growth of commodity production and the accumulation of inventories could proceed for years without attracting the attention of the otherwise very “smart” stock market operators remains one of the mysteries of the epoch. Evidently, a naïve faith in an unshakable prosperity had taken hold of a majority of producers, merchants, and speculators alike.

Raw material producers were leaders in the procession from boom to depression; their prices fell before, and fell further, than the general price level did. The combined index of prices of nine principal world commodities (1923–1925 = 100) had fallen to under 80 by mid-1929, well ahead of the general price level decline.<sup>60</sup>

Once the collapse of the stock market had ushered in the end of the prosperity, industrial production shrank, generally as prices declined. But the output of farms and plantations, partly also of mines, expanded in the face of shrinking demand and falling prices. This “perverted elasticity” of the supply of staples was a prime element in lengthening and deepening the depression. There was, however, nothing “perverted” about the attitude of the small farmer or peasant who had little choice but to increase his output, or at least to maintain it, in order to meet his mortgage payments and secure a minimum of subsistence. Thus the surpluses grew, even though “production primarily for the market characterized the activity of fewer than one-fifth of the farmers of the world.”<sup>61</sup>

Numerous theories have been put forward by economists and sociologists to explain the apparent illogic of staple producers in trying to “beat” the depression by boosting the supply.<sup>62</sup> One factor is frequently overlooked, one which may have been more potent than any other: governmental *interventions in favor of the commodity*

*producers*, including the revival, during the depression, of international cartels and commodity valorization agreements. Even though they were institutionalized and enforceable, they were without much success.

In 1930 the Canadian Government took action to strengthen the cooperative wheat pools, the Brazilian Government took over the coffee valorization scheme, and the United States Government introduced arrangements for financing stockholding and control of acreages of wheat and cotton. In Cuba, the earlier policy of restriction of the sugar crop was maintained. The range of international action was further extended between 1931 and 1936, to tin, sugar, tea, wheat, rubber and copper.

The schemes introduced for these six commodities had several features in common: apart from copper they involved the governments of the countries concerned, and covered between eight- and nine-tenths of exportable production; they were agreements between producing countries, with that for wheat also embracing importers; and the purpose of all was to restrict the volume of supplies coming onto the markets by quantitative control of production or exports or both. An additional distinctive feature of the tin scheme was the use of buffer stocks.<sup>63</sup>

Almost invariably, the international arrangements to reduce or withhold supplies served as an incentive to nonparticipating producers to increase their output. To boost domestic output at the expense of foreign producers was the avowed aim of depression-time domestic farm policies in most countries—and these policies did accomplish their immediate objective, but to the detriment of all concerned. The fiasco of Hoover's interventions in American farm politics is well known.<sup>64</sup> The Agricultural Marketing Act was passed in June 1929, and the Federal Farm Board established with a capital of \$500 million. It provided twenty-year loans to farm cooperatives—the proverbial drop in the bucket in the face of production rising on a world-wide basis. Index-wise (seasonally adjusted, 1923–1925 = 100) the “world visible” supply in nine major commodities stood under 100 in most of 1924, above 190 in late 1929, and reached 250 in mid-1934, while their prices kept declining.<sup>65</sup> The celebrated “bread basket of democracy” became a focal point of the global agricultural crisis. Autarchistic policies such as the export premiums proposed in the McNary-Haugen bills, which never became law, the

Agricultural Marketing Act (1929), and the import restrictions resulting from the high Smoot-Hawley Tariff Act (1930) provoked retaliatory threats by some thirty countries and were preceded by similar discriminatory measures in many.<sup>66</sup> Governmental paternalism, including innumerable methods of monetary and commercial warfare, probably did more damage to the raw material producers than the shrinkage of demand due to the industrial crisis and unemployment. American price-raising policies, devaluation included, boomeranged. Between 1928 and 1934, the share of the United States in world copper production fell from 54 per cent to 17 per cent; in wheat from 22 per cent to 14 per cent; in cotton from 58 per cent to 49 per cent.<sup>67</sup> One need not be a believer in 100 percent *laissez-faire* to sympathize with Rothbard's pithy dictum:

If government wished to alleviate, rather than aggravate, a depression, its only valid course is *laissez-faire*—to leave the economy alone. Only if there is no interference, direct or threatened, with prices, wage rates, and business liquidation, will the necessary adjustments proceed with smooth dispatch. Any propping up of shaky positions postpones liquidation and aggravates unsound conditions. Propping up wage rates creates mass unemployment, and bolstering prices perpetuates and creates surpluses.<sup>68</sup>

The almost total failure of public controls and direct “tinkering” to overcome, or to mitigate, the depression is a matter of record. The same can be said of Franklin D. Roosevelt’s “stabilization” and price-raising policies that helped to lower world market prices and to spread the depression. These abortive policies, applied on a global scale, included all the stratagems in the Keynesian economic philosophy, which was to gain worldwide dominance, namely flexible exchange rates, devaluations, deficit financing, cheap money, and so on. There was no shortage of money infusions (“quantity theory” was on the rampage) intended to spark the “initial ignition” of the “accelerators” and “multipliers.” Yet the nostrums failed pathetically, except in two countries: Soviet Russia and Nazi Germany. The “moral” seems clear: it takes a totalitarian regime and a near-autarchic system to make monetary dirigism viable in a depression.

That brings us back to the question posed at the end of the previous chapter. Could the catastrophe have been avoided, or substan-



tially mitigated, if a system of “central bank cooperation,” as Norman wanted it, had been in operation? Restraining the expansion of commodity production was not even on that program. But it is most likely that Montagu Norman, as the manager of the cooperation, would have insisted on credit restraints during the boom, while he was completing the edifice called the gold exchange standard. The Bank of England would have been strengthened, but paradoxically, the international inflationary potential would have been enhanced. What was good for the British balance of payments was not necessarily good for the world at large, or even, in the longer pull, for Britain herself.

Several circumstances greatly aggravated the raw material situation. One, curiously enough, was the abortive attempt of the Federal Reserve Banks to restrain the boom. In the words of the writer of the League of Nations’ *Economic Survey*, 1931–1932:

The increased pressure exerted by the Federal Reserve Banks in the middle of 1928 had the paradoxical result of stimulating industrial activity and speculation. This was because the higher re-discount rates affected different elements of the price-structure unequally. Prices of finished products were more resistant than those of raw materials, and as the gap between these price-groups widened, there was some temporary stimulus to industrial production.<sup>69</sup>

Another and more significant circumstance was the large volume of farm debt accumulated during the boom. The overindebtedness of the American farmer has already been pointed out.<sup>70</sup> The Australian per capita debt of £75 of farmers was excessive for most of the small units. In Germany, the estates of the Prussian *Junkers* (land-owning gentry) had done most of the borrowing and their plight was a great worry to three successive depression-time German governments. In all these situations, production failed to adjust itself to falling prices; and government intervention became “mandatory” with very serious political consequences.<sup>71</sup> And monetary policy was stymied.

As the purchasing power of rural populations—who were still the vast majority of mankind—declined, while manufacturing production was running in high gear, the ensuing all-round “overproduction” forced down industrial sales and prices. The breakdown of equity values in 1929–1930 resulted in severe cuts in business investments and that was the final blow to Prosperity.<sup>72</sup>

### E. Decaying Liquidity

Not the least important among the post-World War I intellectual “revolutions” which weakened financial systems and prepared the way for the downfall of the gold standard was a change in the operational philosophy of commercial banking—from “liquidity” to “shiftability,” to use the terminology of H. G. Moulton. Lip service to the traditional guideposts of asset liquidity continued unabated; but their observance ceased to be a standard practice. Such attitudes have been typical of the upward phase of business cycles. Many crises have been sparked by the default of a single major bank which had lost its capital and some of them part of their deposits in ill-conceived credit ventures.<sup>73</sup> In the 1920's, the decay of bank liquidity affected most of the world's credit structures. The German credit system provides a conspicuous example.

The roots of the German commercial (joint stock) banks' illiquidity reached back to pre-1914 practices. Since their inception in the 1870's, they had been “mixed” banks, providing industrial working capital and even longer term investments, in addition to being commercial banks. They did so by using a substantial portion of their savings deposits or time deposits, and since they were simultaneously underwriters for corporate securities and mortgage bonds as well as stock brokers, they frequently let the debts of industrial firms accumulate until these could be shifted onto the public by issuing shares of stock or long-term obligations.<sup>74</sup> The German banks came out of the great inflation at the end of 1923 with both sides of their balance sheets drastically reduced; fixed properties and goodwill were the major remaining assets.<sup>75</sup> At first, as head of the Reichsbank, Schacht met the urgent demand for “cash” by generously expanding central bank credit. By April 1924, however, the mark began to totter, and under the pressure of public opinion that feared a new inflation, the Reichsbank had to apply the brakes. Thereafter, the foreign bankers functioned as “saviors.”

The cash-to-deposit ratio of German banks had been declining over a long period. According to the official German *Banque Enquête* of 1933–1935, the ratio that used to be over 14 per cent in 1895 fell to 7.4 per cent in 1913, and was down to 1.7 per cent in 1930.<sup>76</sup> Compare this with 15 per cent in the leading French banks.<sup>77</sup> But even these German bimonthly figures were “window-dressed” for

publication; the everyday ratio in the late 1920's was around 1/2 of 1 per cent. How could they operate on such an infinitesimal amount of cash? Jacob Goldschmidt, the chief officer of the ill-fated Danatbank, Berlin's second largest, explained it to the Macmillan Committee. When cash was needed, he would send a messenger with some "bills" to the Reichsbank for rediscounting. He did not mention, as the *Frankfurter Zeitung* brought out later, that pseudo-acceptances (Bank A drawing on Bank B, and vice versa) could be substituted for genuine commercial paper.<sup>78</sup> When the crisis broke, the banks' portfolios of eligible commercial paper were soon exhausted. The Reichsbank, since 1929 under the regime of Hans Luther, refused to take their quasi-acceptances until after Germany *de facto* abandoned the gold standard. In other words, Dr. Schacht had permitted the institutions to shift at will their "shiftable" assets onto the Reichsbank, thereby losing what little vestige of control the Reichsbank had over the money market. It would have meant an appreciable difference in the liquidity status of the German banks if Schacht had insisted that they maintain a cash reserve of at least 5 per cent.<sup>79</sup> But this matter never reached the level of serious consideration until after the banks failed. Nor did the Reichsbank set up, let alone enforce, secondary liquidity requirements, despite substantial credit losses in the midst of the boom suffered by one or two of Berlin's Big Five banks.<sup>80</sup>

A significant change had been brought about by the Black Friday, May 13, 1927.<sup>81</sup> A committee of leading Berlin banks, which was in administrative control of the Berlin Stock Exchange, suddenly clamped down a 25 per cent retroactive margin requirement on brokers' loans. They did so after consultation with Dr. Schacht, who later denied responsibility for the drastic feature of the move.<sup>82</sup> Be that as it may, the outcome was not only to cool down the overheated German stock market, as was rightly intended, but even to bring about its temporary stagnation. The banks lost much of their traditional outlet for "mobilizing" current account loans by issuing corporate securities. Instead, industry, generally speaking, had to rely partly on long-term borrowing abroad and partly on diverting short-term credits, domestic and foreign, to finance the rapid growth and greater technological efficiency of plant and equipment.

In some cases, the German banks acted in an outright reckless fashion, motivated by ambitions and mutual jealousies, and driven



by the keen competition for financial “footholds” in large-scale industrial enterprises. One such case was related to this writer by a director of the Deutsche Bank, Dr. Rösler. Before 1918, there was only one major steel plant in Upper Silesia, an important mining and manufacturing district in eastern Germany. That plant was located in the area later assigned to Poland by the Versailles Treaty. Financed by one of the Berlin banks, a new and enlarged steel plant was put up in the sector still belonging to Germany. Whereupon two more such plants, each “bigger and better,” followed, and each on the initiative of, and financed by, another one of the Big Five banks of Berlin. By the end of 1929, the German sector had acquired a steel capacity that was probably four times larger than the prewar steel capacity of the whole of Upper Silesia, despite the fact that their market was reduced by the political division. Moreover, competition was sharpened by steel capacity expansion in other areas as well.<sup>83</sup> In the end, the entire German steel industry had to be kept going by government subsidies, and by military orders.

The case of Upper Silesian steel was almost a caricature of the propensity for industrial expansion, fostered by the big Berlin banks, often for their own *majorem gloriam*. In general, the leading German bankers were by no means unaware of the dangers of “borrowing short and lending long” in the process of financing the growth and greater “efficiency,” meaning, especially, concentration of manufacturing plants. But they had no influence over the use of funds which the corporations had drawn directly from foreign creditors. So far as their own industrial loans were concerned, it had been the practice of the banks to insist that their money from abroad, which was almost 50 per cent of their total deposits in 1929!, should be applied only to such uses as directly served production for export.<sup>84</sup> That was a sound rule of thumb, but difficult to enforce.

Another trouble was, that the second biggest bank, the Danatbank, deviated from the rule whenever it suited Jacob Goldschmidt’s ambition to add another “feather to his cap,” such as a new board chairmanship in a major industrial corporation. Before the Danatbank went bankrupt, Goldschmidt was on the boards of directors of almost a hundred corporations, an all-time record. It was his practice also to undercut the other banks by offering loans to manufacturers at lower than going rates. The pressure of this unwise and unpoliced competition forced the hands of the other banks.

The condition of over 3,000 local savings banks, including their Giro-Zentralen, or clearing houses, was even worse.<sup>85</sup> By 1931 their assets were 78 per cent illiquid, consisting of unsalable obligations, of loans to utterly illiquid local and provincial authorities, and of equally “frozen” urban mortgages.<sup>86</sup> The situation had been “visible” for some time. In his memorandum of 1927 on reparations, S. Parker Gilbert, the Reparation Agent, commented on the overborrowing and overspending by the German public authorities and concluded: “These tendencies, if allowed to continue unchecked, are almost certain . . . to lead to severe economic reaction and depression.”<sup>87</sup> His foresight was admirable; his judgment reflected the opinion of leading European experts like Oskar Wassermann of the Deutsche Bank. Unfortunately, neither he nor they would or could act accordingly.

The significance of proper liquidity policies is underscored by the recurrent experience in the midst of panics of banks managed in accordance with well-proven qualitative standards; they endured the crises without difficulty. Hungary’s largest bank, and several others, became insolvent in May 1931; yet no run befell the well-managed second largest, the Hungarian Commercial Bank of Pest.<sup>88</sup> Similarly, in July 1931, the fourth largest bank of Germany, the Berliner Handelsgesellschaft, suffered no “liquidity crisis” and no trouble whatsoever, nor were the customers in all but two out of about 200 private banks anxious to draw down their deposits.<sup>89</sup>

The problem was not “the liquidity crisis,” a term that conveys the implication of central banks deliberately and arbitrarily withholding their “high-powered” money so badly needed to save or to relieve the situation—and dilute the currency. The problem arose from a condition of the banks themselves, which, once revealed, caused creditors and investors to “run for safety”—out of the illiquid financial institutions. The prospect of their insolvency was what caused panics and brought about their failure. To realize the significance of the liquidity problem, one may contemplate what the development might have been if some 14,000 small banks in the United States had *not* rushed headlong into a credit expansion of a highly dubious sort (dubious even by pre-crisis standards) and had *not* failed. More than a third of the American bank failures occurred before the depression had even started, and between 1921 and 1933 a total of \$8.5 billion in deposits were wiped out.<sup>90</sup>

What liquidity means, was brought home in the crisis to the mar-

TABLE VI-13  
U.S. Bank Failures, 1921-1934<sup>a</sup>

Year	Number of banks failing	Total deposits of failed banks (\$ millions)
1921-1928	4,763	1,548
1929	628	223
1930	1,292	822
1931	2,213	1,669
1932	1,416	698
1933	3,891	3,583
Total	14,203	8,543
1934	44	35

SOURCE: D. L. Kemmerer and C. C. Jones, *American Economic History* (New York: McGraw-Hill, 1959), pp. 537, 540. State banks accounted for 80 per cent to 97 per cent of annual failures.

<sup>a</sup>Includes only national and state banks.

“Between 1921 and 1933, the number of commercial banks in the United States declined from 28,197 to 13,245, that is, by more than half. Nearly all the decline resulted from bank failures.”

gin speculators in common stocks, bonds, commodities, and real estate.<sup>91</sup> A majority of these were in 1929 in an untenably illiquid position that could never have grown to such catastrophic dimensions as it did if elementary rules of sound financial behavior had not been obscured by visionary dreams.<sup>92</sup>

The significance of asset liquidity has been demonstrated, also, by the fact that three national banking systems, those of France, Switzerland, and Holland, came through the “liquidity crises” of 1931-1933 literally unscathed.<sup>93</sup> The central banks of the three Gold Bloc countries had adhered to the “real bills” technique, refraining from monetizing anything but gold and short-term paper of the self-liquidating type. What is more, the respective commercial banks of these nations operated, by and large, on the same pattern. During the



depression, only one minor investment bank in Switzerland became insolvent due to defaults on loans extended abroad; one private banking house got into serious trouble in Holland, and one municipally owned savings bank in France.<sup>94</sup> Those three nations had their full share of prosperity in the 1920's, but not the flamboyant kind of prosperity. Was it sheer coincidence that their gold reserves were rising throughout the world-wide panic and that the deflation of their deposit volumes was much milder than elsewhere? In fact, the volume of bank deposits increased in France between 1929 and 1931, demand deposits by 12 per cent, savings deposits by 14 per cent, a consequence of the gold inflow, whereas they declined in the United States by 16 per cent and 12 per cent, respectively.<sup>95</sup>

The pre-crisis tendency of American commercial banks to shift their earning assets from the self-liquidating to the "shiftable" kind is indicated by the increase of their "investments and participations," other than government bonds, from 10.8 per cent of total assets in 1913 to 14.1 per cent in 1929. In the same period, the commercial banks in England and Wales—where no internal panic occurred in 1931!—reduced this kind of holdings from 7.8 per cent to 3.2 per cent.<sup>96</sup> No securities of any kind, except government bonds in moderate amounts, were held in French commercial bank portfolios; French savings banks were holding, as a rule, none but government bonds.

The "liquidity crisis" that engulfed one money market after another was in most cases aggravated, if not caused, by the illiquidity of the respective overindebted treasuries. Britains' budget was balanced between 1922 and 1929, but only in a precarious fashion. The government's apparent inability to restore the budgetary balance in 1931, before the devaluation, was the prime factor in causing a persistent run on sterling. The German federal budget, and the state and local budgets as well, showed deficits for years before the crisis, as did the national budgets of Italy, Austria, and Poland. Once the depression broke out, the fiscal authorities had no reserves on which to fall back. Higher taxes would have worsened economic conditions, possibly yielding lower rather than higher revenues. Foreign and even domestic capital markets were unwilling to absorb public securities. In short, a crisis of confidence in the respective governments' ability to pay developed, gravely impeding any attempt at rescuing illiquid banks and insolvent businesses within the gold

standard frame of reference. Again, it is worth noting that the national budgets of France, Switzerland, and the Netherlands were reasonably in balance: they were the three countries which best, or longest, withstood the impact of the depression.

Coming back, however, to the pre-crisis liquidity, or illiquidity, of the banking systems: arguments have been presented *ex post* to the effect that the problem did not exist at all, or was irrelevant, since it could have been resolved, allegedly, by proper central bank action. We shall deal with this controversy in a later chapter.<sup>97</sup>

## F. The Speculative Euphoria

As the First World War ended, “Wall Street” became, almost overnight, the financial capital of the world. Even before the war the New York Stock Exchange had been time and again a “hotbed” of speculative activities on an international scale. After the war, it rose to global leadership. Its trading volume became equal or even superior to that of all its foreign competitors combined, with a turnover of up to \$6 billion a day, and to more than double that amount in the panic, a fantastic volume at the time.<sup>98</sup> The combined sales volume of the over-the-counter market and the other American stock exchanges was much larger. The New York Stock Exchange became the symbol of a gloriously expanding capitalism. The unique position it acquired by 1929 as the focus of world-wide speculation—and capital allocation—was in no small measure due to participation by the public. This was indicated by the fact that on a single day of the great panic in October 1929, 16 million shares, millions of them in odd lots, were thrown on the market. The market’s breakdown imparted a shock effect not only to the financial communities but to the civilized world at large, as no other event had since World War I.

The legendary “orgy” of stock market speculation in the late 1920’s—reminiscent of the South Sea Bubble in England of 1720 and the 1634–1636 “tulip mania” in Holland—has been exploited by “leftist” literati for all it is worth, with emphasis on the manipulations of ruthless operators. It has become a favorite subject of satire; barbers, messenger boys, and shoe shiners allegedly playing the security analysts for childishly credulous amateur investors.<sup>99</sup> London had its “scandal” six weeks ahead of New York. The Hatry fraud cost the British public around \$75 million. As to Wall Street,

an investigation by Congress, published in twenty volumes (1933–1934), disclosed unsavory practices by promoters, investment trusts, bankers, and others.<sup>100</sup> The Securities and Exchange Commission entered the scene in 1934. Yet, a chief object of investigation, Samuel Insull, could not be proven guilty of more than a reckless abandon to financial superconstruction dreams. The greatest single disaster visiting the New York exchange, and some others, was the catastrophe of the Swedish “match king” and “empire builder,” Ivar Kreuger, a case with world-wide ramifications. Among the prime victims of Kreuger’s superconglomerates, however, were leading American investment bankers.<sup>101</sup>

The late 1920’s were in the United States the era of skyscrapers, figuratively as well as literally. The “creeping crisis” in primary production and the breakdown of the Florida land boom in 1926 did not affect other speculation in land values, let alone the stock market, as mentioned above. By hindsight, it is a fairly simple task to identify the handwriting on the wall indicating the nature of this “hothouse prosperity”: overextended and illiquid credit structures, overgrown production capacities and inventories, nonsustainable yet rigid commodity prices and wage rates, extraordinary speculative “orgies,” including the cold-blooded mischiefs of rapacious and financially powerful operators.<sup>102</sup> It is difficult to comprehend the apparent lack of insight, and foresight, displayed by a majority of contemporaries in all walks of life, their ignoring the signals that should have served as warnings. Financial communities, the American in particular, seemed to live in a dream world from which they were brutally awakened.

Some danger signs were seen and understood by thoughtful observers. *The Commercial and Financial Chronicle* (New York), Alexander Dana Noyes, financial editor of *The New York Times*, and a few economists, some of them connected with newspapers or with major financial institutions, deserve credit for having pointed out “unsound” aspects of the boom. But on the whole the economic literature of the day was either silent or contributed significantly to the bullish propaganda, as did the spokesmen of the Hoover Administration.<sup>103</sup> The more stock quotations rose, the greater assurance they spread. The boom was feeding on itself. Highly respected and influential scholars, also the learned statisticians of the Harvard Business School, provided “scientific” rationalizations in support of



the belief in the fantasy of Eternal-Prosperity-on-a-High-Plateau—and justification for common stocks selling on average yield levels of less than 2 per cent, with glamorous favorites at 70 and more price earnings ratios. The stock market's advance was slowed down to "sideways" movements in the spring of 1929, reflecting growing difficulties in the staple commodity areas, and the political tensions generated by the reparations issue of the Young Plan conference.<sup>104</sup> In addition there were "direct pressures" as a result of the very mild rediscount rate boosts by the Federal Reserve.<sup>105</sup> Then a short-lived flourish of staple prices in the early summer of 1929 helped to stimulate stock quotations and raise their averages to new record highs by early September.

Overvaluation of capital assets is an earmark of every boom. The elasticity of demand for such assets to interest rate changes becomes "perverted." This was demonstrated by the fact that 12 per cent and higher rates on call loans did not cool down the speculative fever. The inelasticity of the credit demand was due, partly, to the tendency of many speculators to play on the expectation of selling soon at a higher price; partly to the prevalence of "delirious" conceptions of future corporate earnings. The imagination of many was fired as perhaps never before.

Never before had the conviction obtained that peace was guaranteed, assuring the prospect of uninterrupted progress. Although the United States refused to join the League of Nations, the mere existence of such a peace-keeping superorganization, in which the chief European powers and Japan were united, was greatly reassuring, the more so since the League's foundations were buttressed by the Kellogg-Briand Peace Pact and the Locarno Pact. The optimistic faith in the League and its instrumentalities was probably more deep-seated in America than on the other side of the Atlantic. In fact, there seemed to be no power in existence that could seriously threaten the new balance of power. Germany was disarmed and prostrate and Russia was not considered capable of aggressive action, being tied down by extremely difficult problems of consolidating communism.

The psychological uplift provided by the assumption of perpetual peace was one foundation for the optimism of the 1920's ignoring the terrible political tensions developing in both Europe and Asia. Equally significant, if not more so, in generating visionary optimism

was the unprecedented pace of the technological revolution. It had brought to fruition Herbert Spencer's ideology of progress that was dominant in the late nineteenth century,<sup>106</sup> in the English-speaking world, at any rate. Never before had the technique of production and transportation undergone such truly revolutionary changes in such a short time. It took several decades to build up the railroad system of the United States; it took barely two decades for the automobile to "take over," imparting a far more spectacular change in people's ways of life than railroads and steamships had done.

. . . the automobile, when first introduced, was hailed as a device of individual and social improvement—a liberator from the constraints of space and time. Now, men were able to travel to the countryside and rejoice in the beauties of nature, to commute from suburb to city and put the distance between their homes and places of work, freed from the restrictions of more laborious or track-schedule-bound means of locomotion. The new industry yielded immense profits to investors and high wages to hundreds of thousands of workers. Together with its spin-offs, it provided the principal thrust toward widely diffused prosperity based upon mass production.<sup>107</sup>

The unprecedented pace of progress yielded "immense" profits—what else was needed to arouse the spirits? The triumphal spread of the internal combustion engine, the assembly line, and the skyscraper would alone have sufficed to spark sanguine expectations. But so did the sudden expansion of artificial energy creation and utilization. "It is in capital [in the physical sense] that the great change has taken place since just before World War I."<sup>108</sup> Between 1912 and 1929, net production of electric energy in the United States jumped from 25 billion kilowatt hours to 117 (!) billion.<sup>109</sup> In the decade after 1919, the growth of public utility types of enterprises accelerated in a cumulative fashion. Throughout industry and agriculture, the sudden emergence of new inventions on a broad scale, the cumulative application of innumerable innovations, and the relentless improvement of old techniques brought about increased productivity per man-hour. "Greater Efficiency," meaning specialization, mechanization, concentration, Taylorism, and the assembly-line technique, was the slogan of technology and of commercial organization, with the conveyor belt the symbol of the New Era. All of these combined meant reduced costs and higher wages—*without raising prices*

(which should indeed have declined). Increasing “mass purchasing power” and growing sales of articles of mass consumption heralded reduced costs per unit of output. They bolstered profits and became the credo of the “progressive” businessman like Henry Ford and part of the “philosophy” on which the speculative mania fed. With peace taken for granted, population rising, taxes falling, and markets expanding, the sky was the limit for grandiose profit anticipations.

The radio industry was literally born in 1922 and very soon was booming—I’ve never seen anything develop so fast as radio did. Refrigerators took the place of ice boxes, gas stoves replaced coal burners, electric lighting replaced gas or even kerosene lamps; public utilities boomed. Most of all, the auto industry, that went unmentioned as an industry in the 1899 census, was #7 by 1914 and #1 by 1930. Ford’s company, capitalized at birth in 1903 at \$100,000 got a bona fide offer to sell out in 1923 for \$1 billion, which he did not accept. That means a \$100 share had, in 20 years, become worth \$1 million. True most of this stock was privately held by Ford, although a Mrs. Haus, around 1919, had sold out her \$100 share for \$262,000. Not bad. But other auto companies were not doing badly either. Coming back to Ford, it takes 13 doublings for \$100 to be about \$1 million.

Of course it is easy to exaggerate the number of persons who held stocks in the 1920’s. It was probably not more than around two million, compared to ten times that many at present. But there was a considerably greater diffusion than ever before in ownership. People got into the market who never before would have thought of doing so. My wife’s aunt, a salty school marm, did a little speculating, quite successfully, to her delight.<sup>110</sup>

It was a fundamentally sound trend, given the dynamics of the free market society and a social climate generally favorable to business enterprise. But it had decisive flaws. While technology progressed by leaps and bounds, financial thinking went into an eclipse. There were several reasons for this. The apparent novelty of an extraordinary pace of development led to underestimating the distance to the “rosy future”—just as John Law and his contemporaries had done two centuries earlier. “Louisiana,” the Mississippi valley from the river’s and its tributaries’ sources to its delta, would have been history’s most remunerative investment—if the investors had waited 150 years. Disregarding a “fair” number of outright fraudulent or totally



unrealistic stock market maneuvers in 1928–1929, Wall Street's clientele would have come out with huge profits—if it had waited only thirty years or so, and had not been operating with borrowed money.

Secondly, fateful illusions had been conjured up by misconceptions of the monetary order. The chief reason for the financial confusion in the late 1920's, as in similar eras of the past, was the credit inflation. Combined with stable price levels, it generated a sense of security and an overestimation of the expansionary potential. This misled a dynamic society into recklessly speculative ventures on an unprecedented scale. Believers in monetary stability were carried away by their wishful thinking. The believers in the dogma that central banks are able to, and should, stabilize price levels became victims of an almost religious fervor characteristic of men like Professor Irving Fisher of Yale. He was responsible, more than any other single person, for popularizing the concept that the Federal Reserve System was bringing about price level stability.<sup>111</sup> This was most encouraging, in view of the early postwar experience with inflation and deflation, and their unsettling consequences. It gave the green light: "Go Ahead, nothing to fear". Prosperity *sine* inflation and deflation was now indeed a "reality"; it was the longest boom on record, although it lasted only six years. The implication was that credit-debt-expansion could not cause major fluctuations in prices and sales; and that "contracyclical" central bank policies were able to "neutralize" business cycles and price movements. The question was not, how much expansion, but rather, which are the most profitable directions. And this utopian state of mind was reinforced by the widespread conviction that central bank cooperation was a working reality, insuring a world-wide stability of price levels and monetary systems.

The self-aggravating effect of the outpouring of credit on equity values should be pointed out, and the stimulus imparted thereby to speculation. Mortgage loans, excessive in relation to actual market values, helped to raise real estate values; higher land values, in turn, attracted more mortgage credit; and so on. The more security values rose, the more their "usefulness" as collateral increased. Boom generates boom—by piling debts on debts.<sup>112</sup> The inflation of asset values, nontaxable capital gains, was probably the better half of the

profit inflation, that was both the proximate cause—as well as an effect—of the boom.

So far as this writer can ascertain, most economists of distinction in the United States and Europe were skeptical of the boom's ultimate outcome, and so was the majority of monetary (public) authorities on both sides of the Atlantic. Yet, no one in a responsible position wished to be held accountable for "breaking" the stock market; nor did any "pessimist" foresee the dimensions of the forthcoming catastrophe. A very large sector of the public had been "taken in." Those engaged in real estate or security speculation, middle-men and "tycoons" like Charles E. Mitchell of New York's National City Bank and Albert H. Wiggin of the Chase National Bank, in particular, were resentful of any criticism of the boom. Hence an *ad hoc* concocted theory, asserting that the boom in stocks had no relevance to "basic" economic conditions, achieved a measure of acceptance. By the same token, the multibillion security loans drawn into the stock market meant no misallocation of capital. Ironically, such rationalizations of bullish operators found unexpected "scientific" support in quantity theory quarters. The stock market makes strange bedfellows.<sup>113</sup> Differences in motives aside, both bullish groups—the "gamblers" and the "monetarists," for a short-hand characterization—agreed that there was no reason for Federal Reserve intervention against the "wildest" sort of speculative excesses. The question has remained controversial to this day.

There are no comprehensive data available about what margins were requested on "street loans." Bankers and brokers spoke of 40 per cent to 50 per cent requirements; these may have been for "strangers." Major and senior speculators were as a rule people of good credit standing—before the crash—who put up 25 per cent margin, or even less. The hysterical liquidation of customers' accounts at the outset of the panic would scarcely be understandable, if ample margins had been provided. The speculative frenzy was financed directly by the banks, with corporations and foreign capitalists participating—and indirectly by the Federal Reserve Banks. The member banks could rediscount acceptances and use the funds to provide street loans. At least 10 per cent of the credit system's total resources were engaged in a relatively nonproductive, and in its consequences actually destructive, pursuit, not counting the equally speculative real estate and farm loans. The crash and the subsequent depression

might have been much less severe had there *not* been this massive and devastating withdrawal of call money. There would then have been much less speculation and an orderly retreat, rather than a panicky liquidation.

It has been asserted that the flow of funds into speculation financing directly benefited industries. In reality, and this was the consensus of competent observers, the margin speculator often bought from, and then sold to, another margin speculator. And if he took his profit, he spent it more often than not on “conspicuous consumption.” It is a reasonable presumption that only a fraction of the capital that was pushing up share quotations to “dizzy” heights went into productive investments.<sup>114</sup> But the lending capacity of the banks was depleted *pari passu* unless they borrowed from the Federal Reserve, which they did. Surely this was not the most desirable way of using the liquid resources of the credit apparatus. Indirectly, the speculative boom did attract funds into industry by creating and maintaining a vigorous market for new corporate security issues. But whatever advantage accrued<sup>115</sup> was more than offset by the subsequent panic that ruptured entrepreneurial psychology and undermined the confidence in business and in the capitalist, free market system itself. *The entire credit structure of the world—that rested on the belief of reasonable stability and dependability of American capital values—became suspect.* As one presumption after another gave way under critical scrutiny, an historically unique situation in peacetime developed, a creeping state of fear and uncertainty interspersed with periodic panic-threatening crises.

It was a catastrophe, indeed, to more than just the multitude of people who lost their fortunes, or if dependent on the spending of the winners, lost their source of income. Could it have been averted, or controlled, by monetary policy, as one school of economists claims? Bear in mind that the sudden collapse of common stock values occurred at a time when most American cyclical indicators were still pointing upward.<sup>116</sup> A recession of sorts was expected by some, but certainly not one that would have justified wiping out untold billions in market values.

Evidently, more and more operators, among them one of the biggest, Jesse Livermore, grasped the portent of developments in the agrarian and mining sectors and quietly turned bearish. To be sure, the Hatry scandal in London, the languishing of some European



stock exchanges, the sharpening of the Franco–German conflict about reparations—were all reasons to dampen the spirits in Wall Street, but *what caused a “retreat” to turn immediately into a full rout was, to repeat, the self-feeding liquidation of security loans.*

It is apparent that by late 1928 monetary policy had become virtually helpless in dealing with a “cyclical” situation of world-wide dimensions. The unwieldy commodity situation was aggravated by excess capacities and inventories in the manufacturing industries.<sup>117</sup> An artificially bolstered recovery, sponsored by Wall Street professionals, and by Federal Reserve credit expansion, which got under way in the first half of 1930, was to be reversed by a series of financial crises that opened up the second phase of the Great Depression, the one beginning in mid-1931. In fact, the extraordinary volume of stock market and real estate speculation and its volatile financing proved one of the most dangerous destabilizing forces. The diversion of credit into financial markets had created a mirage of stability by leaving the nonfinancial price indices virtually untouched.<sup>118</sup>

## Notes to Chapter Six

1. These are dollars of the pre-1933 parity: United Nations, *International Capital Movements during the Inter-War Period* (Lake Success, N.Y.: Department of Economic Affairs, October 1949), pp. 10–12. See Table VI-1.
2. The outstanding *long-term* international debt has been estimated at \$41 billion in 1914 and \$47.5 billion in 1929, a *net* increase of \$6.1 billion only: M. A. Kriz, *Post-War International Lending* (Princeton: Princeton University Press, 1947). The statistical confusion was confounded by an estimate of the League of Nations’ Economic Intelligence Service that set the total of long-term international debt at 10 billion to 12 billion *pounds* as of the end of 1935.
3. Inter-Allied credits extended by the United States in 1917–1920 amounted to about \$10 billion; besides, about \$1.5 billion worth of British- and French-owned American securities had been repatriated during the war.
4. Hungary published more meticulously detailed payments data than any other country did: League of Nations, *Memorandum on International Trade and Balances of Payments, 1912–1926*, vol. 1 (Geneva, 1927), pp. 91–101.
5. The commodity crisis is discussed in Sec. C and Sec. D, below.
6. See chap. 4, sec. E, above, and chap. 8, sec. A, below.
7. See chap. 5, sec. C, above.
8. The U. S. Department of Commerce estimated the *total net* capital outflow from the United States in 1919–1930 at \$6 billion: Table VI-3.
9. R. C. Kuczynski, *American Loans to Germany* (New York: Macmillan, 1927), pp. 250 ff.
10. Germany, incidentally, had lost her prewar foreign investments, estimated at \$5 billion to \$6 billion: Herbert Feis, *Europe the World’s Banker, 1870–1914* (New Haven, 1930), p. 71.
11. See sec. E, below, and chap. 7, sec. A, below.

12. More about the inventory problem in sec. C, below.
13. See sec. F, below.
14. Information from Mr. Harry Stuart, former head of Halsey Stuart and Co.
15. "Danatbank" was the abbreviation for Darmstädter und National Bank.
16. Hjalmar H. G. Schacht, *My First 76 Years* (London: Allan Wingate, 1955), p. 145.
17. The following reasoning, by a partner of Lee Higginson and Co., about loans to German corporations is an illustration. "Of course here when an industrial company borrows, we expect it to have a very beautiful position of liquid capital. I think in Germany in many cases, while the liquid capital was very much less, they had really substantial amounts of worth that made the loans on the whole very safe." (Quoted by Ilse Mintz, *Deterioration in the Quality of Foreign Bonds Issued in the United States, 1920-1930* [New York: National Bureau of Economic Research, 1951], p. 84.)
18. They were virtually forgotten again by the latter-day "monetarists," who are following the primrose path of the crude quantity theory.
19. Irving Fisher, "The Debt-Deflation Theory of Great Depressions," *Econometrica*, vol. I, no. 4 (1933), pp. 337-357. Fisher failed to recognize that "deposit money" was the monetized portion of the total of outstanding credit. For a popular presentation, see Harry Scherman, *The Promises Men Live By* (New York: Random House, 1938); also H. L. Cooke, *The Role of Debt in the Economy* (Washington, D.C.: Public Affairs Press, 1961).
20. The statistics of debts omit, of course, those of banks and other financial intermediaries, whose debts are offset by their claims.
21. Traditional guide posts to limit the expansion of municipal debts, such as debt-to-property ratios, were frequently ignored. See L. A. Shattuck, Jr., *Municipal Indebtedness* (Baltimore: Johns Hopkins Press, 1940).
22. See Table VI-5.
23. At mid-1929, the total net debt (public and private) was estimated at \$191.1 billion—more than triple the privately held "prime" money supply (cash and bank deposits) of \$61 billion.
24. About the concept of the "money supply," see chap. 8, sec. B, below.
25. See P. W. McCracken, *Cyclical Implications of Wartime Liquid Asset Accumulations* (Ph. D. diss., Harvard University, 1948).
26. See Table VI-7.
27. See W. W. Stewart, *Monetary Policy*, passim.
28. The greatest "sinners," as a group, were the railroads. The share of funded debt in the total (net) capitalization of American railroads amounted in 1930 to 62 per cent, as against 32 per cent in the case of the four largest British railway systems. See Savings Bank Trust, Co., *Railroad Debt Reduction* (New York, 1937). In the crisis, a significant number of American railroads went into receivership.
29. See Kemper Simpson, *The Margin Trader* (New York and London: Harper & Brothers 1938), pp. 108, 155. A. H. Winakor (*Capacity to Pay Current Debts*, University of Illinois Bulletin, October 6, 1936, p. 26) sampled 172 industrial corporations. Result: in 1927, the ratio of current liabilities to total tangible assets was 0.92 per cent in corporations with less than \$5 million assets, against 0.63 and 0.58 per cent in those with assets amounting to \$50 million to \$100 million and over \$100 million, respectively.
30. W. F. Warrington, *The Nature and Extent of Losses to Bondholders in Corporate Reorganization and Liquidation* (Ph.D. diss., University of Pennsylvania, 1936).
31. G. W. Edwards, "Control of the Security-Investment System," *Harvard Business Review*, October 1933. See chap. 9, sec. B, below.
32. A. G. Hart, *Debts and Recovery* (New York: Twentieth Century Fund, 1938), chap. 5.
33. See Table VI-8. Debts maturing within one year are classified as short term.
34. The ratio of farm loans to total loans extended by all banks was 17.3 per cent; it declined

- to 6.4 per cent by 1934, due to the progressive elimination of country banks. The urban institutions kept expanding until late in 1930. See Tables VI-9 and VI-10. On the "quality" of farm loans, see sec. C, below, and chap. 8, sec. A, below.
35. See H. Hoyt, *Hundred Years of Land Values in Chicago* (Chicago: University of Chicago Press, 1933); M. Palyi, *The Chicago Credit Market* (Chicago: University of Chicago Press, 1939), pp. 70 ff.; W. H. Newman, "The Building Industry and Business Cycles," *Journal of Business* (Chicago) July 1935, pt. 2; C. D. Long, *Building Cycles and the Theory of Investment* (Princeton: Princeton University Press, 1940).
  36. S. Gestler, "Construction and Business Cycles," *Survey of Current Business*, October 1946.
  37. U. S. Savings and Loan League, *Fact Book*, 1967, p. 85. See Table VI-10.
  38. Hart, *Debts and Recovery*, pp. 129–130. See sec. E, below, and chap. 7, sec. C, below.
  39. All banks in the United States were closed for three days in March 1933—on governmental order. See chap. 7, sec. C, below.
  40. This was recognized by Benjamin M. Anderson, Jr.—after the event (*Chase Economic Bulletin*, March 16, 1931, p. 7). Yet, the debt inflation is sidestepped in the voluminous opus of Friedman and Schwartz, and by other recent publications of quantity theorists. See chap. 8, sec. C, below.
  41. See Leverett Samuel Lyon, *Hand-To-Mouth Buying: A Study in the Organization, Planning and Stabilization of Trade* (Washington, D.C.: Brookings, 1929). C
  42. U. S., Department of Commerce *Historical Statistics of the United States*, (1960), p. 151. Total corporate inventories remained stationary between 1926 and 1929: *ibid.*, p. 581.
  43. Extracts appeared in the January 1930 issue of the *Journal of Business* (Chicago): the editor commented that the finding were "revolutionary."
  44. See sec. E, below, and chap. 7, sec. A, below.
  45. See J. W. F. Rowe, *Markets and Men: A Study of Artificial Control Schemes in Some Primary Industries* (New York: Macmillan Co., 1936); Robert F. Martin, *International Raw Commodity Price Control* (New York: National Industrial Conference Board, 1937); especially, Melvin T. Copeland, *A Raw Commodity Revolution* (Cambridge, Mass.), March 1938. See also sec. D, below.
  46. Organization of European Economic Cooperation, *Industrial Statistics, 1900–1955* (Paris, 1955), p. 82
  47. *Ibid.*, p. 140.
  48. M. T. Copeland, "The Revolt in Raw Commodities," *New York Sun*, January 7, 1939.
  49. Unknown at the time to the public, a large New York bank was in 1929 "deeply" engaged in financing Cuban sugar inventories.
  50. U. S., Department of Commerce, *Historical Statistics*, p. 285.
  51. E. G. Nourse, "Agriculture," *Recent Economic Changes*, vol. 2 (New York: National Bureau of Economic Research, 1929), p. 565.
  52. Attention is called to the debt-generating impact of technological progress, especially in certain farming districts, as illustrated by the following report.

Another contrast is between the kind of economic development that has taken place in the corn belt, of which Iowa is typical, and that of such states as the Dakotas and Montana, and the western parts of Nebraska and Kansas. The latter area is largely wheat and range country, and the chief characteristic is low-priced land. Nor was the land boomed to the extent that it was in the richer, black-soil territory. The result has been that the investment per farm unit has been far lower than has been the case in Iowa. A quarter-section Iowa farm ten years ago might well have represented an investment of between \$30,000 and \$40,000, exclusive of improvements. It is this situation which has been largely responsible for a demand for credit that exceeded the ability of local banks to satisfy. Insurance companies have extended a large amount in



first mortgages, but besides this the annual operating costs of such high-priced farming units (such as interest, taxes, insurance, and machinery), have been a heavy burden, particularly upon the many small banks. This led to use of several banks by a single borrower, and "cross-lines" developed in which banks usually shared inequitably in the security. In consequence, a depression, especially in land values, is far more severe than upon banks in the other kind of region, where fixed investments are not great, and a good year can easily wipe out the deficits of a poor one. The heavy fixed charges go on, while banks' equities grow thin, to the point where foreclosure is necessary. These overhead items eat into the value of the assets, rendering them not only non-earning, but self-consuming.

(William McKinley Edens, *Causes of Bank Failures*, manuscript completed December 1928 [unpublished], pp. 4-5.)

53. Copeland, *Raw Commodity Revolution*, p. 49.
54. Chicago Board of Trade, *The Twenty-Second Annual Report of the Trade and Commerce of Chicago* (1930), p. 45.
55. Beginning in 1928, nitrogen production grew far ahead of consumption. By 1931, the combined German and Chilean production capacity had been expanded by 4 million tons, as against an annual world consumption of 1.2 million tons; "visible" inventories amounted to 400,000 tons in both Chile and Germany. (*Frankfurter Zeitung*, August 21, 1931.)
56. See sec. D, below.
57. About corners and other speculative maneuvers on the commodity markets, See Franz Pick and Richard Lewinsohn, *Sinn und Unsinn der Börse* (Berlin: Fischer, 1933), chap. 5.
58. Robert T. Patterson's book, *The Great Boom and Panic* (Chicago: Regnery, 1955), barely mentions the commodity side of the story. "Monetary" analysis of boom-and-bust followed the same line; *America's Great Depression* (M. N. Rothbard) was a partial exception. The superficial and politically slanted study of J. K. Galbraith (*The Great Crash* [Boston: Houghton-Mifflin, 1955]) ignores it altogether.
59. Patterson, *Great Boom*, p. 128. The extraordinary intensity of speculation in farm products has been confirmed to this writer by Mr. R. F. Uhlmann, former president of the Chicago Board of Trade. Similar information about speculation in sugar was obtained from Mr. Ody H. Lamborn, of the New York Coffee and Sugar Exchange.
60. This was an index *adjusted to eliminate changes in general price level*: Martin, *Commodity Price Control*, pp. 157 ff.
61. H. C. Taylor and A. D. Taylor, *World Trade in Agricultural Products* (New York: Macmillan Co., 1943), p. 173.
62. For a summary (incomplete) of such explanations, see J. K. Galbraith and J. D. Black, "The Maintenance of Agricultural Production during the Depression: The Explanations Reviewed," *Journal of Political Economy*, June 1938, pp. 305-323. It practically ignores a chief factor: authoritarian interventions.
63. *Midland Bank Review*, August 1966, p. 12. For a succinct presentation of staple market manipulations during the depression, see Martin, *Commodity Price Control*.
64. See Rothbard, *Great Depression*, pp. 203-207; W. W. Peterson, *The Great Farm Problem*. (Chicago: Regnery, 1959), chap. 5; Taylor and Taylor, *World Trade*.
65. Martin, *Commodity Price Control*, pp. 165 ff.
66. For a biased exaltation of the early farm parity movement, see Gilbert C. Fite, *George N. Peek, and the Fight for Farm Parity* (University of Oklahoma Press, 1954).
67. Martin, *Commodity Price Control*, p. 3.
68. Rothbard, *Great Depression*, p. 167.
69. Geneva, 1932, p. 53.
70. See Sec. VI B, above.

71. In J. Schumpeter's penetrating analysis (*Business Cycles*, chap. 14) the entire interwar period was one of a "down-grade-Kondratieff" for commodities.  
 Ibid., p. 693: "... depressions were actually impending or in progress in 1914 and . . . public expenditure turned them into prosperity first and created untenable situations afterward."  
 72. Regarding the failure of monetary and fiscal policies to master the depression, see chap. 8 and chap. 9, sec. B, below.  
 73. See chap. 1 sec. E, above.  
 74. The Belgian, Swedish, and Italian deposit banks followed a similar pattern; those in the Danubian countries were actively engaged in commodity trading.  
 75. See Lüke, *Von der Stabilisierung zur Krise*, pp. 36 ff.; H. G. Schacht, *The Stabilization of the Mark* (London: Allen & Unwin, 1927). As the banks reopened their accounts in terms of the new currency (Reichsmark), they posted fictitious values. This overcapitalization boomeranged in the depression.  
 76. *Untersuchungsausschuss für das Bankwesen*, 1933 (quoted in the text as *Bank Enquête*) vol. I (Berlin, 1935), p. 562. See also Nordhoff, "Über die Liquiditätsfrage," *ibid.*, pp. 475 ff.

#### LIQUIDITY OF BIG GERMAN BANKS

a) Cash-to-deposits ratio:

End of	1895	14.6%
	1900	12.5%
	1905	9.5%
	1908	7.8%
	1913	7.4%
4/30	1929	2.2%
8/3	1930	1.7%
End of	1932	3.5%

b) Asset liquidity: "liquid" assets (eligible for rediscount) to deposits:

	1905	53.6%
	1908	53.0%
	1913	50.7%
	1932	30.3%

77. See Mogenet, *Un Siècle d' Economie Francaise*, p. 155.  
 78. For Goldschmidt's testimony, see *Minutes of Evidence*, (Macmillan Report), vol. 2, pp. 147 ff.; see also *Frankfurter Zeitung*, August 7, 1931.  
 79. See O. Seitz, *Barliquidität der Kreditbanken*, (Ph. D. diss., University of Jena, 1936); Erich Schneider, *Die Liquidität der Berliner Grossbanken in den Jahren 1928 bis 1932* (Ph. D. diss., University of Rostock, 1934).  
 80. The Big Five were the Disconto Gesellschaft, Berliner Handelsgesellschaft, Deutsche Bank, Dresdner Bank, and Darmstädter und National bank. See H. P. Willis and H. Beckhart, *Foreign Banking Systems* (New York: Holt, 1929), pp. 712–720.  
 81. See chap. 5, sec. C, above.  
 82. See Lüke, *Von der Stabilisierung zur Krise*, pp. 235–238. The bankers' committee would scarcely have dared to proceed without Schacht's consent, as Dr. Mosler, a director of the Disconto Gesellschaft, told this writer. Dr. Mosler was the intermediary between the committee and the Reichsbank. The charge against Schacht has also been raised by Jacob Goldschmidt, Professor H. Rittershausen, and others.  
 83. Eastern European banking systems operated largely on a similar expansionary pattern, only more so. In Austria, Hungary, Italy, and Poland (also in Sweden), banks were readily

- responding to an “insatiable” demand for credit—using short-term funds, borrowed to a large extent abroad.
84. As pointed out by Georg Bernhard, an outstanding German journalist: “Die Liquiditätsstörungen und die Krise . . .,” *Archiv für Sozialwissenschaft und Sozialpolitik*, May 1932, pp. 314–339.
  85. They usually deal in government securities and often provide mortgages.
  86. Lüke, *Von der Stabilisierung zur Krise*, p. 325.
  87. Mintz, *Quality of Foreign Bonds*, p. 77.
  88. Philipp Weiss, its chief officer, was considered one of the ablest continental bankers.
  89. See chap. 7, sec. A, below. About the liquidity, or relative illiquidity, of Britain’s commercial banks, see chap. 7, sec. B, below.
  90. See Table VI-13.
  91. See sec. B, above.
  92. See chap. 8, sec. A, below.
  93. See chap. 7, sec. D, below.
  94. An enlightening survey of how the diverse national banking systems fared in the crisis appeared in the *Frankfurter Zeitung*, June 11, 1933. See Brown, *International Gold Standard*, chaps. 22, 25, 26, 27.
  95. League of Nations, *World Economic Survey, 1931–1932* (Geneva, 1932), pp. 214–215.
  96. League of Nations, *Monetary Review* (Geneva, 1939), p. 83.
  97. See chap. 8, sec. A, below.
  98. The total value of all shares *listed* on the New York Stock Exchange rose from \$27 billion on December 1, 1924, to \$89.5 billion on September 1, 1929. (In 1929, the yield of all regularly traded common stocks fell to 74 per cent of the yield of high grade corporation bonds.) The volume of new issues rose from \$4.1 billion in 1922 to \$10.2 billion in 1929.
  99. Typical of “sensationalized” literature was Galbraith’s *Great Crash*. For a sober assessment, see Patterson, *Great Boom*; for a highly dramatized presentation, Robert Sobel, *The Great Bull Market* (New York: Norton, 1968). John Brooks’ *Once in Golconda: A True Drama of Wall Street* (New York: Harper & Row, 1969) is an informative but anecdotal chronicle.
  100. U.S. Senate, Committee on Banking and Currency, *Stock Exchange Practices*, 73rd Cong. (1933–1934). A short resume of these hearings was published by the Committee’s “special” and publicity-conscious counsel: Ferdinand Pecora, *Wall Street under Oath* (New York: Simon & Schuster, 1939).
  101. Lately, Kreuger’s brother has undertaken to rehabilitate Ivar’s honor, putting the blame for the fantastic losses the investors suffered on the (Swedish) “bankers.” See Torsten Kreuger, *The Truth about Ivar Kreuger* (Stuttgart-Degerlock: Seewald Verlag, 1968). Robert Shaplen, *Kreuger, Genius and Swindler* (London: André Deutsch, 1961), has pointed out the near-incredible credulity of outstanding American, Swedish, and other bankers.
  102. Not every manipulation that has been condemned after the event was necessarily “wicked.” “Inside trading,” as an example, *could* also serve the interests of the average stockholder. See Henry G. Mann, *Insider Trading and the Stock Market* (New York: Free Press, 1966).
  103. As one example for many, Colonel Leonard F. Ayres, economist of the Cleveland Trust, may be quoted (*The New York Times*, July 15, 1929): “This general feeling of confidence is based in part upon the prevailing high levels of activity in most lines of business and in part on the advances in stock prices during the last month. A third reason for the present hopeful state of business attitude is the conclusion generally reached by businessmen, bankers, and speculators, that the *Federal Reserve authorities have definitely accepted defeat* in their long struggle to regain control over the credit situation.” In this context, an anecdote



told by Colonel Ayres deserves to be recorded. In 1927, at a solemn dinner in Paris celebrating the tenth anniversary of America's entrance in the war, the Colonel was seated next to the General of the Armies, John J. Pershing. The sober silence at the party was suddenly interrupted by the General's leaning over to Ayres and whispering to him: "How far do you think General Motors can rise?"

Professor Irving Fisher assured himself a place among the immortals by his statement, issued in October 1929: "Stock prices have reached what looks like a permanently high plateau."

104. See chap. 5, sec. B, above.

105. See chap. 8, sec. C, below. Charles Mitchell, of the New York National City Bank, publicly challenged the Federal Reserve by announcing his readiness to lend to speculators' funds borrowed from the central bank—against the latter's advice.

106. See A. Bury, *The Idea of Progress* (New York: Dora Publications, 1955).

107. Robert Strausz-Hupé, "Social Values and Politics: The Uninvited Guests," *Review of Politics*, January 1968, p. 60.

108. Donald L. Kemmerer, "The Changing Pattern of American Economic Development," *Journal of Economic History*, December 1956, p. 585. For a splendid summary of the period's technological progress, Schumpeter, *Business Cycles*, pp. 753 ff., is to be consulted.

109. U.S., Department of Commerce, *Historical Statistics*, p. 507.

110. A personal note to me, dated April 26, 1969, by Professor Donald L. Kemmerer (University of Illinois).

111. See chap. 2, sec. B, above; Rothbard (*Great Depression*, chap. 22) gives a good summary of this type of utopian literature. See B. M. Anderson, Jr., in *Chase Economic Bulletin*, May 8, 1929.

112. See sec. B, above.

113. See chap. 8, sec. A, below.

114. See Simpson, *Margin Trader*, pp. 94 ff.; M. Palyi, "Economic Significance of Bank Loans for Stock Market Transactions," *Journal of Business* (Chicago), January 1932.

115. Actually, the stock market boom may well have been responsible for industrial misallocations by stimulating investment in "glamorous" enterprises without due regard to prospective profits.

116. The American cyclical indicators turned to "recession" in the fourth quarter of 1929, a full year behind their German and British counterparts; C. T. Schmidt, *German Business Cycles, 1924–33* (New York: National Bureau of Economic Research, 1934), pp. 250–254. See W. C. Mitchell, *Business Cycles and Their Causes* (University of California Press, 1941).

117. See sec. C, above.

118. See chap. 8, sec. A and sec. B, below.

*The Crisis, 1931–1933***Introduction**

FOR MORE THAN a decade, the Western powers, creditors and debtors alike, had tried to overcome the periodically threatening crises through a variety of half-measures which usually included an additional expansion of credit. In the naïve hope that these steps would eventually restore the economic equilibrium within the various countries and throughout the world, the authorities had avoided drastic measures, which seemed politically impossible at the time, or at least inexpedient, since the great mass of the people did not understand the grave dangers involved.

It is thus not surprising that the leaders on both sides of the Atlantic failed—and often failed miserably—to rise to the situation, once the great crisis developed after the onset of the depression. Whether it was folly, ignorance, incompetence, or just taking the easy way out, the long-drawn-out crisis, which started with the failure of the Austrian Kredit-Anstalt in May 1931 and ended two years later with the willful debasement of the dollar in 1933, could have been greatly moderated, if the leaders of the time had shown more courage and wisdom. To this day, the world is suffering from the failure of true leadership during those critical years.

Even after the collapse of the New York stock market in 1929 and the rising number of defaults of the raw-material-producing coun-

tries during 1930, the acute crisis of 1931–1933—in theory at least—could largely have been avoided through proper cooperation within the countries and internationally.

The excessive flow of credits into Germany; the poor use of a major portion of these funds; the illiquidity of the German banking system; the collapse of the artificially maintained commodity price structure; the tremendous credit inflation in the United States, followed by an equally drastic deflation; the chronic deficit spending in Germany and in Britain—all these factors, and many more, help to explain the collapse of the international monetary system between 1931 and 1933.

In the end, it was the shortsightedness and the failure of nerve of leading political figures, and in some instances an utter lack of economic sophistication—the inability of the people to grasp the seriousness of the situation—that were fatal. A minor but yet important aspect was the unfortunate, almost stupid, timing of a number of official documents and pronouncements, which produced a panic and brought about “the end of an age.” (G. C. Wiegand)

### **A. The Central European Crisis**

Not surprisingly, the first countries to suspend the convertibility of their currencies were raw material exporters, especially those of already dubious credit standing. Argentina “went off” in 1929, as did also Peru and Uruguay. And in 1930 Australia and then New Zealand had to take the same step as wheat, wool, and metal prices went tumbling.<sup>1</sup> British credit to a heavily indebted Australia almost dried up with the onset of the depression. The Commonwealth as well as the Provinces had taken undue advantage of London’s credit facilities during the boom. With wool sales declining in price and volume, and the City’s lending propensity abating, a currency based on borrowed reserves and burdened by an overextended domestic credit structure could not stand the strain unless it accepted a very severe deflation. Instead, wages were being held artificially high, further impairing the country’s export capability and prolonging the financial agony.

The difficulties of remote raw commodity producers, however, did not disconcert London. The City was accustomed to their recurrent departure from the gold standard, whenever their exports collapsed.



Given their rich natural resources, the problems were considered temporary and “peripheral.” By contrast, the financial convulsions of Austria, a nation of much less commercial importance, meant a great deal. “This, I think, is it,” exclaimed Harry Siepmann, one of Norman’s closest associates, on May 11, 1931, when the message of the Austrian Kredit-Anstalt crash reached London.<sup>2</sup> This crash presaged the breakdown of the entire European credit system. Austria, a highly industrialized country, had been the first war victim to be “stabilized” and thus had become the ward, as it were, of the Bank of England.<sup>3</sup> Montagu Norman, an “aesthete” at heart, was impressed by her beautiful mountains, classical music, and superb cooking; above all, he had deep sympathies for a small, amputated nation that fared worse by the peace treaties than any other. He apparently overlooked that this nation, burdened with intergovernmental debts, was stuck in a rut, both politically and financially.

The Kredit-Anstalt, badly weakened after absorbing two illiquid competitors, had become by far the largest commercial bank of Austria, the one on which 70 per cent of the country’s major industrial enterprises depended. A showpiece of the Viennese Rothschilds, it was the leading financial institution of the Danubian area, in which it had lent liberally. Indirectly, it had a controlling interest in the largest bank of Budapest, the Hungarian General Credit Bank, which promptly declared itself insolvent too.<sup>4</sup> It had lost 45 per cent of its deposits, all to foreigners. Both failures had something to do with the commodity situation, and everything with illiquid industrial assets. The Vienna bank was bailed out, partly, by Baron Alphonse von Rothschild, who contributed 7.5 million schillings in shares, plus 22.5 million more in cash; the government put in 100 million schillings and the Austrian National Bank, another 30 million. The latter, in turn, received a \$14 million credit from eleven central banks and a very modest loan from the Bank of England, which was renewable from week to week.

But the damage had been done; the “creeping” run on the German banks now broke into the open. Truly effective central bank action in favor of either Austria or of Germany had been canceled out by mismanaged diplomacy. Almost two months before the Kredit-Anstalt crisis, the German Foreign Office had announced a customs union with Austria—the Great Powers were not even notified in advance—which especially antagonized France and Italy.<sup>5</sup> Worried

Frenchmen pulled some of their capital home. At first Austria kept the Kredit-Anstalt “floating,” but soon she adopted a policy foreshadowing the German “solution,” namely, freezing all foreign (private) claims and supporting either directly or indirectly the insolvent banks, a pattern to be followed in numerous other debtor countries.

Germany had been losing gold since mid-1930, due to the flight from the mark by foreign and, to a lesser extent, domestic capitalists.<sup>6</sup> French, Dutch, and Swiss banks, especially, had been “running out.” Yet, remarkably, even the publications of the balance sheets for 1930 did not spark the panic the Berlin bankers had feared it might. For the first time, the big banks reported heavy losses on their security underwritings, the unsold residuals of syndicated corporate security and mortgage bond issues, which had gone awry.<sup>7</sup> Even these figures were window-dressed, and very substantial losses on loans were kept out of sight with the aid of “hidden reserves” (*Stille Reserven*). Although dividends were cut or omitted, confidence in the German banks as well as in the mark did not evaporate until the Vienna crisis.

Following this event, a double-pronged capital flight got under way, the German public hoarding both foreign and domestic currency, and foreign depositors converting their mark balances. By June 25, the Danatbank, Berlin’s second largest, had to inform the authorities that it too was insolvent, having lost 250 million marks, the quadruple of its own capital, in the Lahusen (Nordwolle and Ultramarine) concern, the country’s largest cotton-processing “conglomerate.” It was a foregone conclusion before the end of the second week of July that on Monday, July 13, the “bastion” of Jacob Goldschmidt would not reopen, but by that time another big bank, the Commerzbank, had to report that its portfolio of eligible paper was exhausted, and it would not be able to repay its maturing debt to the Reichsbank.

Total confusion reigned on Sunday, July 12. As the exhausted bankers went home at 10:30 P.M., they had no idea what would happen the next morning. The Reichsbank had withdrawn into its impenetrable shell. The government and the “high bureaucracy” kept vigil, but had no advance plans either, that is, beyond closing the Danatbank.

When the banks opened the next morning, one after the other had to close, beginning with the Danatbank. The internal run was in full swing. Frightened depositors besieged deposit-carrying institutions,

including 3,000 municipal savings banks and their provincial "giro-centers."<sup>8</sup> Exceptions were one large bank, the Berliner Handelsgesellschaft, two smaller joint-stock banks in Bavaria, and all but a few private banks. In general the private banks carried no major amounts of foreign deposits and their assets were not frozen. After a three-week bank holiday, during which payments to domestic depositors were gradually resumed, the domestic panic subsided. Ultimately, the defaulting banks were recapitalized by the government, and merged, but Brüning refrained from nationalizing them, as Mussolini had in Italy.

TABLE VII-1  
Total Savings Deposits in Sparkassen (Savings Banks) at End of  
Year, 1925-1932  
(millions of Reichsmarks)

1925	1,629
1926	3,091
1927	4,665
1928	6,990
1929	9,016
1930	10,400
1931	9,722
1932	9,917

SOURCE: *Statistisches Jahrbuch*, 1928-1932, passim; Institut für Konjunkturforschung, *Vierteljahrshefte zur Konjunkturforschung*, 1926-1933, passim. See also Carl T. Schmidt, *German Business Cycles*, p. 79.

The three weeks before the debacle were filled with tumultuous debates between leading bankers, responsible officials, and the less responsible but more vocal pressure group lobbies,<sup>9</sup> while uniformed Nazis and Communists battled on the streets. Under such circumstances, foreign credit was unavailable. The Hoover moratorium of June 20 brought no appreciable relief; foreign creditors, not reparations, were at the root of the problem.<sup>10</sup> Reichsbank President Luther made spectacular efforts to convince the British, French, and Ameri-



can public authorities that by stepping in with unlimited (!) credit, they could collectively save the financial edifice of the entire Western world, and of course the Weimar Republic, but without result. A short-term loan of \$100 million from four central banks was all he could gather, with the Bank of France contributing \$25 million. But this loan, together with the suspension of reparations, prevented the worst, the complete breakdown of Germany's credit apparatus, which disappointed Dr. Goebbels, Hitler's spokesman, who had hopefully anticipated chaos and an early take-over of the government. Yet there was no genuine cooperation in Germany between the banks, the central bank and the government. The banks had nothing constructive to suggest, but refused to underwrite the liabilities of the Danatbank, and all concerned were opposed to a unilateral moratorium.<sup>11</sup>

No matter what internal efforts were made toward a solution, without decisive financial support from abroad, the danger of a political catastrophe was obvious. The terrible danger involved in the cumulative effect of the German credit system's breakdown was foreseen by Chancellor Brüning and Dr. Luther. It was clear to them, apparently, that once Germany's international credit was gone, one of the few remaining barriers against Hitler's take-over would be eliminated. Brüning and his collaborators displayed extraordinary stamina in the midst of the crisis. But under the circumstances it was "naïve" to expect foreign support. The Bank of England was the logical place to which to turn; but Norman was stymied by growing pressure on the weak pound. Governor George L. Harrison of the New York Federal Reserve, Strong's successor since September 1928, flatly refused to intervene. He advised the Germans to stop their own flight from the mark.

The problem was beyond the scope of the central banks; the political leaders had to take over. France, her gold reserves rising, was the "key country." Premier Pierre Laval firmly and sincerely advocated Franco-German rapprochement,<sup>12</sup> and offered a credit of \$1 billion, but at a political price, German concessions, particularly in the matter of armaments and the customs union with Austria. That was out of the question. Lacking a parliamentary majority, Brüning could not last twenty-four hours at the helm without the support of President Hindenburg and the military clique who considered rear-

mament their *conditio sine qua non* for restraining Hitler's ambitions.

Yet Germany did manage to bring the crisis under control. The acute run was overcome by closing the credit institutions; the Reichsbank stopped converting marks into gold. The system of compulsory "exchange barbed wires" with its bureaucratic trappings was evolved piecemeal, beginning with an emergency decree of July 15, 1931. No one seems to have realized where it would lead. The freedom of German residents to buy and spend was thoroughly curtailed. The major—foreign—creditor banks had no alternative but to leave their short-term funds in Germany. Subsequently arrangements were made by annually renewed "Standstill Agreements" for servicing and amortizing these claims. Thereafter, Germany serviced her long-term foreign debt with the aid of "Schachtian" commercial policies, until September 1939.

These sophisticated substitutes for the old-fashioned general moratorium, primarily applied to external obligations, were the last resort of an insolvent nation. In effect, although not in name, Germany had forcibly "funded" her short-term debt to foreigners. A moratorium of some sort would have been unavoidable, even if it had been possible to pour a billion dollars into the German barrel. It was an almost "bottomless" barrel. As late as September 30, 1932, after nearly two years of massive capital withdrawals, Germany's debt to foreigners—by that time fully registered—amounted to 10,181 million marks on long-term account, and 9,347 million on short-term, a total foreign debt, in dollars, of about 5 billion.<sup>13</sup> The Reichsbank's gold and foreign exchange reserve had shrunk to a paltry \$300 million; and the country's international credit had been dissipated. Instead of blaming themselves for their own limitless confidence in Germany, the disappointed foreign creditors quickly convinced themselves that Germany was the culprit. But the leading foreign bankers could no longer ignore the foreseeable international repercussions and were more than willing to "stand still" as long as the domestic owners of marks were forced to do the same. Both creditors and debtors clung to the conviction that somehow the crisis would blow over in the reasonably near future. That was the wishful conviction, especially, of the German authorities and was one reason for their *not* devaluing the mark.

Throughout the crisis, until convertibility had been suspended,

TABLE VII-2  
German Long-Term Foreign Indebtedness, by Type of Debtor, September 1932  
(millions of marks)

	Public utilities	Banks	Industry, trade, transportation, agriculture	Other debtors	Total
Total Long-Term Debts:	3,601	1,405	4,701	474	10,181
Creditors:					
Commercial Banks	140	216	810	68	1,234
Investment Banks	23	54	414	178	669
Trade and Industry	0	11	174	18	203
Other creditors (incl. loans)	3,438	1,124	3,303	210	8,075
Creditor Countries:					
United States	1,489	984	2,578	67	5,118
Great Britain	513	84	456	7	1,060
France	429	19	13	4	465
Netherlands	721	171	842	134	1,868
Switzerland	238	106	648	105	1,096
Belgium	36	7	16	4	63
Italy	41	0	37	5	83
Sweden	133	18	7	3	161
Other countries	1	16	104	146	267
Debt Classes:					
Loans	3,433	1,113	3,157	131	7,834
Mortgages and real estate debts	12	23	342	126	503
Other Debts:					
To banks	132	199	663	26	1,020
To non-banks	24	70	539	191	824

SOURCE: *Wirtschaft und Statistik* (Berlin: Statistische Reichsamt, May 1933).

Dr. Luther, unwaveringly supported by Brüning, played the gold standard "game" according to its classic rules. He made no concessions to the noisy demands for disregarding the legal (40 per cent) gold reserve requirement for the Reichsbank's note liabilities. He made no exception even in favor of the Reich or other public bodies which were overindebted, deficit-ridden, and just as illiquid as the banks.<sup>14</sup> The Reichsbank had raised its rediscount rate to 10 per cent and the rate on collateral loans to 15 per cent, the pressure coming from "financial editors" and from Professor W. Röpke, as Luther noted with sarcasm in his memoirs, but to no avail.<sup>15</sup> Imposing an



TABLE VII-3  
German Short-Term Foreign Indebtedness, by Type of Debtor, September 1932  
(millions of marks)

	Banks	Reichsbank	Industry, trade, transportation, agriculture	Public utilities	Other debtors	Total
Total Short-Term Debts:	3,861	814	3,745	622	305	9,347
Creditors:						
Commercial banks	3,342	814	1,656	535	95	6,442
Finance companies	118	—	355	4	47	524
Trade and industry	109	—	1,405	2	47	1,563
Other creditors	292	—	329	81	116	818
Creditor Countries:						
United States	1,592	190	640	443	33	2,896
Great Britain	661	—	423	62	25	1,171
France	239	—	134	18	8	399
Netherlands	373	—	1,081	27	78	1,559
Switzerland	613	—	859	55	84	1,611
Belgium	34	—	89	1	4	128
Italy	17	—	39	2	6	64
Czechoslovakia	54	—	68	2	5	129
Denmark	18	—	27	—	5	50
Sweden	35	—	48	12	7	102
Other countries	225	—	337	0	50	612
B.I.S.	—	624	—	—	—	624
Debt Classes:						
Foreign Trade (Rembourse) credits and other bank accounts	2,118	—	429	—	0	2,547
Bank debts arising from goods deliveries	0	—	919	0	3	922
Acceptances and I.O.U.A.	12	—	101	39	1	153
Loans	31	—	95	78	6	210
Mortgages and real estate debts	10	—	182	3	67	262
Other Debts	1,690	814	2,019	502	228	5,253

SOURCE: *Wirtschaft und Statistik*, (Berlin: Statistische Reichsamt, May 1933).

extraordinary cost on borrowing was a useless gesture. High rates are effective in a panic only when the credit of the central bank or of the government is *not* impaired. In the German situation, a truly "fundamental disequilibrium" existed. *No Confidence!* No creditor could be attracted by 15 per cent when there was a strong chance that 100

per cent of his money might be “frozen.”<sup>16</sup> To say that the previous years’ neglect of elementary liquidity rules “boomeranged,” is to state a fact which implies no “moralization,” although it may be difficult to avoid drawing inferences of an ethical nature.

Ever since the onset of the crisis in 1931, Brüning and Luther had been the favorite targets of disparaging criticism, as President Hoover was in the United States and Montagu Norman was everywhere. The “failure” to devalue the mark was the chief objection to Luther’s policies, an objection that missed the essential points. Since the German external debt was contracted in foreign currencies, neither their capital value nor their burden would have been lightened by a mark devaluation. The annual service charges reached over \$300 million in 1931.<sup>17</sup> Nor would devaluation have benefited the insolvent banks. The government had bailed them out by means of forced mergers, official guarantees, recapitalizations, and subsidies after weeks of tortuous deliberation. They were protected against foreign capital withdrawals by the *de facto* external moratorium. Above all, it was absolutely mandatory to hold the mark at its parity in order to maintain domestic confidence in the currency in an inflation-conscious country like Germany, where runaway inflation was considered by the public the logical sequence to abandoning gold parity.

In the midst of a world-wide decline of trade, production, and prices, the Reichsbank held, until July 1931, the reins of its money supply tighter than did any other central bank. The Brüning regime deflated the budget, except the military, cut interest rates on existing long-term credit contracts, annulled cartelized prices, restrained the social security and welfare organisms, thus enforcing public and private economies in almost every possible way.<sup>18</sup> It took political courage of the highest order to antagonize all pressure groups and to incur the wrath of economics professors and financial analysts. It was unmistakable to the responsible statesmen that these policies were “driving the water over the mills” of the extremists, yet they had to risk that in order to avoid creating an inflation panic. Also, it was the overwhelming national consensus that in the face of falling wages and profits, “distributive justice” called for equivalent reductions in bureaucrats’ salaries, old-age pensions, and other welfare benefits—in short, a near-universal deflation.

As mentioned before, the *de facto* external moratorium and its

coorelative, the foreign exchange control—which soon would widen into all-round trade restrictions—were thought of as mere emergency measures. They would be removed as soon as fresh foreign credit became available. For this prospect, there was a sort of precedent: the capital flow from America seemed about to revive in the first half of 1930, when the \$300 million Young loan was successfully placed, albeit at a discount. Could it not revive again? This was the wishful expectation. To restore international credit-worthiness the budget had to be balanced and the valetudinarian “flowers” that had appeared during the boom weeded out. And a cruel deflation was mandatory to restore Germany’s credit for still another reason. Reparations had only been postponed by the Hoover moratorium, not terminated; and the postponement, ratified by the Franco-American agreement in the night of July 6–7, was not assured until then. In order to have a “moral” base for appealing for an Allied understanding of Germany’s problems, it was necessary to convince the world that these problems were not, as the budget deficits of the 1920’s had been, deliberately contrived by a welfarist regime to sabotage the political debt. Luther emphasized that Germany’s “honest” willingness to fulfill her political obligations had to be proved. The proof lay in Brüning’s policies, and in the end, reparations were postponed *sine die* at the Lausanne conference of August 1932.

But by that time, Brüning had been dismissed—an irony of history—largely because his plans for agrarian reforms in East Elbian Prussia had antagonized the *Junkers* who were Hindenburg’s closest advisors.

Something else was proven by Brüning’s deflationary policy, which is also ironic: Germany’s “ability to pay.” As a result of the deflationary pressure from 1930 on, Germany’s balance of trade produced surpluses that would have been adequate to permit the transfer of funds in excess of the annual reparation installments.

True, import restrictions were at first more effective than increased exports; but the latter had to overcome the import barriers of the outer world. This demonstrated the fallacy of the Keynesian contention that a “poor” debtor country could not be “forced” to produce a substantial export surplus.<sup>19</sup> The trade surplus amounted to \$391.6 million in 1930 and to \$670.9 million in 1931. In the latter year there was a surplus of \$265.5 million in current account, *after* reparations



and interest on the debt to foreigners. The trade balance declined in 1932 when the deflationary pressure abated, still leaving a small surplus on current account. This surplus widened again in the following years and was maintained thereafter partly with the aid of Schacht's—and Minister of Commerce Funk's—novel techniques in the art of “beggaring your neighbor.”<sup>20</sup>

Germany's financial catastrophe was due to the fact that the economy became almost completely illiquid. The short-term liabilities of all credit institutions totaled RM 14.7 billion in 1925 and RM 40 billion at the end of 1930. The bank assets were largely immobilized. The savings banks accounted for the lion's share in this rapid growth of the total bank liabilities, which had almost tripled in four years. The commercial banks straggled far behind; from RM 7.6 billion in 1913, their deposit volume rose to RM 11.4 billion in 1929, with the amount due to foreign banks increasing from 26.6 per cent in 1925 to 48.7 per cent in 1929 and declining to 44.4 per cent in 1930. Roughly one half of all commercial bank deposits consisted of balances belonging to foreign bankers who considered them absolutely liquid and part of their “secondary” reserves.<sup>21</sup>

It would be difficult to find a situation of such illiquidity of a whole financial system as that of Germany on July 13, 1931. Austria, Poland, and other overindebted Eastern countries were not far behind, but these countries between them represented only a fraction of the volume of “frozen” credits that had piled up in Germany. The financial irresponsibility of the Weimar Republic, using money borrowed abroad to boost living standards at home through public and private expenditures, despite the reparation requirements, left the country without adequate reserves.<sup>22</sup> What made the situation appear hopeless and any ultimate rescue action from abroad seem very difficult, was the inability of the nation to put its over-all financial house in order in a reasonably short time.<sup>23</sup>

The catastrophic consequences of the German financial debacle are well known. The world-wide depression deepened severely; international confidence in currencies and banking systems was shaken. The onslaught on sterling was an immediate consequence, and the politicians knew it was coming. They were also aware of the fact that Germany, once relieved of reparations, could take care of her foreign, nonpolitical, debts in an orderly fashion, assuming that Germans had not lost confidence in their own currency. In retrospect,

it seems almost incredible that no attempt was made to save the situation by offering Germany a *stand-by* credit of \$1 billion to \$2 billion dollars. But the problem was not one that dollars alone could resolve. It was a political problem of the first order.

Keynes and others had succeeded in convincing the British and American public that the Versailles Treaty was not only wrong, but was untenable. As British and American public opinion swung to Germany's side, German determination to scrap the Treaty unilaterally hardened. All German parties agreed on that; they differed only in the method they advocated: peacefully, or otherwise.

Ultimately the peace as laid down could only be maintained if all the Allies supported it. But some of the Allies, principally Britain and the United States, did not do this, and it was largely their irresponsibility which left France in a state of nervous anxiety and exposed Germany to delusions of potential grandeur.

We now have the evidence of the German documents, which reveal a government seeking single-mindedly to reverse an existing order. Yet the Allies had evidence then, too—in the attachés' report, in the speeches in the Reichstag, in the German press. It was not that there was an absence of evidence, but rather that there was a failure to perceive its importance.<sup>24</sup>

With the United States staying on the sidelines, France was the key country, financially still untouched by the depression. She was apparently willing to pay a high price in money terms to save the peace. But no German party was willing to bargain away the nation's right to maintain its largely treaty-violating war preparations and to carry on the psychological warfare against the Versailles terms. No economic hardship was capable of inducing Hindenburg and the other generals to come to terms with France on her terms. They were determined, and so were a large number of their fellow countrymen, to restore, at whatever economic and financial cost, Germany's pre-war geographic and power status, and ultimately to take revenge for the real and alleged humiliations she had suffered.

The "deflation" carried out until late July 1931 by Brüning and Luther has been blamed for Hitler's rise to power. This is one of the most pernicious myths which has grown out of the interwar monetary and political confusion. Professor Alexander Gerschenkron of Harvard has written:

I have come to understand that neither received opinion nor fear of runaway inflation can be seen as the strategic factor determining the complex of policies which filled what probably has been the most dramatic chapter of modern economic history, its contents demolishing all our artificial boundaries between disciplines and becoming an integral part of general history—not of Germany, but the world. For there is little doubt that those policies opened the door of the Chancellery of the Reich to Adolf Hitler and must be regarded as the primary, and not so very remote, cause of the second World War.<sup>25</sup>

Nothing could be further from the truth than the statement that the German “deflation” of 1930–1931 had been the “complex of policies” which opened the door of the Chancellery of the Reich to Adolf Hitler. What “complex of policies” is meant? The global depression was an Act-of-God rather than a complex of German policies. Brüning and Luther cannot be made responsible for the world-wide fall of prices, for the reparations and the pre-1930 credit policies of the Reich and of Schacht. Was he referring to the policy of reducing wages and salaries of government employees? Most economists agree that “sticky” wages and prices were the depression’s major aggravating circumstances. In fact, eliminating such obstacles to cost adaptation was helpful in sparking Germany’s boom in the late 1930’s. Some of Brüning’s policies were actually *inflationary*, such as the forced reduction of contractual interest rates, the food-price-boosting agricultural tariff—raised in April 1931—and subsidies; also some relief measures such as the public works.

Professor Gerschenkron has fallen victim to the ingenious anti-Weimar propaganda which makes Brüning responsible for Hitler’s rise to power. The statement to the effect that there was no inflation fear in Germany during the 1931 crisis is contrary to all known facts. Since 1923, the fear of currency depreciation was deeply ingrained in the German mind. During the crisis, a Saver’s League was formed which numbered millions of members.<sup>26</sup> Actually the impact of Brüning’s deflationary policies was soon moderated, for as early as the end of August 1931, the Reichsbank relented on its credit restraints when the domestic panic was over. From then on, credit expansion was the official policy, especially in favor of big industrial units which were under liquidity strains. The official discount rate was gradually reduced from 15 per cent in early August to 4 per cent in late September 1932. Moreover, it seems ill-advised to ignore certain



relevant political facts. Hitler had lost the November 1932 presidential election; his party was bankrupt with heavy liabilities, and his private armies, the brown shirts and black shirts, with no money in the till, were on the verge of dissolution.

By late 1932, Germany's domestic situation, protected by foreign exchange and trade controls, had appreciably improved. Imports declined substantially, exports rose somewhat, and with the actual termination of reparations, capital could no longer be withdrawn. But in late 1932 the Chancellor, General Schleicher, made the tactical mistake of turning to the "left," thereby incurring the animosity of the arch-Conservatives, Hindenburg's closest friends. They persuaded the overaged President to replace General Schleicher on January 30, 1933, with a "conservative," anti-labor coalition headed by Hitler.<sup>27</sup>

### **B. Britain in the Pillory**

The acute panic that brought the pound sterling to its knees did not directly affect the British deposit banks. One London merchant banker, a minor one, got into serious trouble, having been deeply involved in a Hamburg firm, but the difficulty was straightened out by the Bank of England. The resilience of the British credit apparatus, and the "discipline" of the British public, were remarkable. While Germany was exposed simultaneously to an external and an internal run, in Britain there was not even an anxious moment for the City so far as the domestic credit picture was concerned. This was due, primarily, to the Bank of England's pervasive influence, which had no parallel elsewhere, least of all in the United States. It was an influence which could be effective only on such a perfectly organized and self-disciplined money market as that of the City. From the outset of Norman's regime as a vice-governor in 1918 he sought to maintain relatively high liquidity standards. About 40 per cent of the assets of the commercial banks consisted of cash and short-term Treasury paper that was readily marketable within sterling's geographic range. Norman "would give all the help he could to financing the movement of goods but . . . not to be extended to bills continually renewed," and would "discriminate against finance bills."<sup>28</sup> The "advances," however, of the London banks to domestic industry were to a substantial extent frozen. And the overindebtedness of the Trea-

sury, the greatest debtor, was one reason for foreign creditors' doubts about sterling's solvency.<sup>29</sup>

An important feature of the British banking system was the concentration of the short-term domestic credit business in ten clearing banks, largely in the Big Five banks' branch systems. This was in contrast to unit banking in the United States and to the German system where thousands of savings banks competed with commercial institutions on the short-term money market. In the United Kingdom, financial weakness in one or another sector, industrial or regional, did not too seriously affect the liquidity and solvency of a large bank with a nation-wide radius. Yet, as Norman candidly told Moreau on May 27, 1927, "54 per cent of all disponibilities [earning assets] of the banks are immobilized in advances to industrial firms which can't do without them."<sup>30</sup> The Bank of England's discount policy was frustrated under such conditions, as was also the potential of London's Big Five banks to borrow abroad during the acute crisis.

In this context, Sir Henry Clay's analysis of the Lancashire spinning industry's problems, and of the banks' involvement in it, throws a spotlight, also, on the industrial conditions which affected Britain's balance of payments, and on the lasting ill-effects of the price inflation and trade distortion due to the war.

The organization of the industry in Lancashire, mainly in firms specialized to a single process—spinning, weaving or finishing—which were co-ordinated by middlemen, . . . gave all the economies of mass-production so long as the total volume of output was maintained, but became uneconomical when the volume fell to a level at which full employment of machinery and operatives was not possible, and, moreover, was *not readily adaptable to changes in volume, type of product and direction of export*. The impact of the decline was concentrated on the spinning section . . . because [of] . . . a peculiar financial disability. The trade was conducted mainly by joint-stock companies; the capital for these was raised largely on loan, and the deferred ordinary shares were usually only partly paid up; so that trade depression would lead to calls on ordinary shareholders, who were usually local investors, largely engaged in the industry, to meet losses. During the short post-war restocking boom, spinning prices unfortunately had been forced up to unprecedented heights, with corresponding profits. On the basis of these profits, a *speculative re-financing boom developed*. Mill companies were bought up, at prices that gave the previous shareholders a large profit, and resold to the

public at a large profit to the purchasers. The new companies were constituted on the same dangerous system of a *large proportion of loan-capital, supported by a small proportion of paid-up ordinary capital* and a large liability of ordinary shareholders to pay up the rest of the issued ordinary shares on calls. The leading trade circular estimated that the total amount thus called up in the 'twenties exceeded £30 million; how much was actually paid up is unknown, but it is unlikely that it was less than half, and the whole of this went in meeting losses already incurred, not in purchase of improved equipment. Thus on the ordinary strain of loss of trade was superimposed the financial strain of meeting calls on unpaid shares. On the security of this liability, the mills received *advances from banks; banks were also involved as creditors* in some cases, because they had advanced the money to purchase for resale, and *were left with the mills as security when the boom collapsed* and their debtors found themselves unable to effect the resale and repay the advance. (Italics supplied.)<sup>31</sup>

But the weak spots in the armor of London's Big Five did not cause a run. Sterling's difficulty was due to top-heavy short-term indebtedness to foreigners. This was disclosed by the Macmillan Committee's *Report*, which was published in July 1931, in the midst of the German banking crisis.<sup>32</sup> It became clear then for the first time that short-term sterling debts were far in excess of the sum of Britain's short-term claims against foreigners and her gold reserve. This disclosure came at a most inopportune time. Foreign owners of sterling bills and balances became alarmed that their funds might be frozen in London, just as the British funds had been in Berlin, and they began to liquidate sterling claims. As the gold reserve of the Bank of England declined, more capital flight developed.<sup>33</sup> An aggravating circumstance was the rising deficit in Britain's balance of payments. Even though the Exchequer agreed in 1930 to Norman's proposal to require authorization to grant loans abroad, including sterling countries,<sup>34</sup> the strain on the payments balance was scarcely relieved. Nor did the deterioration of Britain's trading position escape the attention of foreign financial circles.

The competition of imports in the British home market became keener, not only in such commodities as wheat, but also in manufactured goods. In 1925 British domestic exports of "goods wholly or mainly manufactured" were £617 million, her retained imports were £288 million. In 1929 such exports were £574 million, and imports



£306 million. In 1931, such exports were £291 million and imports £245 million.<sup>35</sup>

The obvious question was: what would remain of the British trade balance if *manufactured* imports outgrew exports?

The budgetary problem, however, was the crux of the situation. Capitalists around the globe had learned by “rich” experience since 1914 that maintaining a gold standard was incompatible with a large and chronic budgetary deficit, such as appeared to be in prospect for Britain. Unfortunately, the (parliamentary) May Committee’s *Report* was published on July 31, when the sterling-panic was in full swing. It indicated a deficit for fiscal 1932–1933 of £120 million, “the largest since 1920,” and raised doubts about the chances of restoring fiscal equilibrium very soon. The May Committee proposal adopted a pessimistic tone in order to spur early action by the hesitant MacDonald Labor government and a confused Parliament.<sup>36</sup>

The stumbling block to constructive action was domestic politics—a Labor government in undisguised conflict with its own party. Prime Minister Ramsey MacDonald and Treasury Secretary Philip Snowden were willing to take the measures necessary to balance the budget, but cutting unemployment benefits (the dole) was the chief difficulty. The parliamentary majority, backed by the Trade Union Congress and several Cabinet members, was dead set against such an “antisocial” move, even though the purchasing power of the unemployment benefits had risen by about 30 per cent. This appeared to be a crisis of the British parliamentary system itself, severely testing the world’s confidence in that system as well as in sterling. The bitter conflict within the Cabinet was resolved when MacDonald resigned on August 23 and returned as the head of the National Government, a coalition of the Labor minority with the Conservatives. Then in September, Parliament passed a budgetary law which reduced the dole, cut government payrolls, and applied other economy measures and almost eliminated the deficit of the forthcoming budget. But the continuing bitter political wrangle, the Trade Union Congress threatening “industrial chaos,”<sup>37</sup> undermined the world’s confidence in the United Kingdom’s ability to put its house in order. The last straw was a short-lived “sit-down strike” at Invergordon staged by a group of British naval personnel. Because the government had ordered some cuts in pay, the sailors refused to board their ships.

This was headlined by the world press as a "mutiny in the Navy," the first in British history, sensationalized to be the end of British sea power, indeed of Britain herself.

The daily gold outflow reached new highs in the week of September 13, virtually exhausting the Bank of England's gold reserve, save for the amounts available from the American and French emergency credits which had been granted in August.<sup>38</sup> Yet it still remains a mystery *why* Britain left the gold standard.

The "posthumous" charge by the well-known French economist, Jacques Rueff, that the Bank of England defaulted intentionally in order to damage the creditor central banks, the Bank of France in particular,<sup>39</sup> may be dismissed as without serious foundation.

In all likelihood, Montagu Norman would *not* have approved the departure from gold had he been on the job. But he was absent, having suffered a nervous breakdown in late July, and had been recuperating at the Château Frontenac in Quebec.<sup>40</sup> When the Bank of England went off gold, he was aboard ship and learned of it only upon his arrival in Liverpool on Wednesday, September 23. His biographers relate his ill-humor and the venom he vented on his associates when he reached London.<sup>41</sup> Knowing the Governor as they did, he wanted to know why they felt they had to "throw in the sponge."

According to the official version, Sir Ernest Harvey, the Deputy Governor, asked the Treasury to free the Bank of England of the obligation to redeem sterling at parity. A well-informed source close to the Exchequer maintained, however, that it was the Exchequer which ordered the suspension of gold payments. More likely, they acted in unison, having lost their confidence, if not their "nerve," under the extraordinary pressures of the seven or eight weeks' long "siege."

Sterling had been under steady pressure, with only brief interruptions, since late 1929. At that time, Governor George Harrison, of the New York Federal Reserve, "was himself inquiring [of Norman] whether a dollar credit on the lines of the 1925 [standby] arrangement would be helpful." Toward the end of 1930, gold withdrawals from London assumed such dimensions that Clement Moret, who had become the new governor of the Bank of France in September 1930, suggested to Norman a large-scale conversion operation on the Paris market to absorb a substantial part of the British short-term

indebtedness. Norman, always conscious of sterling's "prestige," refused the offer and proposed instead an International Corporation to refinance countries in distress. It would use French money, but be under "international," meaning British, control. That was not acceptable to the French. Apparently Norman feared that such a loan, publicly offered, would hurt rather than strengthen the City's credit.<sup>42</sup> During the acute sterling panic, in August 1931, the Bank of England negotiated two ninety-day credit lines (currency swaps) totaling \$250 million equally divided between the Federal Reserve Bank of New York and the Bank of France, repayable in dollars and francs, respectively. Then, in September, a further \$200 million was provided for one year, one-half by J. P. Morgan and an equal amount by Paris to support sterling on both the spot and the forward exchange markets.

Britain could have had more help in Paris as well as in New York. In both places, public and private authorities were anxious to head off the catastrophe. But the British authorities seem to have become emotionally exhausted. Several "eyewitnesses" have told this writer that both those in the Treasury and in the Bank had convinced themselves that Britain's house could not be brought into order without first "teaching a lesson" to a public which was either indifferent or indolent. It was to be a very costly lesson. And the tragedy of it all was that in a matter of weeks, the house *was* put in order, following the devaluation, demonstrating that neither the run on sterling nor Britain's departure from gold had been unavoidable. The poor balance of payments position could have been corrected without devaluation by effectively restraining British lending abroad. Actually, London was still exporting long-term capital a few days before "going off" gold.

The devaluation was not "planned," nor was it prepared. Rather, it was "feared." That Great Britain had slipped into adopting the gold standard nearly two centuries earlier, reminds one of the adage about the British Empire having been created "absent-mindedly."<sup>43</sup>

The budget deficit, which turned out to be £150 million higher than anticipated, was eliminated by reducing the dole, cutting governmental payrolls, and suspending annual amortization payments on the national debt—with no consequent revolts and no chaos. There was no outcry at all when the Bank without hesitation raised



the discount rate to 6 per cent, in the midst of the depression, and maintained it at that level for five months.

Although the immediate results of the abandonment of gold were not serious or, indeed, very noticeable, the country had reached a major turning-point in its economic history. It had tried, and had failed, to restore the old nineteenth-century confidence and trust which, with a few occasional tremors, had firmly ruled between the world's great trading nations. The first results of this failure seemed almost entirely favourable to Britain, but *the more remote consequences were an increase of international suspicion and hatred, an inflamed nationalism in Europe and, finally, war.* (Italics supplied)<sup>44</sup>

Indeed, Britain's devaluation in 1931 had a psychological and political impact on Europe, and beyond, that can hardly be overestimated. In final analysis, the break-up of the international financial and commercial system was a decisive factor in "balkanizing" Europe and preparing the ground for World War II.

This brings up a significant question. If the British authorities did not intend to devalue the pound, why did they not defend it by raising the discount rate? In words of the late Professor Frederic Benham:

On May 14th, immediately after the collapse of the Kredit-Anstalt, the Bank Rate was actually lowered, from 3 to 2½ per cent. It was not changed until July 23rd, when at last it was raised to 3½ per cent. During the last week or so of July the Bank of England lost over £25 million of gold. On July 30th the Bank Rate was again raised, but only to 4½ per cent, and there it remained until September 21st. Great Britain had always advocated a high Bank Rate as the remedy for a financial crisis and a drain of gold. She had been on the gold standard, in effect, for over two hundred years, with only two breaks—one during the Napoleonic wars and one during the last war [1914–1925]. Now for the first time in her history she suspended gold payments in time of peace and with a Bank Rate of 4½ per cent!<sup>45</sup>

The reluctance to use the discount weapon was at the root of the widely disseminated charge that "perfidious Albion" had intentionally "trapped" its creditors. To quote Professor Benham again:

Does it follow that British monetary authorities were secretly glad to leave the gold standard? Certainly a few men had been urging for some time either the abandonment of the gold standard or at least

devaluation to a lower parity. But it is beyond dispute that this was not the view of either the Government or the Bank of England. Parliamentary debates, public utterances, and press comment showed a strong desire to avoid any such action. The sincerity of this desire is shown by the £130 million credits, which cost over £160 million to repay, and by the drastic September Budget. The Bank of England twice assured the Bank of South Africa that it would do its utmost to stay on gold. Then why was the Bank Rate not raised but actually lowered after the Kredit Anstalt closed? Why was it not raised to 8 per cent or perhaps 10 per cent in July or even in August?<sup>46</sup>

Posthumously, the explanation has been offered that if boosting the rate from 2 per cent to 4½ per cent accomplished nothing, further increases would have done no better. That is indeed a weak rationalization. It was contrary to all rules of the "game" and all traditions of the Bank of England to let the currency default at 4½ per cent, without putting up a "last-ditch fight." True, a depression-ridden country, with the number of unemployed rising from 1,344,000 at the end of 1929 to 2,500,000 at the end of 1930, was in no mood to countenance a severe deflationary move. Yet failure to do so was a policy of surrendering to hysterical panic, without regard to the country's long-term interests. And, as mentioned above, the bank rate was raised to 6 per cent on September 21, after the event, and maintained for five months at that level, depression or no depression.

More logical appears Benham's explanation:

We can only conclude that the Bank of England thought a high Bank Rate, in the circumstances, would do more harm than good. It might have been interpreted abroad as a sign of weakness. It would have forced a number of British firms into liquidation. At the worst, if foreign credits and its own prestige could not save sterling, then the financial storm was so great that nothing would avail. In my opinion, the traditional remedy should have been tried.<sup>47</sup>

It should have been, indeed. No matter what damage a higher discount would have caused, it should have been tried as an alternative, if only for a few days, as a matter of principle.<sup>48</sup>

Evidently, there is no shortage of rationalizations; such as that an 8 per cent or 10 per cent rate might have forced "a hysterical run of liquidations." Six per cent certainly did not cause any such trou-

ble. It is a moot question of policy priorities whether the stock market speculators should be squeezed or the currency sacrificed.

It is difficult to avoid the conclusion—which was reached, apparently, by Norman himself—that Harvey and his associates had “lost their heads.” Maybe they were in dire need of a good night’s sleep. The problem was simply to restore confidence in the pound sterling. That it should have been possible to do so is evidenced by the fact that soon after the devaluation, capital began to flow into Britain—in the expectation of a *sterling revaluation*, back to the old parity.

The fact is that the British authorities, to Norman’s apparent disgust and George Harrison’s disappointment, did not make an all-out effort with every means at their disposal to save the pound. The “Gibraltar” of world finance was thus permitted to fall, yielding to an attack that was motivated by panic fears which would be dispelled very shortly thereafter. The irony of it was that none of the responsible authorities, to a man, believed in debasing the currency, let alone in floating exchange rates, as a remedy. In fact, they were all fearful of devaluation and were greatly relieved when their fears of the inflationary consequences did not materialize at once.

To this day sterling’s reputation has not recovered from the blow it unwillingly received under the policy adopted in September 1931. And this policy became a “pattern” not only for the British but for many other Treasury chiefs. At first, the damage was moderated by a general understanding that a banker’s bankruptcy is “excusable” when his debtors leave him in the lurch. Excusable or not, the result was a violent shock not only to the prestige of England but to the reputation of the whole privately managed system of international finance based on gold.

The downfall of the gold standard became the wellspring of an intentional legend which might be described as the “Keynesian trap.” It has become a dogma that it was the 1925 return to sterling’s pre-1914 parity that necessitated the subsequent devaluation, if not the Great Depression, altogether. As far as this writer is aware, no one has made any attempt to demonstrate the logical or causal “mechanism” which could connect the abandonment of the gold standard in 1931 with the return to gold in 1925 other than that the one followed the other after a six and a half years’ interval!—*post hoc ergo propter hoc*. Since the burden of proof should rest on proponents of this thesis, a few questions may be pertinent.



1) Would the choice in 1925 of a lower parity to gold, or of no parity at all, have strengthened the British balance of payments beyond providing “monetary” relief?<sup>49</sup> Suffice it to recall that by, or before, the end of 1926 British prices were generally adjusted to the American level.

2) By what mysterious interplay of forces did sterling’s return to the old parity bring about a world-wide crisis? How did it promote or provoke the domestic overindebtedness in the United States and the excessive capital flow to Germany—or the illiquidity of German banks and the overproduction of prime commodities? Patently, the purpose of the “Keynesian trap” is to divert attention from the errors, mischiefs, misjudgments, and maladjustments, both public and private, which accumulated and were compounded during the seventeen-year period beginning with the inflationary financing of the war and the world-wide disruptions it brought about.

3) If a chief obstacle to restoring a “healthy” British trade balance was the obstructionism of organized labor, as has been pointed out, how would this obstacle have been removed by returning to a sterling of a lower parity, or of none at all?

Sterling’s departure from gold was greeted with sarcasm by Britain’s enemies and with enthusiasm by a broad sector of the Anglo-American economic “intelligentsia.” Keynes, who at the moment, oddly enough, was opposed to devaluation, became the hero of the day. Had he not opposed the return to gold in 1925, almost single-handedly? He was vindicated; the event demonstrating, allegedly, that a postwar gold standard was doomed from the outset. In reality, nothing of the sort had been established. Two facts have become evident:

a) A balance of payments cannot be maintained in equilibrium if the country lends abroad far in excess of what its surplus of visible and invisible exports permit it to lend.

b) Merchandise exports were sluggish due to organized labor’s intransigence and the relative inflexibility of wages.

What, then, was achieved by devaluation? The panic was terminated and there was no longer any reason for selling pounds short. This result might have been obtained by a more determined defensive stance and better central bank cooperation.

Britain’s balance of trade improved thereafter, but not at once, or even then for long. The commercial “benefits” of devaluation were

washed away by "competitive" devaluations and retaliatory exchange and trade restrictions on the part of other nations. Competitive devaluations robbed Britain of every commercial advantage her departure from gold might have produced. Internally, the relaxed credit policies in the wake of the devaluation so stimulated domestic consumer spending that toward the end of the 1930's, the "basic" international balance of payments of the United Kingdom was unbalanced again.

A very significant change brought about by the monetary debacle consisted in turning Britain "inward"—in the Keynesian direction. It was only logical that "going off" was followed in January 1932 by imposing a general tariff on imports, and so Britain's free trade policy, in effect since 1846, was jettisoned within a few months after the devaluation. The ultimate beneficiaries of the devaluation were protectionist Conservative industrialists and Socialist planners.

Another "achievement" has often been credited to the devaluation of the pound: a return to Cheap Money. Five months after the fatal September day, a series of bank rate reductions was instituted; thereafter the 2½ per cent rate was maintained for many years. In reality, Cheap Money was an earmark of the depression—devaluation or no devaluation.<sup>50</sup>

By March 1932, Montagu Norman became the apostle of Cheap Money. This may appear to be, but was not necessarily, a betrayal of his convictions. For one thing, the depression continued, despite the money-tinkering, and the volume of unemployment did *not* decline substantially until World War II. For another thing, there was no longer any need to defend the strict gold standard strenuously, for there was no strict gold standard to defend any more. Furthermore, gold was soon flowing inward and in such quantities that it became embarrassing and indeed had to be "restrained." Norman was co-responsible for maintaining Cheap Money in Britain during the 1930's by advising the government to undertake large-scale debt-conversion operations.<sup>51</sup> But, at the same time, he devised new techniques to hold sterling's exchange rate fluctuations to a minimum and to stabilize the pound against the dollar so as to return, in effect, once more to a gold standard, if only to a very emasculated kind.

Panics always imply an element of irrationality. They may subside as unpredictably as they arise. It is inexcusable that the Bank of England went off gold at 4½ per cent, high as that rate may have

seemed by depression-time standards. Why did Sir Ernest Harvey not wait a day or two longer—over the weekend—for the Governor's return? Norman never made clear what he would have done, had he been "on the job." Given his tremendous prestige and resourcefulness, he might have been able to mobilize temporary help. But this was not a crisis like any other; it came in the deepest depression on record, and on the heels of the German breakdown. Only one such world-wide crisis had ever occurred before, the momentary one at the outbreak of World War I. At that time, the 10 per cent discount rate of the Bank of England was a superfluous gesture: the system of international finance had to be "frozen" anyway, although Britain was still the world's foremost financial power.<sup>52</sup> In September 1931 the British authorities were apparently the victims of the same illusion that the Germans had been two months earlier, that it was all a nightmarish series of incidents, that, somehow, things soon would return to "normal." What the Germans and the British did not, and could not, grasp or foresee, was a complete change of the public mind. On September 19, 1931, the average Englishman would have been (and was) horrified at the thought of the pound sterling's leaving the gold standard. Four days later, the same Englishman only shrugged his shoulders. He was gratified to observe that the departure from gold had apparently changed nothing except that the pressure ceased. This was the culmination of a monetary revolution that began seventeen years earlier.<sup>53</sup>

As to Montagu Norman—he could, and very likely would, have raised the discount rate sharply, if only to protect the Bank's reputation against a reproach of bad faith. Moreover, there was an obvious route open to avoid devaluation; Norman was certainly cognizant of it. By September 20, the bulk of pounds sterling privately held by foreigners had been liquidated. The British public, and this was essential, made no visible effort to run out from under sterling. What remained of foreign-owned sterling claims was mainly in the hands of central banks, which were, by and large, perfectly willing to help the Bank of England in its hour of travail. In fact, *they all expected that the Bank of England would be capable of defending sterling*—which was the reason why they did not convert their sterling balances.<sup>54</sup> A one-month moratorium could have been arranged over the critical weekend with the central banks of France, Holland, Switzerland, etc. During that month, all gold payments could have been



suspended. Actually, the budget was balanced, or nearly so, and the alleged “mutiny” in the Navy was soon forgotten. Close observers of the scene, who watched the foreign exchange markets at the time, had little doubt that by late October, if not before, the gold embargo could have been lifted, and the gold parity saved. In the meantime, the Bank should have taken full advantage of foreign credit facilities which had actually been offered—on September 18 by Governor Harrison of the New York Federal Reserve Bank—and rejected by the men who ran the Bank of England in Norman’s absence.<sup>55</sup>

Strictly speaking, sterling did not “break” with gold itself. It remained convertible but at a market value which was below the traditional parity and subject to change. For six months after September 1931, sterling was left to fluctuate and did so within narrow limits. This was a *de facto* devaluation, for Britain had abandoned the old parity to gold. Sterling fell by as much as 30 per cent of the old parity, due to the haste of several central banks to salvage what they could of their gold stake in sterling holdings. By the end of September, the discount against gold—with the London gold market remaining open and free—was permitted to settle on that level. Then, in 1934–1935, Britain lowered it to 59 per cent of the old parity, in order to adjust it to the American dollar, which meanwhile had also been devalued by 41 per cent. In 1940 the new gold parity was institutionalized.<sup>56</sup>

#### *Addendum: About the “Ethics” of Devaluation*

Unfavorable light was thrown on the the Bank of England’s “ethics” by the less than correct handling of its debt to the Netherlands Bank that supported sterling time and again. In its *Annual Report* for 1931–1932, the Netherlands Bank gave an account, in subdued language, of the incident (quoted by Brown, *International Gold Standard*, vol. 2, pp. 1170–1172):

And to the loss itself, the decisive factor there lies in the question whether the Bank, in exercising a careful management, should not have discarded its holding of sterling in time. *The Management were of the opinion that they should not do this because they were convinced that the British Government and the Bank of England firmly intended to maintain the gold standard and to make the gold stock of the said Bank entirely available for this purpose. This conviction was based on*

the conversations which Dr. Vissering and Dr. Tetrode had with the Management of the Bank of England on August 26th, 1931, when anxiety concerning the financial position of England began to prevail . . . The statements which had been made to them, . . . placed beyond doubt that it was intended that the proceeds of the loan of £80,000,000 which the British Government had obtained from abroad to support sterling, should be employed in order to maintain the gold standard together with the entire gold stock of the Bank of England then available. This intention also appears from the telegram received on August 29th, 1931, from the Deputy Governor of the Bank of England, which reads as follows: "With reference to our conversation on Wednesday last you will no doubt have seen the official announcement to-day of the conclusion by our Government of large credits in New York and Paris. I trust this announcement will serve to abolish all doubts as to the safety of foreign funds in London."

On the grounds of these facts, the Management considered that they were entitled to continue their efforts towards international cooperation and to refrain from liquidating the Bank's sterling assets . . . They considered that they were bound, in view of their public function, to maintain the relationship as it had grown entirely in accordance with the views and the desire of the Bank of England, . . . as long as they might expect, from . . . assurances received, that England would maintain the gold standard. This expectation received strong support from the fact that *the gold stock* of the Bank of England between the dates of the conversations referred to and that of *the last weekly return before the suspension* of the gold standard, not only exhibited no diminution, but even *showed an increase*. On these two dates the gold stock stood at £133,300,000 and £135,600,00 respectively.

In the light of the developments described above, the Management was so convinced that *the Bank of England would consider themselves in equity bound* by the exigencies of international cooperation to safeguard the Netherlands Bank against all losses on its sterling assets, that they drew up and published on September 27th, 1931, the *communiqué* of that date.

. . . The Netherlands Bank has, however, been disappointed in this conviction, as it has since become clear that the Bank of England takes the view that the responsibility for the suspension of the gold standard rests exclusively with the British Government and that there existed a connection between the gold stock which . . . was at the disposal of the Bank at the time when the gold standard was abandoned, and the loans which had been taken up abroad by the British Government and

the Bank of England in order to support sterling. It is obviously unnecessary to state here that such a connection could by no means be surmised by third parties. (*Italics supplied.*)

In short, the Netherlands Bank felt, and for good reason so, that it had been *deceived by the Bank of England*, a turn that was scarcely befitting Norman's idea of central bank cooperation, or the "ethics" of the gold standard.

While foreign central banks were bitterly indignant, sterling's devaluation in 1931 had a "moral" effect, in the short run, at home that was totally unexpected and remained unappreciated. It came as a tremendous surprise to the British public, making clear the seriousness of the money problem. It was at once obvious to the "man on the street" that a repetition of this sort of "mess" could not be tolerated. Industrial conflicts and labor unrest quieted down; so did the resistance against cutting government salaries and the dole, although unemployment lingered on. Paradoxically, destabilization had a stabilizing effect—of a nonrecurrent and temporary sort. In the longer run, however, the impact was highly demoralizing.

M. J. Bonn (*Wandering Scholar*, p. 318) has summed up cogently the ethical aspect of sterling's devaluation:

September 20, 1931, was the end of an age. It was the last day of the age of economic liberalism in which Great Britain had been the leader of the world. She had built a mighty empire in five continents by political domination and economic development . . .

Now the whole edifice had crashed. The slogan "safe as the Bank of England" no longer had any meaning. The Bank of England had gone into default. For the first time in history a great creditor country had devalued its currency, and by so doing had inflicted heavy losses on all those who had trusted it.

### C. The Dollar Debased

Within the eighteen months after sterling's devaluation, a majority of currencies were adjusted along either the British or the German pattern of external default, and in some instances by a combination of both techniques. Several Central European currencies adopted the German pattern even before the British devaluation. Before March 1933, outstanding exceptions were the American dollar and its "satellites," such as the currencies of Panama, Haiti, etc., and the group



of countries that came to be known as the Gold Bloc.<sup>57</sup>

The United States was in an exceptional position, notwithstanding attacks on its gold stock in 1930, the fall of 1931, in the first half of 1932, and early 1933.<sup>58</sup> The severe attack in the wake of the British devaluation was quickly repelled when the discount rate of the New York Federal Reserve Bank was raised from 1½ per cent to 2½ per cent on October 8, 1931. Despite a loss of \$725 million in about six weeks, the year ended with a gold loss of barely \$174 million.

In the final two months of 1931, the . . . gold stock in the United States rose as a result of shipments from Canada, Latin America, and the Far East. The flow from these areas had in fact never ceased; but from the middle of September through October, the shipments to Europe had been much larger than the receipts from other parts of the world. In November and December, however, exports to Europe practically ceased, while shipments from Japan, which was endeavoring to maintain the gold standard, were in heavy volume. Even after Japan abandoned the gold standard on December 13, Japanese gold continued to arrive at San Francisco. In these two months the monetary gold stock of the United States increased by \$170,000,000.<sup>59</sup>

The next major attack came in 1932, when internal and external panics coincided, and it was more serious. Hesitantly, the Reserve System met it by open market purchases and by paying out gold. By July, the double run had been overcome, and 1932 ended with a net gold loss of only \$33 million. The official gold reserve still amounted to about \$4 billion at the beginning of 1933, equal to or better than 50 per cent of the Federal Reserve System's total monetary liabilities; as against about 70 per cent in the 1920's.

The dollar was therefore in a strong "technical" position, despite the rapidly rising mortality of small banks, until it became widely suspected that the newly elected President was considering radical changes in the monetary system. Franklin Delano Roosevelt had been elected on a balanced budget and "save the dollar," i.e., a gold standard, platform, but even before he took office, persistent rumors circulated that he would take the dollar down the "sterling line."

An internal financial crisis materialized in early February (1933) with massive withdrawal's of deposits and also of gold. The entire banking structure seemed threatened with collapse. This time, the Federal Reserve Board did nothing to stem the panic.<sup>60</sup> President

Hoover's attempts to cajole the Board into action were unsuccessful. The reluctance of an incompetent Federal Reserve Board to relieve a chaotic situation,<sup>61</sup> either by closing the banks for a few days, or by issuing more notes or, in lieu thereof, clearing house certificates, led to a nation-wide panic on March 4, the eve of Roosevelt's inauguration.<sup>62</sup> The closing of the banks for several days by Roosevelt abruptly ended the domestic run. But this short-lived critical situation provided the alibi for suspending gold payments and establishing foreign exchange controls. For nine months starting April 20 the dollar alternately was left floating or was pegged at varying but descending rates, a curious experiment with "flexible" exchange rates and the "crawling peg." The experimentation terminated on January 31, 1934, with stabilization at the new level of \$35 per troy ounce fine, in place of the historic \$20.67. Thus was the dollar devalued to 59.06 per cent of its previous gold content. Meanwhile, domestic convertibility was suspended, private gold ownership outlawed, all paper money in circulation declared legal tender, the gold clause in contracts abrogated, and the sale of gold by the Treasury limited to foreign monetary authorities. A gold bullion standard with only external convertibility, the first of its kind in peacetime, had now been established.

The experiment with a downward-drifting dollar produced unexpected results. Theoretically, the country's trade balance should have improved; actually, it deteriorated in a spectacular fashion. American exporters held back their exports, anticipating higher profits after foreign exchange rates rose further. American importers with similar logic hastened to buy and to pay abroad in order to avoid the anticipated rise in the cost of imports. The "floating" exchange rates proved a disequilibrating factor, in both domestic and international trade.<sup>63</sup>

The Roosevelt devaluation was a "first" in still another respect, disregarding the reduction of the dollar's fine content in 1834 from 24.75 to 23.2 grains. Never before had a government deliberately cut the gold (or silver) value of a nonmetallic currency that stood at or near parity in the foreign exchange markets, that was backed by ample international liquidity and that was no longer threatened by panic. Keynes described the experiment as "the gold standard on the booze," echoing British resentment about the fact that the commercial "fruits" of the sterling devaluation had been spoiled. *The New*

*York Times* commented: "There is probably no instance in history of so bold an economic experiment."<sup>64</sup> The similarity with deliberate coin-clipping was striking.

Thereafter, deliberate devaluation became acceptable as an instrument of monetary policy—frequently preceded by intentionally deceptive assurances by the authorities that no such action was intended. In 1944, this novel "instrument" of deceiving the creditors was "legalized" in the Bretton Woods Agreement, if only for cases of "fundamental disequilibrium," whatever that is.

Roosevelt had been advised by two agricultural economists, Professors George Warren and Frank A. Pearson of Cornell University. They believed in the automatic adjustment, in an inverse ratio of price levels to the gold content of the currency, implying a purely "metallistic" version of the quantity theory of money.<sup>65</sup> According to this brand of the theory, the increase in the dollar's purchasing power would be corrected automatically "by reducing the number of grains of gold in the dollar so as to offset the increased value of each grain." Something like the 1926 level price level was to be restored.<sup>66</sup> Prices in general, other than export and import prices, failed to behave in accordance with the theory. The official consumer price index (1923–1925 = 100) rose by 2 per cent in 1934, and by another 8 per cent in the following three years. The objective of restoring prices to the 1926 level was soon abandoned and the Warren–Pearson team was dropped from the presidential Brain Trust. But, of course, the devaluation could not be reversed.<sup>67</sup>

Whatever the theory, it is safe to assume that without the precedent set by Britain, devaluation would *not* have been an acceptable policy for a creditor nation like the United States. Yet, analogy between the two cases is extremely tenuous. The American financial system was under no such pressures as Britain's had been. By September 1931, Britain's gold reserve was practically exhausted, whereas in 1933, the gold stock of the United States, almost \$4 billion at the old parity, was the largest the world had ever seen, and equaled 8.2 per cent of total bank deposits—a better ratio than that existing at that time in any country save France and Switzerland. Britain's budget had been precariously balanced since 1921 and seriously unbalanced since 1929. Her national debt was disproportionately higher than the American and her balance of international payments had been in a chronically strained condition. Although an apprecia-



ble deficit in the budget of the United States in 1931 was followed in 1932 by an admittedly distressing one of \$3 billion (3.3 per cent of the gross national product), this came after ten years of continuous budget surplus and substantial public debt reduction. Furthermore, the American balance of trade, even with a declining surplus in the depression, had long been favorable. The dollar had outshone sterling in world-wide confidence. Whatever arguments may be advanced to "justify" sterling's devaluation, they do not apply to the dollar—except that both countries were in the grip of an unprecedented depression and both were faced with the fact that their claims outstanding abroad were largely frozen. But even as an international net creditor, the United States was in a far stronger position than the United Kingdom, which was a large-scale net debtor on short-term account. In fact Britain had been pushed to the brink against her wishes by a vicious external panic which had practically exhausted her gold reserve; America was faced essentially by a domestic liquidity crisis which she overcame with relative ease.

By their devaluations, their refusal to pay more than a quota on their debts, the respective governments and central banks in effect declared themselves insolvent. Never before had creditors in this way relieved their debtors *pro tanto* of their liabilities. This is precisely what Britain and the United States did. Germany, the largest single debtor, benefited most. Even though her debt burden had been greatly reduced through the dollar and sterling devaluations, Germany suspended full interest payments on her foreign loans beginning in July 1933. At first she made partial payments in dollars and sterling, with the balance paid in blocked marks and script. Eventually all payments were made in 3 per cent dollar script, except for the Dawes and Young loans, whose coupons could be "sold" to agents of the German governments at about 70 per cent of their face value.

The British devaluation was "accidental," committed as an act of desperation, whereas Roosevelt acted with the cynical deliberation of a charlatan. America, then the world's economic leader, abdicated that position and turned "inward," adopting an autarchistic stance. Then in the summer of 1933 Roosevelt "torpedoed" the London economic conference which was supposed to restore something like normalcy in international trade and financial relations. Hitler's answer, implemented by Schacht, was to tighten the "strait jacket"

around Germany's foreign trade and to maximize domestic self-sufficiency.<sup>68</sup> For both Germany and Japan, territorial expansion was the ultimate alternative to genuine foreign trade.

It is of interest to speculate about the possible course of Hitler's policies *if* the London conference of 1933 had been even a partial success. With some relaxation on the international economic front, it is possible that Germany could have corrected her raw material shortage without going to war. Unwittingly President Roosevelt had strengthened the hand of the hard-core anti-internationalist Nazis, by breaking, temporarily, with the best liberal traditions of the Western World. On August 28, 1933, Roosevelt proclaimed:

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.<sup>69</sup>

"The dollar will never be devalued," a leading German banker, Oskar Wasserman, of the Deutsche Bank told this writer in early 1932: "they [the Americans] know that if the dollar were devalued all the gold of the world would flow to the United States with all the inflationary consequences." Of course, some American politicians did *not* know what seemed plain common sense to a European banker. The dollar *was* devalued. Given the productive potential of the United States, her security from military invasion, and the economic dynamism of the American people, raising the price of gold, with wages and prices lagging behind for years, generated tremendous profit opportunities. It was bound to attract the liquid wealth of the Free World to American shores.

#### **D. The Demise of the Gold Bloc**

In 1933, the Great Depression hit bottom. In December of that year, Svenska Handelsbanken happily reported that "the bonds of the depression are gradually beginning to give way."<sup>70</sup> Significantly, the U.S. cost of living index, after five years of decline, turned up; its British equivalent, devaluation notwithstanding, stood at 141.8 in 1933 and 1934, and then rose to 145.5 in 1935. Industrial production

in Britain (1926=100) hit 54.8 in 1934 and was up to 61.3 in 1933. The U.S. index of industrial production (Standard Statistics Co., 1926=100) had risen to 61.3 in 1933 from 54.8 in the previous year.

The financial panics had run their course. The liquidation of the long unsettled Ivar Kreuger affair eliminated the sharpest single thorn in the side of the security markets.<sup>71</sup> The extremely high level of liquidity that the commercial banks had imposed on themselves in most countries helped restore financial confidence. These developments heralded the end of the acute phase of the confidence crisis. By late 1934, business conditions had improved appreciably in Britain and even more so in Austria and Germany.

When the piecemeal devaluation of the American dollar got under way, only six currencies were still on the gold standard. On July 3, 1934, the governments of Belgium, Holland, France, Switzerland, Poland, and Italy issued a joint statement, declaring "their intention to maintain the free functioning of the gold standard . . . at the existing gold parities."<sup>72</sup> Italy and Poland nonetheless soon closed their "doors" by adopting exchange restrictions on the German pattern,<sup>73</sup> leaving only four survivors in the global currency wreckage—a residual Gold Bloc.

British propaganda justifying devaluation as a depression cure made a great impression on Belgian public opinion, particularly on the "intelligentsia." In contrast to the major French and Swiss banks, the leading Belgian institutions were overextended and illiquid, deeply involved in industrial finance, and sympathetic to a monetary measure that promised "relief."<sup>74</sup> The export interests, who were very influential in a country which got 25 per cent or more of its national income from foreign trade, had been urging devaluation for some time. And the farming sector was unhappy because of the pressure on their domestic markets exerted by the "valuta-dumping" of neighboring countries. The temporary rise of unemployment to 11.2 per cent of employables in 1934 did not contribute to a general belief in the virtue of maintaining the gold standard. Yet, the decisive force seems to have been a group of three highly respected economics professors at the Louvain, then the leading university: L. Dupriez, F. Baudhuin, and Paul van Zeeland.<sup>75</sup>

Although the gold position of the Belgian franc, \$380 million at the end of 1933,<sup>76</sup> was fairly strong, nonetheless the emergence of an appreciable budget deficit sparked rumors of an impending currency



“reform.” When, in the late summer of 1934, these three “wise men” burst into the open, demanding that the belga (five Belgian francs) be decapitated, some capital flight set in. This aroused fears for the official gold reserve and enhanced belief in the “necessity” for a devaluation. On March 26, 1935, Professor van Zeeland became Prime Minister; two days later he proceeded to devalue the Belgian franc by 28 per cent (to seventy-four French centimes). The professors had figured out that this gave a set of exchange rates that would restore the purchasing power of the belga to equilibrium with the average of the purchasing power of the major competing currencies. They ignored the fact that international price comparisons were virtually meaningless in the face of ubiquitous trade impediments. This was an intellectual success for the Cassel–Keynes school, being an application of the quantity theory of money,<sup>77</sup> not to mention a political success for the three professors.

TABLE VII-4

Gold Reserves of the Central Banks of the Gold Bloc, 1929–1936  
(in millions of U.S. dollars of the old parity)

	1929	1930	1931	1932	1933	1934	1935	1936
Belgium	163	191	354	361	380	348	346	373
France	1,633	2,099	2,699	3,257	3,022	3,218	2,598	1,769
Netherlands	180	171	357	415	372	338	259	289
Switzerland	115	138	453	477	387	368	268	387

SOURCES: League of Nations, *International Currency Experience*, pp. 234–235, and table 2; League of Nations, *Money and Banking* (1937–1938), vol. 1, 1938, table 6, p. 135 (1934–1936).

But the depression, only slightly alleviated, lingered on. In the later 1930's, Belgium gained less in foreign trade than its proportionate share in world trade should have been. The illiquid commercial banks of Brussels, however, were bailed out; Van Zeeland was later charged with having sacrificed the currency for the benefit of the banks. The “devaluation profit” on the gold reserve, about 1 billion francs, was divided among a dozen government bureaus. Corruption charges, although voiced, were never investigated. Yet, the Belgian experiment was celebrated as a “scientific” achievement, in contrast to the “hot” sterling devaluation and to Roosevelt’s “coldly” arbitrary act.<sup>78</sup>

There now were only three countries left in the Gold Bloc, all three

in excellent monetary shape, with no short-term debt to foreigners to speak of. Their gold resources, as shown in Tables VII-4 and VII-5, while below the record levels of the preceding years, were still more than adequate. Between the year-ends 1928 and 1933, those of France and Holland had more than doubled and those of Switzerland had almost quadrupled, whereas they had shrunk almost everywhere else.<sup>79</sup> The respective central banks had almost continuously

TABLE VII-5  
World Distribution of Gold Reserves, 1913-1943:  
Reported Central Bank Gold Reserves in U.S. Dollars at the Old Parity  
of \$20.67 Per Ounce of Fine Gold  
(\$ millions; end of year)

	1913	1918	1923	1928	1933	1938	1943
Argentina	256	305	467	607	239	255	212 <sup>a</sup>
Australia	22	104	131	109	3	2	—
Belgium	48	51	52	126	380	343	433
Brazil	90	26	49	149	—	19	150
Canada	117	130	127	114	77	113	—
France	679	664	710	1,254	3,022	1,529 <sup>b</sup>	1,181
Germany	279	539	111	650	92	17	—
India	124	64	109	124	162	162	162
Italy	267	203	218	266	373	115	—
Japan	65	226	602	541	212	97	—
Netherlands	61	278	235	175	372	588	300
Spain	92	430	488	494	436	310	—
Sweden	27	77	73	63	99	189	228
Switzerland	33	80	104	103	387	414	569
Union of S. Africa	34	33	53	39	83	131	417
United Kingdom	165	521	746	748	928	1,587 <sup>c</sup>	—
United States	1,290	2,658	3,834	3,746	4,012	8,609 <sup>d</sup>	12,969
USSR (Russia)	786	—	45	92	416	—	—

SOURCE: League of Nations, *International Currency Experience* (Geneva, 1944), p. 240.

<sup>a</sup>Excluding certain reserves included before 1940.

<sup>b</sup>Including gold in the Exchange Stabilization Fund.

<sup>c</sup>Excluding gold in the Exchange Equalization Account (\$448 million on September 1938).

<sup>d</sup>Including gold in the Exchange Stabilization Fund (Special Account No. 1).

more gold in their vaults than there were notes in circulation. The major commercial banks in all three countries, especially in France,

were in a favorable position due to their high standards of asset liquidity. France owed much of her financial strength to the thrift habits of her population that had rebuilt by 1934 the liquid wealth, partly in gold, that it possessed in 1914.<sup>80</sup>

But, late in 1932 France did begin to experience some serious depression pains. These had been delayed by the absence of illiquid banks and the relatively self-reliant structure of the French economy, in which the financially conservative small-farm and artisan-shop-keeper unit played a much larger role than such groups in other industrial countries. "Consumer credit" was virtually nonexistent in France! But several financial developments in 1934–1935 created a general *malaise*. A substantial budget deficit appeared in 1934, the first in eight years,<sup>81</sup> and with unemployment spreading, labor began to grow restive in 1935. Contracyclical deficit financing on a generous scale did not produce the anticipated miracles. Instead, strike waves, plant "sit-downs," and other disturbances, waged by the employed workers rather than by the unemployed, shook the French complacency and threatened to paralyze the country. Greatly affected were large sectors of the heavily subsidized peasantry, who, still about 25 per cent of the productive population, were dissatisfied with their lowered incomes. These had shrunk due to a growing—subsidized—agricultural output in the midst of falling prices.<sup>82</sup> The upshot was the May 1936 electoral victory of a coalition of "liberals" drawn from the Communists, Socialists, and the middle-class "Radical Party," which brought Leon Blum's leftist "Popular Front" to power. His program emerged piecemeal. Higher wages and higher agricultural prices were to generate "mass purchasing power." This program was modeled on the Roosevelt pattern, with one difference: prices were not expected to rise automatically with a forthcoming devaluation, but rather by credit expansion. The unweighted index of French wholesale prices (July 1914=100) hit its postwar low of 334 in July 1935 and rose to 517 in February 1937. The inflation was a "success." Sweeping reform legislation, including the forty-hour week, two weeks' paid vacation, collective wage bargaining, railroad nationalization, was rapidly enacted, driving the timid French capitalist into a choice between gold, sterling, and American dollars. Under the circumstances devaluation of the franc was a foregone conclusion even before it was announced on September 26, 1936, and a gold embargo proclaimed on September 28. Switzerland followed



the French devaluation the same day and Holland did so two days later.

Under Leon Blum, the French franc's parity was lowered again in 1937, and for a third time within three years, in 1938, by Blum's successor, the more conservative Edouard Daladier, cutting the franc to 59 per cent of the parity established in 1928. These steps, barely ten years later, restored the franc to its 1928 parity with both sterling and the dollar. But the franc remained "sick."

The progressive deterioration of the franc in 1936–1938 was not surprising in view of developments under the *front populaire*. Wages and fringe benefits were boosted, per man/hour labor costs rose 70-odd per cent, and the capital flight continued, 10 billion francs "running out" in the five months before September 1936. The flight was further stimulated in 1938–1939 by the lengthening shadow of the approaching World War II. Exports tumbled and—theoretical expectations to the contrary—the country's balance of payments deteriorated.<sup>83</sup> Neither production nor the standard of living showed any significant gain. Real wages rose very little, and the French index of manufacturing hit a depression low in 1937. If the gold parities established in 1936 and 1937 became untenable, it was because rising domestic costs and the resulting increase in prices—a rise of 60 per cent at the retail level—had increased the disparity with foreign prices.<sup>84</sup>

Blum had been planning to devalue at least three months before the step was actually taken,<sup>85</sup> although he had assured the Chambers on May 10, 1936, that he loathed devaluation. His decision when made, however, was forced upon him by his own policies, pursued under the continuous pressure of strikes, farm unrest, demonstrations, unemployment, and political intrigues. The decision to increase the money supply was arrived at hesitatingly because the Socialists and Communists in the government had to take into consideration the conservatism of their partners, the middle-class Radicals. Even so, Blum started his "reflation" in June, issuing Treasury bonds and letting the central bank monetize them. Capital flight was now provoked, with a vengeance.<sup>86</sup>

Only the last parity change, the one in 1938, was a genuine devaluation. In the previous two, convertibility was not restored, not even externally. Between June 30, 1937, and May 4, 1938, the franc

was permitted to “float”—downward. The French public called it “stagnation with devaluation.”

How did France come to such an impasse? During four years of depression, French wholesale prices fell, but by no means to the same extent as they did in other leading countries. Between 1929 and early 1934 wholesale indices, in gold, declined from about 140 to 65 in the United States; almost to the same extent in England; from about 160 to 50 in Japan; but only from 133 to 80 in France. Also, the then usual lag of retail prices behind wholesale ones was substantially greater in France, and lasted longer, than in most other countries. An obvious lag in the decline of French prices behind world-wide prices persisted for four years; nevertheless the import surplus in the French balance of commodity trade rose from \$333 million (at the old parity) in 1929 to \$464 million in 1931. It remained at \$398 million and \$391 million, respectively, in 1932 and 1933. The estimated favorable surplus of French tourist trade fell from \$340 million in 1929 to \$100 million in 1932.

Capital flight, the chief source of France’s payment troubles in 1935–1938, was sparked primarily by her badly unbalanced budget. The parallel between the continuation of budgetary deficits and of capital flight is striking.<sup>87</sup>

It is a legend, unsupported by facts, that France had no alternative but devaluation in order to meet the “valuta-dumping” of the “Anglo-Saxons” and the Germans. Actually there were two contradictory alternatives and the Laval regime, that preceded the Popular Front, in 1935, used both, albeit halfheartedly. One was deflation, which had to be “tough” to overcome the rigidity and “stickiness” of French prices. The other consisted in illiberal commercial policies, namely, clearing and payments agreements, and nontariff protection, in particular.<sup>88</sup> The public found them both unsatisfactory and so France turned to “money-tinkering”, alias fluctuating exchange rates, with even less satisfactory consequences. Indeed the “freeing” of foreign exchange rates produced disastrous results.

If there is anything that inter-war experience has clearly demonstrated, it is that paper currency exchanges cannot be left free to fluctuate from day to day under the influence of market supply and demand. There had been what may almost be termed a secular change by which the public has become (a) more liquid and (b) more sensitive or “elastic” in regard to expectations. If currencies are left free to

fluctuate, “speculation” in the widest sense is likely to play havoc with exchange rates—speculation not only in foreign exchanges but also, as a result, in commodities entering into international trade. In these circumstances the dichotomy between external and internal stability, which has sometimes been stressed by advocates of fluctuating exchanges, tends to become quite unrealistic . . . *it is difficult to conceive of any method of achieving internal stability with both capital and commodity markets subject to “external” fluctuations . . .* A forward market in foreign exchange . . . obviously cannot prevent the disequilibrating movements of capital and trade that are liable to arise in such a system. To the extent that exchange fluctuations call forth equilibrating reactions in foreign trade tending to balance the international accounts, they do so by causing continual shifts of productive resources between home-market and export industries, shifts which are apt to produce frictional unemployment and which clearly are wasteful . . . (Italics supplied.)<sup>89</sup>

By early 1934 even the Swiss franc became suspect. Subsidies totaling 200 million Swiss francs annually, to agriculture, the watch industry, the hoteliers, etc., endangered the equilibrium of the Swiss national budget. Devaluation rumors were ignited by the failure of a 150 million francs bank in Geneva and by the fact that the country’s fourth largest financial institution, the Volksbank of Zurich, had to be federally supported.<sup>90</sup> But the Swiss federal government refused steadfastly—until September 1936—to walk the primrose path of devaluation. Indeed, devaluation made little sense for a country with 9 billion Swiss francs invested abroad and owing to foreigners less than 3 billion, as Dr. G. Bachmann, the president of the Swiss National Bank, pointed out. Yet the French devaluation, on top of the British and American ones, had created a difficult situation.

The Swiss and Dutch devaluations were carried out in an orderly and undramatic fashion, each setting up a new gold price at which the external convertibility of the respective currency was resumed, following the American pattern. The Swiss devalued their franc by 30 per cent,<sup>91</sup> with an additional 1½ per cent cut in its gold value in 1938. The Federal Council, meeting on the day of the French announcement, was at first inclined “to go it alone” and to hold the gold price. It could have done so, in view of the fact that the central bank’s gold reserve had risen twenty-fold since 1913 and covered, in



1932, about 97 per cent of total sight liabilities. But a phone call by the country's largest industrial exporter, demanding in a virtual ultimatum that they increase the price of gold, "helped" the Council to make up its mind over the opposition of Dr. G. Bachmann.<sup>92</sup>

Nonavailability of liquid capital, which had gone into hiding, prompted, in part, the Belgian and French devaluations. The Swiss and Dutch money markets, by contrast, "suffered" in 1936 from lack of demand for capital. This explains, partly, the reluctance of those two governments to devalue. When they eventually did so, it was to a more limited extent than the others. Holland, plagued by an excessive accumulation of domestic municipal and real estate debts, reduced the gold content of the gulden on September 28, 1936, by a bare 19.6 per cent.

## Notes to Chapter Seven

1. See Brown, *International Gold Standard*, chap. 22, for a detailed presentation of the "International Distribution of Credit under the Impact of World-wide Deflationary Forces"; also H. E. Peters, *The Foreign Debt of the Argentine Republic* (Baltimore, 1934). The *Frankfurter Zeitung* of May 12, 1931, reported that 75 per cent of all farmers in Australia were insolvent.
2. Leith-Ross, *Money Talks*, p. 133.
3. See chap. 4, sec. E, above.
4. A banking crisis in Budapest was "quietly suppressed" by the B.I.S. (Bank for International Settlements, Basel) (*Frankfurter Zeitung*, July 7, 1931); 140 million pengoes (\$20 million) Hungarian treasury bills had been placed with four Western central banks. By August 14, a "bank syndicate" had been formed in Bucharest to overcome the Roumanian panic (*Ibid.*, August 14, 1931). See H. S. Ellis, *Exchange Control in Central Europe* (Cambridge: Harvard University Press, 1941), chaps. 2 and 3. Prague was the one Eastern European capital that had not been visited by a banking crisis.
5. See Bennet, *Germany, 1931*, chaps. 3 and 4. The customs union project had been conceived by the Brüning government for domestic consumption, to appease the mounting nationalistic sentiment. Subsequently the project was declared by the International Court in violation of valid treaties.
6. The latter had been shifting since early 1929 from long to short Treasury paper, with the result of distorting the domestic interest rate structure: *Frankfurter Zeitung*, January 1, 1931.
7. *Ibid.*, March 29, 1931. The big banks of Berlin covered up their weakness by purchasing their own shares. This practice boomeranged in the subsequent period.
8. The some 18,500, mostly agricultural, credit associations had no sight liabilities to speak of. The remarkable growth of the German savings banks between 1925 and 1930, largely at the expense of the commercial institutions, is shown in Table VII-1.
9. The story of these tumultuous meetings is told by Lüke, *Von der Stabilisierung zur Krise*, pp. 316–354. See Clay, *Lord Norman*, pp. 375 ff.; Clarke, *Bank Cooperation*, chap. 8; also

- Luther, *Vor dem Abgrund*, and Ellis, *Exchange Control*, chap. 4. K. E. Born's very instructive "political" history of the German crisis, *Die Deutsche Bankkrise*, is also recommended.
10. See chap. 5, sec. B, above.
11. This writer endorsed a proposal by Dr. G. Solmsen (Deutsche Bank) to let all banks declare themselves insolvent and arrange individually with their foreign creditors to repay whatever the "quotas" might be in installments. The *Wall Street Journal* of October 24, 1931, reported this writer as saying that "... there is only the choice left between a unilateral moratorium and some kind of an agreement with the creditors, or a combination of both."
12. In the interest of France, of course. See Geoffrey Warner, *Pierre Laval and the Eclipse of France* (New York: Macmillan Co., 1969).
13. Of the 9.3 billion short-term debt, 3.3 billion marks were owed by the commercial banks, but this was down from 5.9 billion marks owed on July 28, 1931.  
See Tables VII-2 and VII-3. According to the German Bank Inquiry of 1933–1934 (quoted by Born, *Die Deutsche Bankkrise*), Germany's foreign debt before the crisis was RM 25.6 billion gross and RM 15.9 billion net—almost \$6 billion and \$4 billion, respectively. See chap. 5, sec. C, and chap. 6, sec. A, above.
14. The same was true of most other governments in the debtor countries, Italy in particular, a fact that helped to compound the financial confusion.
15. Luther, *Vor dem Abgrund*, p. 221.
16. An international bankers' committee, headed by Sir (later Lord) Walter Layton, of the London *Economist*, gave in August 1931 three reasons for Germany's inability to attract fresh credits: internal political insecurity; external tension; reparation debts. Domestic illiquidity was not noticed. Mentioning it could have been detrimental to the creditors' own reputation.
17. Debt service payments to, and by, Germany (in millions of marks):

	Payments to Germany	Payments by Germany	Net Payments
1925			— 87
1926	340	513	— 173
1927	335	680	— 345
1928	382	945	— 563
1929	400	1,200	— 800
1930	400	1,225	— 825
1931			— 1,300

18. Food prices were artificially bolstered in 1931 by increasingly protectionist foreign trade policies and by direct subsidies to the large farm units—RM 1.1 billion to the East Elbian big farm estates (Osthilfe). About the enmity that Brüning incurred from all sides, see Born, *Die Deutsche Bankkrise*, pp. 180–181.
19. See Table V-5.
20. Schacht took over the Reichsbank in mid-March 1933, this time as Hitler's confidant—a reward to the "Money Magician" for his significant role in bringing the Nazis to power.

Luther was compensated with the ambassadorship in Washington; this ardent Liberal of the Classical School adjusted himself to Nazism—for a while.

21. See chap. 6, sec. A and sec. E, above.
22. See Table VII-3, above, for the composition of Germany's short-term foreign indebtedness. Bresciani-Turroni has rightly emphasized the unsoundness of the "social progress" in which Weimar-Germany had indulged herself: *The Economics of Inflation*, (London: Allen & Unwin, 1937).
23. Born (*Die Deutsche Bankkrise*) has rightly censured the German banks for the incredible neglect of traditional liquidity standards.
24. Bennett, *Germany*, 1931, pp. 310–311.
25. Alexander Gerschenkron, in the *American Economic Review*, May 1969, p. 10.
26. To quote professor Howard S. Ellis (*Exchange Control*, p. 314):

Central European countries were not able to follow the example of England in September, 1931, primarily because of the popular confusion of devaluation with inflation and the danger of a velocity inflation at home through a domestic flight from the currency; because of the opposition of strong political groups, including the Socialist or labor parties; and finally, because of an (undoubtedly exaggerated) regard for the real burden of foreign debts.

Incidentally, Dr. Gerschenkron assisted Professor Ellis in writing the latter's book.

27. See Erich Eyck, *A History of the Weimar Republic*, vol. 2 (Cambridge: Harvard University Press, 1967), pp. 464–ff.; M. Palyi, "Economic Foundations of the German Totalitarian State," *American Journal of Sociology*, January 1941.
28. Clay, *Lord Norman*, pp. 116–117, 125.
29. *Ibid.*, p. 395.
30. Moreau, *Souvenirs*, p. 330. As Norman meant to impress on Moreau the Bank of England's inability to raise the discount rate, he may have "chosen" the above figure accordingly.
31. Clay, *Lord Norman*, pp. 332–334.
32. The Macmillan Committee's figure of the short-term foreign debt (quoted in chap. 5, sec. C, above) was £400 million—an underestimate in the opinion of John Maynard Keynes (quoted by Morton, *British Finance*, p. 35).
33. It soon became known that N. M. Rothchild and Sons got "stuck" in Germany with £75 million. Other hard-hit London acceptance houses were Schroeder, Kleinworth, Seligman, Japhet. But none was permitted to fail. See R. Lewinsohn, *Histoire de la Crise* (Paris: Payot, 1934), pp. 83 f.
34. Clay, *Lord Norman*, p. 368.
35. Benham, *Monetary Policy*, p. 36.
36. Clarke, *Bank Cooperation*, p. 207.
37. Guiseppi, *Bank of England*, p. 163.
38. See p. 269, below.
39. Quoted by Lüke, *Von der Stabilisierung zur Krise*, pp. 319–320.
40. Throughout his adult life he suffered periodically from nervous breakdowns, accompanied by excruciating headaches. He had consulted with famous psychologists, such as Dr. Carl Jung of Zurich, but there was no other remedy than rest.
41. Boyle, *Montagu Norman*, pp. 268–269; Clay, *Lord Norman*, p. 399.
42. Clarke, *Bank Cooperation*, pp. 178–179, 206–207; also Benham, *Monetary Policy*, p. 36.
43. "The settlement of our colonies was never pursued upon any regular plan; but they were formed, grew and flourished as accidents, the nature of the climate, or the dispositions of private men, happened to operate." (Edmund Burke, *An Account of the European Settlements in America* [London, 1757], pt. 7, chap. 20.



44. Giuseppe, *Bank of England*, p. 164.
45. Benham, *Monetary Policy*, pp. 9-10.
46. Mr. Vissering, the president of the Netherlands Bank, told this writer in early 1934 that he had phoned the Bank of England on September 18, 1931, to inquire whether there was any truth to the rumors about a forthcoming sterling devaluation. The British official emphatically denied it, advising Mr. Vissering that he could have his gold at once if he so wished. See Addendum, below.
47. Benham, *Monetary Policy*, pp. 10-11.
48. There is no evidence available for Professor Henry Clay's contention (*Lord Norman*, p. 219) that a major boost of the discount rate, before "going off" gold, would have been interpreted abroad as a sign of Britain's weakness.
49. See chap. 3, sec. B and sec. D, above.
50. See Table VIII-6 and chap. 8, sec. C, below.
51. Morton, *British Finance*, p. 70.
52. See chap. 2, sec. A, above.
53. See chap. 2, sec. B, above.
54. See Addendum at end of this section, pp. 276 f.
55. Clarke, *Bank Cooperation*, p. 217.
56. It had been intimated that the decision to devalue was due to British "sensitivity": the Treasury and the Bank found it "undignified" to balance the national budget under pressure of foreign bankers. Was their dignity better served by defaulting? Actually, both Governor Harrison and J. P. Morgan declined Norman's suggestion to request, in early September, of the MacDonald government that the British budget should be balanced at once.
57. The Gold Bloc of 1933 consisted of France, Holland, Belgium, Switzerland, Italy, and Poland.
58. See chap. 8, sec. C, below.
59. Federal Reserve Board, *Annual Report* (1931), p. 11.
60. See chap. 8, Section C, below.
61. The publication, required by Congress, in December 1932 of the list of banks which had applied for assistance from Hoover's Reconstruction Finance Corporation measurably increased the public's anxiety about the condition of the banking system.
62. See chap. 8, sec. C, below.
63. League of Nations, *International Currency Experience*, p. 120.
64. John Brooks, in *The New Yorker*, September 13, 1969, p. 115. "Patently, F.D.R., a brilliant politician but an economic dilettante, had fallen victim to one of the perennial and surprisingly numerous American species . . . the monetary nut." (*Ibid.*, p. 110.)
65. G. F. Warren and F. A. Pearson, *Prices* (New York: John Wiley, 1933).
66. "Washington had become a Mecca for goo-goos of all types," Raymond Moley wrote later. (Brooks, in the *New Yorker*, September 13, 1969, p. 11.)
67. See W. E. Spahr, *The Monetary Theories of Warren and Pearson* (New York: Farrar and Rhinehart, 1932); B. M. Anderson, *Economics and the Public Welfare* (New York: Van Nostrand, 1969), chaps. 51, 52; J. D. Paris, *Monetary Policies of the United States, 1932-38* (New York: Columbia University Press, 1938), chap. 2; *Federal Reserve Bulletin*, 1936, p. 118, and 1938, p. 633.
68. See chap. 9, sec. A, below.
69. Quoted by Paris, *Monetary Policies*, pp. 168-169.
70. *Index* (Stockholm), December 1933, p. 246.
71. See chap. 6, sec. E, above.
72. Brown, *International Gold Standard*, vol. 2, p. 1287. Another country still on gold in 1933—although not for long—was Estonia.

73. The Italian lira had been slipping since early 1934. It was devalued in September 1936 to the dollar parity level; that is, to 59 per cent of the old parity.
74. See Fernand Bauduin, *La Dévaluation du Franc Belge* (Bruxelles, 1936). B. S. Chlepner (*Belgian Banking and Banking Theory* [Washington D.C.: Brookings, 1943], pp. 52 ff.) emphasized the "inordinate expansion" of Belgian "financial intermediaries."
75. Sauvy, *France entre Guerres*, vol. 2, p. 105.
76. See Table VII-4.
77. See chap. 3, sec. C, above.
78. See Morton, *British Finance*, p. 158; also, J. Sylvestre, "La Politique de la Dévaluation: L'Exemple Belge," *Revue d'Economie Politique*, November–December 1937, pp. 1506–1536.
79. In contrast to France and Holland, Switzerland had no losses in connection with the British devaluation. The sterling holdings of the Swiss National Bank had been converted before the event. See F. Bebie, *Die Abwertung des Schweizer Frankens* (Ph.D. diss.: Zurich, 1939), p. 19.
80. See the instructive study by Jean Lescure, *L'Epargne en France, 1914–1934*, 2nd ed. (Paris: Domat-Montchrestien, 1936). French private gold hoards were estimated at the equivalent of about \$1 billion of new parity.
81. With expenditures rising and revenues falling, more deficits were in prospect. See Mersain-Marlin, *Le Problème Financier, 1930–1936* (Paris, 1936).
82. Sauvy, *France entre Guerres*, pp. 383, 538 ff. See chap. 6, sec. C and sec. D, above. Price supports and other subsidies were boosting French farm output.
83. L. Rist and P. H. Schwab, "La Balance des Paiements," *Revue d'Economie Politique*, May–June 1938, pp. 520–532; Roger Auboin, "The Blum Experiment," *International Affairs* (1937), pp. 499 ff.
84. Mogenet, *Economie Française*, pp. 127 ff.
85. Sauvy, *France entre Guerres*, pp. 228 ff.
86. Sedillot, *Le Franc*, pp. 268 ff.
87. See Charles Rist, "The Financial Situation of France," *Foreign Affairs*, July 1938, p. 606.
88. Quotas covered the entire field of foreign trade in industrial products. See F. A. Haight, *A History of French Commercial Policies*, book 3 (New York: Dutton, 1941).
89. League of Nations, *International Currency Experience*, pp. 118, 137–138; Clay, *Lord Norman*, p. 460. See chap. 1, sec. C, and chap. 5, sec. C, above.
90. G. Natana, "Swiss Franc in Danger?" *Barron's*, May 7, 1934.
91. See Table IX-1, below. The Swiss National Bank was obligated to buy gold at frs. 4869.80 per kilogram ("franco" Bern) and sell it at frs. 4973.22, thus establishing a dollar parity between frs. 4,285 and frs. 4.46 per dollar. See *Schweizerische Nationalbank* (Zurich, 1957), pp. 116 ff.
92. Information from the late President Bachman of the Swiss National Bank. Posthumously, as it were, Swiss universities produced dissertations to show that devaluation was necessary in order to restore "purchasing power parity" between the Swiss franc, on the one hand, and the U. S. dollar and the British sterling, on the other. In reality, Switzerland's prime commercial problem was the "dumping" practices by neighbors entrenched behind exchange restrictions (Germany, etc.). See K. Schneider, *Die Entwicklung der äusseren Kaufkraft des Frankens in den Jahren 1925–38* (Bern, 1949); F. Bebie, *Abwertung des Schweizer Frankens*; Hans Aepli, *Schweizerische Handelspolitik . . . September 1936 bis September 1939* (Uznach, 1944).

*Monetary Analysis of Boom and Bust***Introduction**

WITH THE EX POST facto wisdom of more than a generation it seems fairly obvious that the great boom of the 1920's was inherently unsound, and that the Great Depression of the 1930's was in part at least the result of many unnecessary blunders. But although the experts agree that wiser policies could have limited the inflationary boom and the subsequent collapse and depression, even today they differ widely in their explanations and in the remedies they suggest. Was the collapse the result of a speculative orgy during the 1920's, or was it due to the failure of the central banks, and especially of the Federal Reserve System, to provide the economy with adequate liquidity?

The latter, the monetarist view, has been fashionable for decades and remains popular to this day, even though it is clearly based on fundamental misconceptions of the economic processes. Even though prices were quite stable during the second half of the 1920's, the boom was clearly inflationary. The fact that wholesale and consumer prices are stable, as they were in the 1920's, and again during the first half of the 1960's, is no assurance that inflationary forces are not at work. Price increases, as the late Professor Walter Spahr often emphasized, are merely a symptom of inflationary pressures. Infla-



tion may, and very often does, take the form of a vast increase in credit and the supply of money, a large growth in the public, corporate and private debt, and sharply rising security and real estate prices—all of which was the case during the 1920's.

Even the money supply by itself is not an adequate indication of the inflationary pressure. The use to which credit has been put, and the liquidity of the banking system, are at least as important indicators of the state of the economy as the volume of money and credit. The purely mechanistic interpretation of the quantity theory of money, popular with the monetarists, represents a gross oversimplification of the economic processes. More often than not, the volume of money is the result rather than the cause of the state of the economy, and an artificial increase in the supply of credit by the central bank during a deep depression does not mean that the economy will be ready to make use of the additional credit. The money supply depends to a large extent upon the demand for credit, which in turn depends upon a multitude of factors, i.e., the prevailing economic "climate." You can pull a string, i.e., restrict credit; but you cannot push it.

One of the basic reasons for the failure of the monetary policies of the 1920's and 1930's was the fact that then—as now—there was no clear understanding of the nature of the instrument—money—by which the monetarists claimed to be able to control cyclical fluctuations. No fool-proof method has yet been devised to determine the volume of money—i.e., effective purchasing power—and it is even more difficult to evaluate the complex qualitative factors involved.

In addition to the basic lack of understanding of the interaction of monetary and economic forces, psychological and political factors must be considered. The Federal Reserve could and did regulate the discount rate—although with little effect on the economy—but it did not attempt to control the wild fluctuations of the call money market which drained credit from the economy and from foreign money markets. But even if the Federal Reserve had been able to curb the influx of funds into the stock market, who would have been willing to assume the responsibility for breaking the stock market boom, and end, even if temporarily, the general prosperity? (G. C. Wiegand)

### A. When a Boom Is Not a Boom

If a monetary system “failed,” as the postwar gold standard apparently did, the obvious inference is that it was either inherently defective or had been mismanaged. In any case, there is virtual unanimity among professional observers that fundamentally wrong monetary policies were pursued. Interest rates and the money supply were mismanaged by the central banks during the period leading up to the world-wide breakdown of the gold standard.

But the agreement goes no further. At this point a wide chasm separates two main schools of thought. The members of the orthodox or classical school hold that an excessive money supply and lax credit policies permitted and indeed fostered the escalation of a cyclical upturn into the unrestrained boom of the 1920's. The members of the “neoteric” or monetarist school, on the other hand, regard “high” interest rates and an insufficient money supply, if not actual deflation, beginning in mid-1928 or even before, as the real cause. The orthodox school recognizes the quantitative as well as the qualitative elements in the credit expansion which led to the crisis. The monetarist denies or minimizes the significance of the qualitative aspect. According to the orthodox interpretation, the catastrophe of 1929–1933 was the inevitable outcome of public and private policies, and since the money supply had become excessive, enlarging it further in the crisis was futile, or worse. The monetarist's interpretation, on the other hand, denies that the crisis and depression were inevitable and asserts that by pursuing a liberal policy of money creation, the Great Depression could have been avoided or at least minimized.<sup>1</sup>

The first question, then, is: Did the American, and international, economic phenomenon of the 1920's qualify as a boom? The consensus, both academic and “practical,” has been, and still is, that, by historical comparison, the boom of the late 1920's was one of extraordinary dimensions. That, indeed, is indicated by all available data. Yet, at the outset of the 1929 crisis, leading stock market operators, with their own speculative engagements at stake, answered the question in the negative, as has already been discussed.<sup>2</sup> They were later joined by a Harvard economist, Lauchlin Currie, whose 1934 essay became a “classic” of the reinvigorated quantity theory of money.<sup>3</sup>

Currie claimed that there was no boom in the 1920's—insisting on a definition of the word “boom” that suited his purpose. This is a matter of semantic intent, and irrelevant. Currie's point of view, presented as the strict application of an axiom, was that “the major part of the rise in stock [values] appeared reasonable and defensible on the basis of the then existing knowledge . . .” In other words, pragmatically anything the stock market does is justifiable *at the time*; it can never be proven that its judgment was wrong. By the same token, the market cannot commit major errors in estimating future profits; nor can the practitioners be blamed for neglecting the traditional standards of sound financial management. Furthermore, the monetarists insist that economic progress would have been stymied without the outpouring of money into speculative ventures, for “risk-taking” enterprise, the carrier of “progress,” would have been deprived of the adequate financial wherewithal.<sup>4</sup> But is it the function of commercial banks, the guardians of the liquid funds of business and the public, to venture into risk-loaded enterprise, to violate the rules of prudence and trusteeship?

Lofty rationalizations have been presented to the effect that there was nothing basically objectionable about the credit practices of American banks prior to the crucial occurrences, except for some foreign loans.<sup>5</sup> Friedman and Schwartz provide a characteristic sample of monetarist technique.<sup>6</sup> They ask why about 15,000 banks closed between the end of 1919 and the end of 1933, with some 6,000 failing before 1930. Their answer rests on a fanciful distinction between *ex ante* and *ex post* considerations. What happened later could not have been foreseen in advance. “These failures had no connection with the possible decline in quality of credit . . . They were primarily explained by improvements in transportation and an increase in urbanization which benefited the large banks at the expense of the small, and by the agricultural difficulties of the Twenties.” Not a single reference to sources was offered to support the contention that the “villagers” in the Middle West deserted their local banks in favor of city institutions. Actually, the literature analyzing country bank failures gives not even a hint of such developments. But it does list causes of bank failures ignored by the monetarists, such as poor credit judgment, irresponsible real estate speculation, unqualified “bankers,” insufficient capital, and frivolous risk-taking. These were



among the chief causes of country bank failures, according to the consensus of analysts.<sup>7</sup>

If no credit is a bad credit until it becomes uncollectible, then the banker's role is reduced to that of a credit-dispensing automaton, without a relevant function in allocating capital by discriminating in favor of economically justified undertakings. By this token profitability and safety of investment may be disregarded as criteria. True, it is easier *ex post* than *ex ante* to pass judgment on the soundness of a loan, but unless we believe that credit should be expanded without regard to the use made of the funds, foresight and caution on the part of the lenders and investors has to be the condition *sine qua non* of rational policy. Allocative considerations are significant, also, because the public's confidence in the liquidity and solvency of the banks is essential to the credit system's sustained operation. No such problems exist in a closed (totalitarian) economy. But in a free market economy, in which the entrepreneur faces the risk of failure, it is incumbent upon the banker to minimize the risk he incurs while using other people's money. This is the ultimate meaning of "liquidity," namely defensive hedging in order to avoid becoming illiquid or even insolvent.<sup>8</sup>

It is customary to refer to a financial panic as a "liquidity crisis" and to distinguish between the domestic and the external kind. As to the former, the term "liquidity crisis" implies a shortage of funds due to the failure of the monetary authority to provide sufficient reserves for the payment of deposits. By this interpretation, it is not only alleged, frequently, that the illiquidity should be relieved, but also that the "penalty" for the previous imprudent banking, illiquid lending, and reckless speculation, should be waived. To this lopsided approach it makes no difference whether a bank has lent its funds on a dubious collateral of long maturity, or on a relatively short-term, self-liquidating asset. Monetarists disparage the concept of self-liquidating loans as the basis for credit, referring to it as the "real bills doctrine." Actually, genuine commercial paper has been and remains the kind of money market instrument most suitable to protect the liquidity and solvency of the banking system. Of course, the problem of bank solvency is eliminated if the central bank is supposed to validate all kinds of debts; but if that becomes so, it risks losing all control over the nation's money supply.

## B. The Money Supply Approach

There is something intellectually seductive about the attempt to explain major shifts in price levels and business activity by changes in the volume or the price of money, or both. Such explanations have the “charm” of a simple formula, relieving the analyst of the burden of studying a multiplicity of complex market phenomena and their interrelations; and it offers itself as a “scientific” device to control the pulsations of the economy. As John Maynard Keynes put it before the Macmillan Committee, “. . . though the monetary factor may be only a balancing factor, it is *the most controllable factor*, as it is one which can be operated by a central authority merely by a decision, whereas the other factors are under the control of all kinds of casual [sic] matters, on which nobody can give instructions, or exercise control or give forewarning. Therefore, so far as executive people, those concerned with decisions, are concerned, the money [supply] factor is of importance . . .” It bespeaks the intellectual honesty of Keynes to have revealed the “social engineering” (and single decision) motivation underlying the allure of the monetarist—the quantity theory—type of approach.

Evidently, the “single decision” must emanate from a “single authority,” preferably the one who issues the “high-powered money” that constitutes the member banks’ reserves and enables them to expand credit. The crucial point in the monetarist assumption, or axiom, is that the public borrows and the banks lend *automatically* as the bank reserves expand or contract. From there, the *non sequitur* is deduced: if bank credit contracted in 1929 and after, it did so because Federal Reserve funds had been withheld, and the want of them, or their reduced rate of expansion, brought about the depression. The latter could and should have been mitigated, or precluded, simply by boosting the bank reserves. The theory takes for granted that there are always credit-worthy people around who are willing to incur additional debts. But *are* there always eligible debtors? And what if both banks and prospective borrowers use their funds to repay debts or to improve their liquidity position, rather than to invest and spend? That is precisely what happened in the Great Depression. The methodology underlying the monetarist approach, borrowed as it is from mechanics, assumes automatic processes rather than often unpredictable human behavior.

Turning to the records, they show a tremendous increase in the money supply of the United States between 1914 and the end of 1929. As a first approximation, we are using the term “money supply” in a conventional sense, which is open to at least twenty interpretations:<sup>10</sup> currency in circulation, plus total adjusted bank deposits, including savings and time deposits. In these terms, the American money supply increased in fifteen years from \$20.239 billion to \$54.-850 billion, an extraordinary annual average rate of growth of more than 10 per cent. This was better than a 150 per cent increase in fifteen years. It was offset partly by a 60 per cent rise of the general price level in terms of the wholesale index, and partly by a 58 per cent increase in total physical production. Another portion of the inflated money volume served the tremendous expansion of transactions, at rising prices, on the real estate and security markets. On top of the money flood, money’s velocity of circulation had accelerated: the annual rate of demand deposit turnover (“transaction velocity”) rose between 1919 and 1928 from 35.0 to 53.6.<sup>11</sup> Patently, rapid inflation of the “effective” money supply (volume times velocity) was the earmark of the years 1914–1929 despite periodic interruptions. Yet the “raw” figures do not fully reflect the monetary expansion. Between 1921 and 1929, some \$1.8 billion in deposits were wiped out through bank suspensions, so that the reported growth of the “money stock” represented a *net* increase, after allowing for the wiped-out deposits. The inflationary trend was halted with the crisis of 1920–1921; but even in the years 1921–1929, the “effective” money supply, as defined above, outpaced the index of physical production. Between 1914 and 1929 the index of physical production rose from 105.8 to 163.5, or by 54½ per cent, while the money supply (not counting the sharply increased velocity) rose by more than 150 per cent. Between 1921, the bottom of the postwar depression, and 1929, the peak of the boom, physical production rose by about the same percentage, 54½ per cent, while the money supply (depending upon the definition of money) increased by about 30 per cent to 70 per cent.<sup>12</sup>

A narrowly defined “money supply”<sup>13</sup> reached a zenith of \$57.159 billion at the end of October 1929 and declined thereafter almost continuously until early 1934. “The [1929–1930] decline in the stock of money is especially notable because it took place in a monetary and banking environment that was in other respects free of market



TABLE VIII-1

Annual Physical Production in the United States Relative to  
the Average for 1909–1913 as 100, 1880–1930

Year	Total Production	Crop production	Mineral production	Manufacturing production
1880	34.5	51.0	13.1	27.0
1890	47.2	55.8	30.2	44.3
1900	67.4	80.9	51.3	61.0
1910	97.4	99.1	98.1	96.0
1913	106.7	99.0	111.7	111.1
1914	105.8	111.5	105.8	102.1
1915	115.2	117.4	112.9	114.1
1916	123.3	102.7	126.7	136.0
1917	126.8	109.1	135.7	137.1
1918	125.9	110.0	136.2	134.8
1919	123.6	112.0	120.0	131.7
1920	133.1	122.3	137.3	139.7
1921	105.7	101.1	109.0	108.1
1922	130.0	112.2	118.8	143.1
1923	148.7	113.0	163.2	169.8
1924	139.6	110.9	151.2	156.4
1925	151.7	114.2	156.0	175.1
1926	155.5	116.2	169.5	178.7
1927	152.5	115.5	168.3	173.9
1928	158.7	121.0	167.0	181.5
1929	163.5	114.4	179.0	192.9
1930	136.4	106.2	154.7	153.3

SOURCE: Warren M. Persons, *Forecasting Business Cycles* (New York: John Wiley, 1931), p. 171.

difficulties.”<sup>14</sup> The foregoing sentence by Friedman and Schwartz epitomizes the monetarists’ confusion by implying that the contraction of the money supply was brought about artificially. The “money stock” rose until late 1929; it contracted in 1930 because the demand for money fell off, and did so for several reasons, most important of which was the massive cancellation of collateral loans and the failure of many small banks. But the stock exchange crisis and the bank failures have simply been ruled out of monetarist consideration; they do not fit into the frame of reference of business cycle theory in terms of monetary aggregates.

Frequently the monetarists disregard the long-term growth of the “money supply.” What matters, allegedly, is the fact that its short-term—i.e., year-to-year—growth rate has been reduced or reversed. From \$55.505 billion at the end of 1928, the money supply fell to \$54.850 billion a year later, a “deflation” of \$658 million or of a fraction of over 1 per cent. And even this minute reduction occurred in the last two months of 1929. And a closer look discloses that there was no contraction at all.

At the end of October 1929, the figure was \$57.158 billion, or more than 5 per cent higher than a year earlier,<sup>15</sup> although the stock market liquidation had already started before the last of October. *Since it was preceded by credit expansion, the great crash cannot be explained in terms of credit contraction.* There had been no credit-shortening before the crash, despite bank failures. It was the liquidation of brokers’ loans at the end of 1929, after the crash got under way, that accounted for the decline of the money volume. Liquidation started for reasons indicated above.<sup>16</sup> Credit curtailment was the consequence of the underlying developments, rather than the cause.

The pre-1929, almost continuous monthly increases in the money stock would appear to have been even more pronounced if the money supply concept were revised in realistic terms. Money is what people consider as “liquid” holdings which they can readily use at face value to pay debts and to make purchases. A person considering a down-payment on the purchase of a house would scarcely be inhibited by having his funds kept as a “share” in a savings and loan association rather than as a “deposit” in a commercial or savings bank. By the computations of R. W. Storer,<sup>17</sup> the total money supply, including the public’s “near-money holdings,” *without the cash surrender value of life insurance policies*, grew from \$42.3 billion in 1921 to \$61.8

**TABLE VIII-2**  
**Real Money and Principal Near-Money Assets**  
**Held by the Public, 1920-1940**  
**(\$ billions)**

Year	Money <sup>a</sup>	Near-money holdings <sup>b</sup>	Ratio of near money to real money
1920	\$23.7	\$21.0	\$ .89
1921	20.8	21.5	1.03
1922	21.4	22.6	1.06
1923	22.7	25.2	1.11
1924	23.1	27.6	1.19
1925	24.9	30.2	1.21
1926	25.6	31.9	1.25
1927	25.5	36.3	1.42
1928	25.9	37.7	1.46
1929	26.4	37.4	1.42
1930	24.6	39.1	1.59
1931	21.9	38.4	1.75
1932	20.4	33.3	1.63
1933	19.8	31.0	1.57
1934	23.1	33.3	1.44
1935	27.0	33.8	1.25
1936	31.0	33.4	1.08
1937	29.6	35.1	1.19
1938	31.8	35.3	1.11
1939	36.2	36.4	1.01
1940	42.3	39.0	.92

SOURCE: Robert W. Storer, "Problems of Near-Money versus Real Money," *Financial Analysts' Journal*, March-April 1965, p. 4.

<sup>a</sup>Demand Deposits and Currency, June 30, 1920-1928; December 31, 1929-1940.

<sup>b</sup>Includes time deposits in commercial and mutual savings banks, savings and loan shares, credit union deposits, postal savings deposits, U.S. savings bonds (at redemption value), U.S. Treasury securities maturing in one year or less (excluding Federal Reserve and U.S. Government agency holdings), commercial and finance paper and bankers' acceptances. All data are as of December 31, seasonally adjusted where possible, except commercial time deposits, 1920-1940, which are June 30 figures.



billion at the end of 1928 (or \$63.8 billion at the end of 1929), a 50 per cent growth in eight years.<sup>18</sup> But in the same eight years, "prime money" itself, meaning cash and demand deposits, showed an advance of barely 25 per cent. The "near-money" component of the total supply of means of payments ran ahead of the "prime money" component both ways, upward in the boom and downward in the depression.<sup>19</sup>

It is characteristic of the monetarists' tendency to oversimplify that they employ a concept which limits the dimension of money, arbitrarily omitting what does not fit their pragmatic purpose. What matters is not a narrowly circumscribed and forced "money supply" notion but a feeling for the over-all "liquidity" position of the economy. As the British Radcliffe Committee *Report* cogently put it:

The immediate object of monetary action is to affect the level of total demand . . ."

. . . Monetary action works upon total demand by altering the liquidity position of financial institutions and of firms and people desiring to spend on real resources; the *supply of money* (in the narrow sense) itself *is not the critical factor*. (Italics supplied.)<sup>20</sup>

A fundamental error of the monetarists is to emphasize the ready availability of money, as if it were the decisive factor affecting the business cycle. In reality:

It is the whole liquidity position that is relevant to spending decisions . . ."

The decision to spend thus depends upon liquidity in the broad sense, not upon immediate access to the money. This is most clearly seen in the giant industrial firms, making plans for their constructional development two, three and four years ahead of much of the actual spending; but this is merely an extreme example of what is being done throughout the economy, by spending units great and small, all the time. *The spending is not limited by the amount of money in existence; but it is related to the amount of money people think they can get hold of*, whether by receipts of income (for instance from sales), by disposal of capital assets or by borrowing."<sup>21</sup>

Omitting the short-term credit instruments, the so-called money substitutes, held by the non-bank public, the conversion of which into cash at face value can be "forced," is not without motive.<sup>22</sup> Such

instruments are beyond direct quantitative control by the central banker, i.e., the social engineer and the economic planner.

In all industrial countries, "transferable credit instruments" constitute a significant portion of the total money supply. The Radcliffe *Report's* view has been effectively endorsed by a Canadian expert, Dr. A. N. Macleod, of the Toronto-Dominion Bank:

To the extent that *transferable trade credit instruments* are actually used to settle transactions they constitute the *introduction of a new form of money* into the theoretical model . . . What is significant here is not the volume of such instruments that is outstanding in a given place and time, but the willingness of the public, or of a significant portion of the public, to accept them as a means of payment. It would seem that there is a *substantial volume of* [commercial] *paper* in many if not most advanced money economies that is technically just *as transferable as a cheque on a bank*, needing only the simple endorsement of the drawee or the holder in due course. . . . This is surely true of Britain, where the acceptance houses still ply their traditional trade and by their endorsement underwrite the credit of the drawer of the paper. (Italics supplied.)<sup>23</sup>

If the object is to prove that prosperity can be activated, or maintained, by regulating the "supply of money," this pragmatic philosophy involves several gratuitous assumptions:

- a) that the "money supply" can be defined and measured in any but an arbitrary fashion;
- b) that changes in the outstanding central bank credit are the strategic factor in determining the loans and investments of commercial banks; and
- c) that the latter, in turn, are the sole, or main, determinants of the significant economic "variables" in the business cycle.

These hypotheses overlook the fact that the "velocity" of money's turnover, which is or can be an independent variable, is just as significant for gauging the "work" money performs as its quantity is.<sup>24</sup> But the above hypotheses are "old-timers" in the never-ending debate about the fundamentals of credit policy. Actually, the above monetary analysis of the Radcliffe *Report* was a refined and elaborated restatement of the mid-nineteenth-century doctrine known as the Banking School. Similarly, the monetarist approach is an attempt

to revitalize the defunct Currency School, with the Cassel–Kitchin axiom of an annual 3 per cent growth of the gold supply being the necessary condition of stability.<sup>25</sup> The following passage from John Stuart Mill may serve as an early restatement of the antimonetarist point of view:

Not only has this fixed idea of the currency as the prime agent in the fluctuations of price made them shut their eyes to the multitude of circumstances which, by influencing the expectations of supply, are the true causes of almost all speculations and of almost all fluctuations of price; but in order to bring about the chronological agreement required by their theory, between the variations of bank issues and those of prices, they have played such fantastic tricks with facts and dates as would be thought incredible, if an eminent practical authority had not taken the trouble of meeting them, on the ground of mere history, with an elaborate exposure. I refer, as all conversant with the subject must be aware, to Mr. Tooke's *History of Prices*. The result of Mr. Tooke's investigations was thus stated by himself, in his examination before the Commons Committee on the Bank Charter question in 1832; and the evidences of it stand recorded in his book: "In point of fact, and historically, as far as my researches have gone, *in every signal instance of a rise or fall of prices, the rise or fall has preceded, and therefore could not be the effect of, an enlargement or contraction of the bank circulation.*"<sup>26</sup> (Italics supplied.)

In other words, by historical evidence, the demand for money is the prime factor that determines the money supply.

The assumption that the central bank has the power—within the framework of a gold standard—to regulate at will the money supply, however defined, ignores an elementary fact of life, namely, "an expansion of credit always involves somebody going into debt. It seems to be one of the easiest things to overlook in an abstract statement about credit, that it always involves indebtedness . . . The question [of the availability of eligible assets] turns upon the whole set of business circumstances and not merely upon changes in the quantity of one element in the [quantity theory] equation."<sup>27</sup>

Even assuming that a close correlation could be established at all times between the volume of "high-powered money"—legal tender or its equivalent—issued by a central authority and the money supply, which is an unrealistic assumption,<sup>28</sup> the relation of the latter to such economic magnitudes as the price level, let alone the real na-



tional income, would be tenuous indeed. Nonetheless, the monetarist construction is predicated on the assumption of close long-term correlations.

Controversial monetary theory is beyond the scope of this book. It may suffice to relate a few more examples of noncorrelation. "During the last eight years," W. W. Stewart told the Macmillan Committee in 1930, "demand deposits in the United States have gone up by more than 40 per cent, but prices have declined. The volume of bank [demand] deposits in the country [United Kingdom] is approximately the same as in 1920, but prices are 60 per cent lower and are still declining." In the United States all commercial bank loans and investments increased between 1919 and 1928 by 50.1 per cent, whereas the wholesale price index declined by 24.6 per cent.<sup>29</sup>

Is the theory supported by a short-term correlation? That is the monetarists' claim: they take it for granted, without proof, that if the money supply and prices move in the same direction, the former must be the causal factor, although they admit occasionally that the demand for money is an "independent variable."<sup>30</sup>

As to the alleged relatively short-run correlation between money supply and price level, one conspicuous sample of recent British experience may do:

Between February, 1955, and mid-1956, the volume of bank deposits . . . fell by 7 per cent; in the second half of 1956 it retraced only a small part of its downward path. On the average, clearing bank deposits were 3 per cent lower in 1956 than in 1955. Moreover, the level of bank advances, which the government evidently regards as a more critical element in the finance of inflationary spending, was reduced by approximately 10 per cent in the year following the Chancellor's directive to the banks in July 1955.

How is it, then that the economy was able in 1956 to finance an 8 per cent increase in gross national expenditure, almost wholly reflecting a rise in costs and prices? The answer is, of course, that *inflation does not require an increase in the quantity of money if it can be financed by a more rapid turnover of the existing money stock.* (Italics supplied.)<sup>31</sup>

There is nothing paradoxical about "inflating with a falling quantity of money" when "money" is defined as just currency and demand deposits. The near-money components of the total supply may have been augmented. In fact there is a constant shifting, back and

forth, between the two media, a spontaneous, scarcely controllable shifting.<sup>32</sup> For this reason alone, the quasi-authoritarian power of central banks over the supply of purchasing power and, especially over other economic variables, is limited—*except in hyper-inflation*.

The monetarist approach is, however, myopic in still another respect. It overlooks the synchronization of international price and employment trends under the gold standard, or, for that matter, any standard not subject to major foreign exchange restrictions which links the major currencies on the basis of reasonably stable foreign exchange rates. Of course, in the 1920's, American prices played "first fiddle" on the world markets. But the foreign influence exerted on the American commodity markets was far from negligible. Is it necessary to point out, as an example, the influence of foreign demand—and foreign prices—on the price of American cotton? Changes in the effective money supply of major foreign countries may affect domestic price expectations directly and indirectly. Now then, the *total* supply of outstanding liquid pounds sterling, as an example, doubled between 1913 and 1924. It stagnated in 1925, the year of sterling's return to gold, but started to climb again in the following year. By 1932 it had risen by another £400 million (14 per cent), as shown in Table 3, below, despite Norman's efforts to "disinflate." The rise was probably even steeper, if the cash surrender value of British life insurance policy reserves were taken into account. In addition, the velocity of British demand deposits rose consistently throughout the period. The British index of velocity stood at 81.9 in January and at 81.7 in July of 1920; it registered 117.8 and 117.5 respectively in 1927 and 1928.<sup>33</sup>

Even more spectacular was the near-doubling of the German money supply between 1924 and 1929,<sup>34</sup> and the more than 50 per cent increase of the French money supply after the *de facto* stabilization of the franc at the end of 1926.<sup>35</sup> In both cases no complete data on deposits in savings institutions and other privately held "liquid assets" are available. But the expansionary trend was unmistakable; it dominated virtually every single monetary system—with or without adequate gold and foreign exchange reserves.

In short the 1920's were an era of world-wide credit expansion. Its most spectacular phase was the large-scale financing of inflated security and real estate values, especially in the United States. Such overcapitalized values were not reflected in the price level indices, which has generated confusion. Both Lauchlin Currie

TABLE VIII-3  
Money Supply in the United Kingdom, 1913, 1924–1932  
(£ millions)

Year	Bank notes & currency notes (1)	London clearing banks' deposits (2)	All other: "money" (3)	Total "money" supply (4)
1913	45.7 <sup>a</sup>	1,104.3 <sup>b</sup>	271.8	1,421.8
1924	430.0	1,678.9	781.7	2,890.6
1925	417.7	1,668.5	797.1	2,883.3
1926	409.0	1,698.8	805.8	2,913.6
1927	412.9	1,748.1	809.0	2,970.0
1928	411.6	1,807.2	813.0	3,031.8
1929	394.5	1,800.7	817.5	3,012.7
1930	392.2	1,847.1	832.3	3,071.6
1931	389.6	1,722.5	861.4	2,973.5
1932	393.2	1,925.0	906.1	3,224.3

SOURCES: For 1913: J. Kiltee, *The Statesman's Year-Book, 1915*, (London: St. Martin's Press, 1915). For 1924–1932: Board of Trade, *Statistical Abstract of the United Kingdom* (London: His Majesty's Stationery Office, 1935).

Column (1) Weekly average amount of banknotes and currency notes in circulation in the quarter ending December 31 of each year. The figures exclude Bank of England Notes held in the Currency Notes Redemption Account from August 6, 1919, to November 21, 1928, and in the Banking Account of the Bank of England throughout. On November 21, 1928, note issues of the Bank of England and the Currency Note Commissioners were amalgamated.

Column (2) Average weekly position of current deposit and other accounts during the quarter ending December 31 of each year.

Column (3) Includes savings certificates, deposits in building societies, deposits in trustee savings banks, and deposits in post office savings banks.

<sup>a</sup>It is estimated that (excluding gold coin held in the Issue Department of the Bank of England) gold coin to the value of £123 million was in circulation in the United Kingdom on June 30, 1914.

<sup>b</sup>Deposits and current accounts of 44 English joint stock banks, 8 English private banks, 9 Scottish joint-stock banks, and 9 Irish joint-stock banks.

and Friedman and Schwartz have insisted, as have many others, that there was no inflation in the 1920's, since "prices" did not rise.<sup>36</sup> Actually, the inflation of the "general price level" in the 1920's was "hidden." It was offset by lowered costs, increased labor productivity. Hence the appearance of No-Inflation, which misled the monetarists, who simply ignored in this context the "price level" inflation of real estate, common stocks, and, above all, the *inflation of profits*.



TABLE VIII-4  
French Money Supply, 1924–1932  
(billions of francs)

Year	Money Supply <sup>a</sup>
1924	59.465
1925	75.256
1926	80.130
1927	88.742
1928	103.189
1929	107.271
1930	117.435
1931	125.346
1932	123.607

SOURCE: League of Nations, *Statistical Yearbooks, 1931–1932, 1935–1936* (Geneva, 1932, 1936).

<sup>a</sup>Money supply: currency in circulation plus short-term (bank) deposits (current accounts and deposits in six correspondent banks).

A curious aspect of the quantity theory approach is its lack of precision in the use of quantitative terms and the ambivalence of its concepts. Admittedly, nonmonetary factors play a great role in the cycle. How important are they? “To explain secular movements in prices . . . we should look primarily to the money stock, and then secondarily to non-monetary factors that may also have important influence.”<sup>37</sup> Cagan concludes: “The evidence therefore is consistent with, and, taken as a whole, impressively favors emphasis on the rate of monetary growth as the main reason some business contractions, regardless what may have initiated them, became severe.” In other words, the money supply is always the causal factor, even if its variations were “initiated” by non-monetary factors. The logic is “irresistible.” For “mild cycles,” Cagan found “clear evidence of the influence of business changes on the quantity of money . . . mutual dependence is the rule.”

The fascination with the money supply causes the monetarist to overlook other, often equally important elements in the economic equation; or sometimes such elements are eliminated by recourse to additional arbitrary assumptions. He assumes that velocity of circulation of money may be irrelevant because it *tends* to rise and fall

with the money supply. This is frequently true, but not always, and changes in velocity, or its reciprocal, the holding of balances, can make all the difference in quantitative terms. Moreover, the expansion of debts which, for the most part, are not monetized, may affect directly the price level represented by conventional indices. In fact, the growth of the volume of mortgages, corporate bonds, and other debt instruments was a decisive factor in pre-crash cyclical developments, as we have seen.<sup>38</sup> Indeed, the great boom could never have developed without the tremendous rise in nonfederal debts, shown in Table VI-5.

The monetarist approach is incapable of explaining either the great boom whose occurrence in effect it denies, or the subsequent Great Depression. The list of its weaknesses is long indeed. The single-minded obsession with the money supply as the determining element in the cycle sidesteps the *demand for money* as an “independent variable,” independent of central bank policy, as mentioned before. It claims that changes in the money supply are the governing “variables,” but admits that they operate with lags which are not only notoriously long but also vary in an unpredictable fashion and for these reasons alone disqualify as policy guide posts. To quote Dr. Friedman:

In the National Bureau study on which I have been collaborating with Mrs. Schwartz we found that, on the average of 18 cycles, peaks in the rate of change in the stock of money tend to precede peaks in general business by about 16 months and troughs in the rate of change in the stock of money to precede troughs in general business by about 12 months . . . For individual cycles, the recorded lag has varied between 6 and 29 months at peaks and between 4 and 22 months at troughs.<sup>39</sup>

The basic weakness of the latter-day money supply approach has been well summarized by economist Richard Davis of the New York Federal Reserve Bank:

Most . . . economists are agreed that the behavior of the quantity of money makes a significant difference in the behavior of the economy—with “money” usually defined to include currency in circulation plus private demand deposits, but sometimes to include commercial bank time deposits as well.

In the past five to ten years, however, there has come into increasing prominence a group of economists who would like to go considerably

beyond the simple assertion that the behavior of money is a significant factor influencing the behavior of the economy. It is not easy to characterize with any precision the views of this group of economists [which] are rarely stated in quantitative terms. More frequently, the importance of money as a determinant of business conditions will be characterized as “by far the major factor,” “the most important factor,” “a primary factor,” and by similar qualitative phrases inescapably open to various interpretations.

. . . as one moves from the stronger phrases to the weaker, one comes closer and closer to the view that money is simply “a significant factor.” at which point it becomes virtually impossible to distinguish their views from those of the great majority of professional opinions.<sup>40</sup>

The latter-day monetarist approach has a further “blind spot.” It ignores the significance of gold, the metal, which has a “value” of its own, independently of its monetary use. This is an especially important consideration in the foreign exchange value of a nonconvertible currency—fiat money—that is not attached to gold in a fixed ratio. In the short run, at any rate, the value of such currencies in terms of gold, and indirectly in terms of commodities, frequently varies with the prospects of their redeemability, rather than with their outstanding volume. This was conspicuously and almost ludicrously the case under the condition of an inflation of the runaway or “self-inflaming” type.<sup>41</sup>

No one has better summed up the fundamental weakness of the lopsided money supply analysis of business cycles than a leading monetarist did by stating emphatically that “it will still leave for the future for other scholars a full development of a monetary theory of the cycle which incorporates both demand and supply in an empirically meaningful way.”<sup>42</sup> Yes, the “incorporation” of the demand side would change the whole theory. In the meantime we may as well listen to Professor Erik Lundberg, the distinguished Swedish economist:

. . . we have a very limited amount of reliable knowledge in this field that can prove of practical value in the formulation of monetary policy. This is really a paradox. Economists have been discussing problems of monetary policy on a relatively sophisticated level, for about 150 years. A large number of countries have provided us with practical and statistical experiences of monetary policy in various forms and during various phases of the trade cycle over long periods



of time. During the inflationary phases of the inter-war period, as well as during the boom and recession periods of the post-war years, a rich variation of experiments were made and the experiences gained have been studied by skilful or wise economists. And we are still so uncertain as to the effects—and the magnitude of such effects—caused by monetary policy. As I pointed out . . . studies of the experiences of the past decade are most likely to create general scepticism regarding the efficacy of monetary policy and its usefulness in counteracting both an excessively steep rise in demand and a recession.<sup>43</sup>

### C. The Frustrated Federal Reserve System

Throughout the 1920's, Federal Reserve policy was gravely disturbed by the emergence of problems for which there was no precedent. At the same time the traditional guide posts for central bank management had become largely useless.<sup>44</sup>

In the first place, Benjamin Strong “and most of his colleagues had come to ignore the gold reserve ratio” which they could now regulate deliberately, if “within limits,”<sup>45</sup> due to the large gold stock accumulated during the war and armistice periods. Having no “gold problem” until 1931, this quasi-automatic guide post had become virtually inoperative. Instead of gold movements, the short-term ups and downs of business conditions became the System's policy guide posts.<sup>46</sup>

In the second place, the idea of an “elastic currency”—the self-liquidating “real bill” rule written into the System's statutes by Professor H. Parker Willis—had lost its practical validity. As Strong emphasized in a public address delivered on November 28, 1922, the Reserve Banks had no control whatsoever over the use to which the borrowing banks put the funds they drew from the central bank. They could, and did, discount commercial paper with the latter and used the proceeds to purchase bonds or to finance stock exchange speculation. The required collateral a Federal Reserve Bank discounted had no relevance to the allocation of the funds by member banks, which was determined, rather, by the relative level of interest rates. As the speculation in securities heated from 1924 on, the rate on street loans rose and so did the commercial banks' credit volume. It made no difference whether the need, if any, of additional bank

TABLE VIII-5  
Gold Withdrawals under U.S. Gold Standard for the Decade 1923-1932

Year	US gold reserves <sup>a</sup> (\$ millions)	Surplus gold above required reserves (\$ millions)	Foreign short-term dollar balances (\$ millions)	Potential foreign claims as percent of surplus gold	Gold withdrawals by foreign claimants <sup>b</sup> as percent of foreign short-term dollar balances	Percent of gold stock drawn into domestic circulation <sup>c</sup>	Ratio of gold stock <sup>d</sup> to nongold money and bank deposits
1923	3,834	2,182	997	46	—	3.02	8.9
1924	4,090	2,491	1,237	59	—	2.90	9.5
1925	3,985	2,427	1,193	49	8.6	2.74	8.6
1926	4,083	2,519	1,639	65	—	2.68	8.4
1927	3,977	2,353	2,591	110	5.9	2.46	8.3
1928	3,746	2,125	2,483	117	11.0	2.31	7.2
1929	3,900	2,399	2,673	111	—	2.05	7.4
1930	4,225	2,663	2,335	88	—	1.68	7.9
1931	4,052	2,271	1,304	57	13.4	1.81	8.9
1932	4,045	2,078	746	36	—	3.56	8.2
Average				72.9	3.89	2.52	8.33

SOURCE: Compiled by W. E. Spahr, *Monetary Notes* (New York), August 1, 1959.

<sup>a</sup>Annual Report of the Secretary of the Treasury (1954), p. 292.

<sup>b</sup>Including gold under earmark for foreign account.

<sup>c</sup>That is, gold money outside Treasury and Reserve banks as percentages of total monetary gold stock; average of monthly percentages.

<sup>d</sup>Both in and out of circulation, end of June.

reserves was satisfied at the System's discount windows or by its own open market operations.

Much of the time the world's most powerful central bank had less influence on the direction of the domestic money flow than had the relatively weak Bank of England or practically any European central bank within the respective money markets. The Federal Reserve System could, and to some extent did, manipulate the money market rates of interest—but not the call money rate. The System was confronted by serious dilemmas.<sup>47</sup> The huge gold reserve, combined with greatly reduced bank reserve requirements, raised the specter of price inflation.<sup>48</sup> Meanwhile, special interests were pleading in Congress for credit liberalization in order to bolster farm incomes. Between April 1925 and September 1929, despite interruptions, a leading monthly index of industrial common stocks almost tripled, from 82.8 to 225.2. Although the central bankers were increasingly disturbed by the stock market boom, the speculative excesses were encouraged time and again by Governor Strong's easy money policy. The discount rate reduction in August 1927 from an unduly low 4 per cent to 3½ per cent, accompanied by open market purchases on an appreciable scale—the System's security holdings increased from \$254 million on May 11 to \$705 million in November—may have stimulated the speculators. As rates on brokers' loans were "skyrocketing," it would have taken very drastic discount rate increases and a drastic reduction of outstanding Federal Reserve credit to subdue the buoyant spirits; the "mania" was spreading and corrupt practices were flourishing. At one time Strong had advocated credit rationing by the Reserve Banks, but he was overruled and changed his mind. The Reserve Board was unsure in its own mind, and refused, as B. M. Anderson put it, "to play the arbiter of security values."<sup>49</sup> Yet eventually it did interfere, but too late and too little. The "direct pressure," meaning advice to member banks, practiced in the first half of 1929, was a complete failure: the leading Wall Street banks refused to cooperate.

There was, of course, a method available to check the reckless speculation, the one which Belgium and Germany applied in 1927. Imposing substantial margin requirements on security credits, in lieu of none, might have done it.<sup>50</sup> But to most Federal Reserve authorities, such a dirigist intervention was unpalatable. The law of supply



and demand was expected to take care of that problem, and it did, but at a terrific cost.

Despite inflation fears, it would have been difficult to justify a policy of severe restraint, when the liabilities of the Federal Reserve Banks were as much as 70 per cent covered by gold, against legal reserve requirements of only 35 per cent for deposits and 40 per cent for Federal Reserve notes. Surplus gold above required reserves was exceeding the required gold reserves every year by over 40 per cent.<sup>51</sup> Nor is it likely that the Administration, deeply influenced as it was by the financial community, would have welcomed a policy of restraint; for effective intervention might have threatened to break the prosperity altogether. Who, indeed, wished to be responsible for *that*? And who was qualified, in the eyes of the public, to be wiser than the world's leading financial community—which, in reality, had lost sight of the inadequacy of underlying values. The result of the failure to act decisively was a two-tier structure of interest rates: “normal” rates under the central bank's control, more or less, and the call money rate, which was left to its own disproportionate level, as if it had no relevance to the economy at large. But the call money rate determined to a large extent the international as well as the internal flow of capital—uphill, as it were, from the countries short of what is called today “international liquidity” to the surplus country, and from the general economy to glamour issues. Britain, in particular, had to put up time and again with drains on her gold reserve.<sup>52</sup>

It is a widespread belief, indeed a never-dying legend, that the Federal Reserve System's policies were distorted by a bias in favor of Europe. Strong was indeed conscious of Europe's financial problems and of America's stake in restoring a viable international standard; and so were the contemporary Republican administrations. But, as mentioned before, Strong had made it perfectly clear to Norman that the Reserve System's prime and overriding attention was to be focused on the domestic scene. Norman's eloquent plea in August 1927 in favor of discount-lowering by the New York Bank did make an impression in New York as well as in Washington; yet, his urgent request was not the only influence motivating the Reserve authorities even on this exceptional occasion.<sup>53</sup>

At practically no time during the boom was the leadership of the Federal Reserve System of one mind about the policies to be pursued.

Various views prevailed: such as those pertinent to the reserves and liquidity of the member banks, their indebtedness to the Reserve Banks, the condition of the money market, the status of the "money supply," seasonal factors, the trend of the economy as expressed by diverse and often contradictory, statistical indicators, the congressional "climate," international affairs, the Treasury's needs, and the stock market. Concern about the stock market boom was responsible for permitting the New York Reserve Bank to raise its rate three times in 1928; back to 4 per cent in February, to 4½ per cent, in May, and to 5 per cent in July. The last boost was almost illusory, for acceptances were exempted. It was held at this level for over a year, notwithstanding the New York Bank's untiring efforts to have it raised further.<sup>54</sup> It took over a year before Governor George Harrison could boost it to 6 per cent in August 1929. This action, even though it was delayed, together with the moderate reduction of the System's total outstanding credit, has been blamed by the monetarists for the catastrophe in late October of that year. But one cannot help doubting the effect of a 6 per cent rate on a speculative fever which had been impervious to 12 per cent and higher rates for street loans. Nor could a reduction of the volume of outstanding Federal Reserve credit have had a great deal of influence on the credit supply, for the banks were able to provide themselves with reserves by liquidating bonds in their portfolios and recalling short loans from abroad. Foreign funds were in good supply and the internal plethora of money was such that industrial corporations were providing ample loans to brokers.<sup>55</sup>

It is of course one thing to be wise *post festum*, and quite another matter to have then decided that it was an opportune time to intervene by restrictive policies against a zooming stock market, while the rest of the economy as a whole *seemed* to be enjoying a superb prosperity with relatively stable prices. After the stock market crash, in an effort to preclude a general deterioration, the Reserve System began on November 5 a series of discount rate reductions. Through eight successive cuts of half of 1 per cent each time, they reduced it to 1½ per cent by May 1931 with no stimulating effect whatever.<sup>56</sup> Despite an apparent business revival in the United States in the first half of 1930, the world-wide depression deepened. Open market purchases in addition to the reduction of interest rates were futile. The run on the dollar just after the sterling devaluation impelled

New York to raise the discount in September 1931 to  $2\frac{1}{2}$  per cent and then to  $3\frac{1}{2}$  per cent in the following month. It was, however, reduced to 3 per cent, and then  $2\frac{1}{2}$  per cent in the first half of 1932, but raised again in April 1933 *after* the bank panic, to 3 per cent. It was cut once more to  $2\frac{1}{2}$  per cent in May, to 2 per cent in October, and finally to  $1\frac{1}{2}$  per cent in February 1934, after the dollar devaluation.<sup>57</sup>

There is virtual agreement among historians of the Reserve System that it could and should have mitigated more than it actually did the domestic crises of 1931, 1932, and February 1933. Actually, in the critical period beginning in late 1929, the Reserve System was up against the fact of member banks' reluctance to borrow—and to lend—irrespective of the repeatedly lowered rediscount rates. Of the outstanding credit of the Reserve System, amounting to over \$1,500 million at the end of 1929, almost \$900 million had been generated by open market purchases. The proportion became even larger in the following years; in 1932 all but \$240 million out of an outstanding Reserve credit volume of over \$2,100 million were due to such purchases.<sup>58</sup> The System's total outstanding credit had risen from \$2,441 million in 1929 to \$4,983 million in 1932, and further in 1933.<sup>59</sup> So far as the years 1930–1932 are concerned, the critics of the Federal Reserve tend to overlook the conflict of objectives which at the time had become a serious matter. In the recurrent crises after 1929 the dollar was in double jeopardy: from within as well as from without. It is easy enough to invoke Walter Bagehot's famous dictum of 1873 (mentioned before) to the effect that to fight a panic the Bank of England must extend credit generously but at penalty rates. This rule was good enough for late nineteenth-century panics in Britain, short ones at that, when the problem was only a dearth of domestic currency, while the Bank of England's solvency was beyond reasonable doubt. But in the early 1930's, actual and impending gold losses, in the midst of a presidential election year, had brought the maintenance of the gold standard itself into doubt. Confidence in the central bank as well as in the domestic credit institutions was impaired, at least momentarily. Yet the conflict of objectives does not explain, still less excuse, the Board's refusal in February 1933 to take additional measures, such as raising discount rates and closing banks for a few days, as was proposed by President Hoover. "They [the Board] rejected the Hoover proposal [to deal with the domestic panic], and



TABLE VIII-6  
Federal Reserve Bank Credit, 1914–1934  
(\$ millions)

End of year	Gold reserve	Reserve bank credit outstanding	
		Total loans and securities	Through purchase of bills and securities
1934	5401	2457	2436
1933	3794	2670	2570
1932	3331	2128	1888
1931	3158	1825	1156
1930	3082	1352	1093
1929	3011	1548	903
1928	2709	1783	717
1927	2867	1591	1009
1926	2948	1335	696
1925	2824	1395	749
1924	3047	1249	927
1923	3169	1211	489
1922	3166	1326	708
1921	3010	1524	379
1920	2250	3235	547
1919	1990	3090	874
1918	2146	2291	526
1917	1672	1060	395
1916	1757	222	184
1915	555	84	40
1914	268	11	0

SOURCE : U.S. Department of Commerce, *Historical Statistics of the United States, Colonial Times to 1957* (1961), series X 245–254, p. 642.

they were either unwilling or unprepared to offer any alternatives.<sup>60</sup> The Board refrained from action, with the apparent intent of gaining favor with the incoming President. He, in turn, seemingly was more interested in partisan politics than in the national welfare. Roosevelt succeeded in “killing three birds with one stone,” disparaging, in the

public eye, the Republican Party, the financial community, and the monetary system (the gold standard).

The Federal Reserve System has been generally criticized, and for valid reasons. It surely could have done more, and faster, than it actually did to “smooth” one phase or another of the crisis. Its total inaction at the most critical juncture, in February 1933, appears especially inexplicable except in terms of “politics.” As one penetrating critic of Federal Reserve policies has put it sharply:

On no other occasion during the first twenty years of Federal Reserve history did purely political considerations play so prominent a role in the determination of monetary policy, nor did the Board deserve more blame for its failure to assume the initiative. In all likelihood this particular banking crisis could have been averted.<sup>61</sup>

It is only fair to add to the foregoing that the intensity and worldwide extent of the acute crisis precluded effective monetary action—by any central bank or government—within the framework of a “free” market economy.<sup>62</sup> Individual banks had been “bailed out” (recapitalized) by Hoover’s Reconstruction Finance Corporation. These funds, and the credit which the Federal Reserve pumped into the banking system via open market operations, accomplished a similar result, an increase in the liquidity of individual banks. “The phenomenon of excess reserves on any scale was a new experience to the System officials.”<sup>63</sup> The unwillingness of the banks to lend and invest could not, however, be overcome. It was a *global confidence crisis* such as had never before been experienced, and of such intensity that the resulting “negative” expectations could not be overcome in a short time by either money infusions, close to zero interest rates, or devaluations. Even after the acute phase of the crisis had passed, the economic system had to adjust itself to an attitude of defeatism which resulted from the 1929 stock market crash, the seemingly hopeless condition of prime commodity producers and the decline in industrial production. Moreover, the excessive debt burden on public utilities, railroads, and manufacturing corporations had to be de-escalated. The process of readjustment was lengthened by endogenous and artificially maintained cost price rigidities.

In short, extraordinary circumstances prevailed, and mechanical formulae for money management were worse than useless. The common-sense point of view of central bankers was summarized in the 1928 annual *Report* of the Federal Reserve Board:

In its ultimate analysis credit administration is not a matter of mechanical rules, but is and must be a matter of judgment—of judgment concerning each specific credit situation at the particular moment of time when it has arisen or is developing . . . the Federal Reserve Board must look for guidance primarily to information concerning the state of industry and trade and the state of credit. Changes in the volume of bank credit in use are the outcome of changes in the volume of business. A proper and effective credit policy, considered in its broader aspects must, therefore, be based on that wide variety of economic facts which throw light on the changes taking place in the business situation and their relation to current banking and credit trends.

This was, however, the short-term point of view. The trees still obstructed the view of the forest. The tragedy of central banking in the 1920's was due to the fact that it tried to operate with the notions of bygone "normal" times and overlooked that the very meaning of the bench marks it used had changed. Statistical data which were relevant to the course of the economy under "normal" (pre-1914) conditions lost or changed their meaning in a heavily inflated credit environment and under widely maladjusted industrial conditions. All of this was ignored not only by politicians like Adolph J. Sabath—who exclaimed on the floor of the House on January 6, 1932, "I insist that it is in the power of the Federal Reserve Board to relieve the financial and commercial distress"<sup>64</sup>—but also by distinguished economists like Irving Fisher and Carl Snyder. In any case, the claim of Professor M. Friedman,<sup>65</sup> that in the crisis the quantity of money contracted "because the Federal Reserve System forced or permitted a sharp reduction in the monetary base," is refuted by a glance at the figures quoted on the foregoing pages.

## Notes to Chapter Eight

1. For a typical example, see Friedman and Schwartz, *U. S. Monetary History*, p. 298: "Far from being an inflationary decade, the twenties were the reverse [sic!]. And the Reserve System, far from being an engine of inflation, very likely kept the money stock from rising . . ."
2. See chap. 6, sec. E, above.
3. Lauchlin Currie, "The Failure of Monetary Policy to Prevent the Depression of 1929-32," *Journal of Political Economy*, April 1934, pp. 145-177. See Currie, *Supply and Control of Money in The United States* (Cambridge: Harvard University Press, 1934). Currie's essay was financed by the Harvard Committee of Research in the Social Sciences. His essay seems



- to have influenced an entire school of "monetarists": Friedman and Schwartz, *U. S. Monetary History*; Cagan, *Changes in Stock of Money*; Beryl W. Sprinkel, *Money and Stock Prices* (Homewood, Ill.: Richard D. Irwin, 1964). See also Clark Warburton, "The Volume of Money and the Price Level between the World Wars," *Journal of Political Economy*, June 1945.
4. Friedman and Schwartz (*U. S. Monetary History*, pp. 209-247, 300, 355) argue that the Federal Reserve "should not have made itself an "arbiter of security speculation or values" and should have paid no direct attention to the stock market boom" (*ibid.*, pp. 291-292) —as if the stock market were an insignificant item in the economic picture.
  5. *Ibid.*, p. 354, referring to the qualitative deterioration of foreign loans in the 1920's. See chap. 6, sec. A, above, chap. 9, sec. B, below.
  6. *Ibid.*, p. 249.
  7. See chap. 6, sec. B to sec. D, above for detailed material about country bank failures and farm foreclosures, see Fred L. Garlock and G. M. Gile, *Bank Failures in Arkansas*, Bulletin 315 (University of Arkansas, College of Agriculture), March 1935; William G. Murray, *An Economic Analysis of Farm Mortgages in Story County, Iowa, 1854-1931*, (Iowa State College of Agriculture), Bulletin 156, January 1933; Fred L. Garlock, *Long Term Loans of Iowa Banks*, (Iowa State College of Agriculture), Bulletin 129, June 1930; David L. Wickens and Ward C. Jensen, *Agricultural Finance in South Carolina*, (Clemson Agricultural College), Bulletin 282, November 1931; James M. Whitsett, *Banking Operations in Ohio, 1920-1940*, (Ohio State University Press, 1941); Robert G. Rodkey, *State Bank Failures in Michigan*, Michigan Business Studies, vol. 3, no. 3 (Ann Arbor, 1935).
  8. See M. Palyi, "Liquidité," *Revue Economique Internationale* (Bruxelles), August 1936, pp. 247 ff.
  9. *Minutes of Evidence*, (Macmillan Report) vol. 2, p. 202. See also chap. 2, sec. D, and chap. 3, sec. D, above.
  10. According to Professor Henry C. Wallich, in *Controlling Monetary Aggregates*, (Boston Federal Reserve Bank), September 1969, pp. 31 ff. It is noteworthy that money supply series published by the Federal Reserve Board have been repeatedly revised. Tilford C. Gaines (Manufacturers Hanover Trust Co.) called attention to the fact that "compensatory balances," up to 20 per cent of loans, are included in the money statistics as deposits—although the "depositors" cannot use them.
  11. Friedman and Schwartz, *U. S. Monetary History*, p. 774.
  12. Warren M. Persons, *Forecasting Business Cycles* (New York: John Wiley, 1931), p. 171.
  13. Cash in circulation and all bank deposits. However, even the meaning of demand deposits is controversial; "compensating balances," for one thing, should be eliminated from the money supply concept, but are not. See T. C. Gaines, "Some Inadequacies of Financial Data and Theory," *National Westminster Bank Quarterly Review*, November 1969.
  14. Friedman and Schwartz, *U. S. Monetary History*, p. 308. See also C. G. Garvy and M. R. Blyn, *The Velocity of Money* (New York Federal Reserve Bank), 1964, pp. 59-60.
  15. "Money supply" data from Friedman and Schwartz, *U. S. Monetary History*, Appendix A, Table A-1.
  16. See chap. 6, sec. F, above.
  17. See Table VIII-2; also J. C. Gurley and E. S. Shaw, *A Theory of Finance* (Washington, D.C.: Brookings, 1960). The quantity theory "equation" of Irving Fisher, which underlies monetarist thinking, has no provision for such *ex ante* considerations in the determination of price levels as are indicated in the text.
  18. Life insurance policy reserves increased from \$6.9 billion in 1921 to \$13.6 billion in 1928 and by another \$1.3 billion in 1929. (U.S., Department of Commerce, *Historical Statistics*, p. 675.)

19. "Capital" deposits in savings and loan associations were the fastest (and longest) growing component of the total money supply. See note 22, below.
20. Committee on the Working of the Monetary System, *Report* (London, 1959), p. 135.
21. *Ibid.*, pp. 132, 133.
22. Note that the (liquid) "share capital" in savings and loan associations—no different in function or nature from "savings" in commercial and mutual savings banks—grew from \$1.7 billion in 1920 to \$6.3 billion in 1930. The associations are dismissed in the money statistics of both Cagan and Friedman and Schwartz—because *legally* they were not "banks," and because satisfactory statistical data were not available previous to 1920.
23. A. N. Macleod, "Some Observations on Trade Credit and Monetary Policy," *Economic Journal*, September 1964, p. 733.
24. See Garvy and Blyn, *Velocity of Money*.
25. This has been well brought out in an excellent essay by A. B. Cramp, "Two Views on Money," *Lloyds Monthly Bank Review*, July 1962. See also chap. 1, sec. D, above.
26. John Stuart Mill, *Principles of Political Economy*, book 3, chap. 24, par. 1. Mill's Banking School argument refers, of course, to credit systems under the gold standard, not under fluctuating gold and foreign exchange values. See also chap. 4, sec. B, above.
27. *Minutes of Evidence*, (Macmillan Report) vol. 2, p. 204.
28. There are numerous factors other than central bank policy which cause ease or tightness of the money market.
29. *Minutes of Evidence* (Macmillan Report), See also W. E. Spahr, "The Supply of Currency and Economic Activity," *Commercial and Financial Chronicle*, December 27, 1956; and B. M. Anderson, in *Chase Economic Bulletin*, March 16, 1931.
30. See Friedman and Schwartz, *U. S. Monetary History*, pp. 657, 659.
31. H. B. Rose, "The Finance of Inflation," *Lloyds Monthly Bank Review*, January 1958, p. 1.
32. "Additions to near monies may mean reductions in demand deposits." (*Business Conditions* [Federal Reserve Bank of Chicago] July 1960, p. 9.)
33. Seasonally adjusted index; 1921–1927 average = 100. Lionel D. Edie and Donald Weaver, "Velocity of Bank Deposits in England," *Journal of Political Economy*, August 1930. The reader may be reminded that at least £400 million, over 10 per cent of Britain's money supply at the end of 1930, was owned by foreigners.
34. See Table V-7 and chap. 5, sec. C, above. In Germany, as mentioned before, deposits in savings institutions grew faster than in commercial banks.
35. In the Netherlands, total deposits in the leading commercial banks and in savings institutions increased from 1,300 million gulden at the end of 1925 to 1,800 million gulden four years later. (League of Nations, *Commercial Banks, 1925–30* [Geneva, 1934], p. 164.
36. Friedman and Schwartz, *U. S. Monetary History*, p. 298.
37. Cagan, *Change in Stock of Money*, p. xxv. Cagan's book is in effect a companion volume to the work by Friedman and Schwartz.
38. See chap. 6, sec. B, above.
39. M. Friedman, *A Program for Monetary Stability* (New York: Fordham University Press, 1960), p. 87. See Richard G. Davis, in *Monthly Review* (Federal Reserve Bank of New York) June 1969.
40. Richard G. Davis, "The Role of the Money Supply in Business Cycles," *Monthly Review*, (Federal Reserve Bank of New York) April 1968, p. 63. See also the pertinent essay by William N. Cox III, "The Money Supply Controversy," *Monthly Review* (Federal Reserve Bank of Atlanta) June 1969; W. E. Spahr, "The Supply of Currency and Economic Activity," *Commercial and Financial Chronicle*, December 27, 1956.
41. At the height of Germany's great inflation in 1923, the peasant women selling chickens

- on the town markets used to counter the query of the buyer about the price by asking: "What is the latest quotation for the dollar?" The price of the chicken rose in proportion. See C. Bresciani-Turoni, *Economics of Inflation*, pp. 134 ff.
42. Cagan, *Changes in Stock of Money*, Intro.
43. Scandinaviska Banken, *Quarterly Review*, no. 4 (1962), p. 107.
44. See chap. 2, sec. C, above. The Board's attempt in 1929 to distinguish between legitimate and speculative credit had even been abandoned. Clay, *Lord Norman*, p. 248. That the Reserve System had been deliberately neutralizing or "hoarding" gold was another legend—and still is.
45. Chandler, *Benjamin Strong*, p. 194. However, until 1923 the Reserve Board had been stressing the significance of the reserve ratio. See Wicker, *Monetary Policy*, chap. 4. See also Table VIII-5.
46. Never, I suppose, have the factors which should move us in our rate policy been so carefully examined and considered, as recently. The results convinced me that our action was required, and that *with our excessive gold stock we must entirely ignore any statutory or traditional percentage of reserve, and give greater weight to what is taking place in prices, business activity, employment, and credit volume and turnover.* (Italics supplied.) Strong to Norman, February 22, 1923, quoted by Clarke, *Bank Cooperation*, p. 31.
47. See chap. 2, sec. B, and chap. 6, sec. F., above.
48. Regarding the reduction of reserve requirements, see chap. 2, sec. B, above.
49. Where does our responsibility lie? Must we accept parenthood for every economic development in the country? That is a hard thing for us to do. We would have a large family of children. Every time any one of them misbehaved, we might have to spank them all. There is no selective process in credit operations. If we undertake "direct action" in one case, we would be saddled with the responsibility for direct action in all cases. Have we infallible good judgment as well as sufficient knowledge to play the role of parent, and attempt to restrain every unwholesome boom, and as a concomitant undertake to correct every class of business which shows signs of languishing? May it not be the case that the world is now entering upon a period where business developments will follow the recovery of confidence, so long lost as a result of the war?
- Governor Strong to Carl Snyder (economist of the New York Federal Reserve Bank), May 21, 1925, quoted by Chandler, *Benjamin Strong*, p. 428. The naïve optimism of America in the 1920's carried away even a critical mind like Benjamin Strong's.
50. See chap. 5, sec. C, and chap. 7, Sec. A, above.
51. See Table VIII-5, columns 1 and 2.
52. See chap. 5, sec. C, above, about the "perverted" capital flow. Norman complained in 1928 about this state of the American money market and the threat to sterling it implied. See Clay, *Lord Norman*, p. 243.
53. See chap. 4, sec. C, above.
54. Time and again, the central banks' grip over the respective money markets was weakened in the 1920's by holding official discount rates below the market levels.
55. For a sober assessment of the 1929 money market situation see Morton, *British Finance*, p. 40:

The monetary explanation of both the boom and the slump appears to put unwarranted emphasis upon the importance of credit policy. What has been termed the cheap money policy of the Federal Reserve System may have aided the bull market of 1927-29, but in itself it was not sufficient to have produced the vigorous upsurge of prices that took place. Great expectations were ubiquitous. When, however, new investment at home



and abroad began to diminish, so did the earning power of corporations. In anticipation of such a movement, an already over-bulled market, starting with a technical decline, suffered a collapse. *Once the recession got under way, a cheap money policy could not have arrested it.* What was needed was a change in expectations, and this was not forthcoming. (*Italics supplied.*)

56. *Federal Reserve Bulletins*, 1929–1934, *passim*.

57. *Ibid.*

58. Some funds were pumped into the economy through “compensating” (deficit) financing as the Hoover Administration incurred a budget deficit. See chap. 6, sec. D, above. See also Herbert Stein, *The Fiscal Revolution in America* (Chicago: University of Chicago Press, 1969) chap. 2.

59. See Table VIII-6.

60. Wicker, *Monetary Policy*, p. 191.

61. *Ibid.*, pp. 194–195. See chap. 7, sec. C, above.

62. Until the passage of the Glass-Steagall amendment (February 27, 1932), the Reserve Banks were not permitted to use federal securities as collateral for notes. See Paris, *Monetary Policies*, pp. 84 ff., 136.

63. Wicker, *Monetary Policy*, pp. 174 ff.

64. Quoted (approvingly) by Friedman and Schwartz, *U. S. Monetary History*, p. 413.

65. *American Economic Review*, March 1968, p. 3.

We are reminded of Kenneth E. Boulding’s “Shakespearean Sonnet” (*Michigan Business Review*, March 1969):

We must have a good definition of Money,  
For if we do not, then what have we got,  
But a Quantity Theory of no-one-knows what,  
And this would be almost too true to be funny.  
Now, Banks secrete something, as bees secrete  
honey; (It sticks to their fingers some,  
even when hot!)

But what things are liquid and what things  
are not,  
Rests on whether the climate of business is  
sunny.

For both Stores of Value and Means of Exchange  
Include, among Assets, a very wide range,  
So your definition’s no better than mine.

Still, with credit-card-clever computers, it’s  
clear  
That money as such will some day disappear;  
Then, what isn’t there we won’t have to define.

*Some Final Reflections***Introduction**

IN SEVEN YEARS, between 1929 and 1936, forty-seven nations abandoned the gold standard, which they had laboriously reconstructed during the 1920's. Was the "flight from the gold standard" unavoidable? Was there an inherent weakness in the system which made it unsuitable for the changing socio-economic climate? The fact is that although the world abandoned the gold standard, it never really abandoned gold. Britain surrendered the gold standard in 1931 in order to preserve her remaining gold reserves; and Washington followed a somewhat similar course in 1968 and 1971. Bretton Woods tried to restore some of the important features of the gold standard. The international monetary system again became—officially—linked to gold, and even after the events of 1960's and early 1970's the world's central banks still struggle to preserve or increase their gold holdings.

The abandonment of the gold standard during the 1930's which has profoundly influenced the course of world affairs and the pattern of economic thought during the past forty years, was not the result of an historical necessity, but of political exigencies, human frailty, and, in some instances, economic illiteracy. While the "end" of the gold standard supposedly removed the regulatory power of gold, and thus freed the individual governments to pursue politically expedient

(usually inflationary) policies, the flow of gold, or of funds tied directly or indirectly to gold, continued during the 1930's, and still continues today, to affect the economies of the world.

Yet the abandonment of the gold standard—a historical accident more than a historical necessity—together with the “fiscal revolution” paved the way to the modern notion that full employment prosperity and economic growth can be attained only by chronic, albeit “controlled” inflation. This has profoundly affected the economic, political, and social character of Western civilization, and of the world at large. (G. C. Wiegand)

### A. The Monetary Revolution

The demise of the Gold Bloc spelled finis to the great experiment that began in 1919: the attempt to reactivate the pre-1914 gold standard. The experiment had failed. But was gold “demonetized” altogether, as implied in the popular term “departure from gold”? This interpretation was widely accepted at the time and even thereafter, especially by passionate purveyors of monetary nostrums.<sup>1</sup>

In 1929–1933 and beyond, international confidence was largely destroyed. Nations with a deficit payments balance could no longer fall back either on credit from abroad or on the comforts of the gold exchange standard which had been practically liquidated.<sup>2</sup> Payment deficits had to be settled in gold. Lacking gold, deficit-ridden debtor nations had to choose between deflation and default. Default could take one of four forms: formal bankruptcy; a moratorium; suspension of gold convertibility (devaluation); rationing (control) of payments in foreign exchange, or some combination of these techniques, one leading to the other. *Open default* on domestic debts occurred in massive volume, especially in the United States, but only sporadically on foreign debts. Chile and some other Latin countries declared temporary moratoria which, however, soon turned into total or partial defaults. Britain's devaluation reduced debts to foreigners incurred in domestic (British) currency. In Germany, exchange restrictions (rationing) put a stopper on claims in foreign money.

There was a simple “rationale” for choosing one method of default rather than the other. Britain's foreign debts were contracted mostly in sterling—in excess of her sterling claims. By lowering the gold “content” of sterling, their burden was reduced at the expense of the



foreign creditors. Germany owed dollars and pounds; devaluation of the mark would have increased the burden in terms of her domestic currency. But foreign exchange control turned out to be extremely difficult to administer. As one loophole after another appeared, she supplemented the exchange regulations with comprehensive trade controls. These included quotas, multiple exchange rates, compensation and clearing deals, bilateral trade agreements, all used to maintain a precarious balance between imports and exports.<sup>3</sup> “The ultimate effect of exchange control was to replace the system of international trade by discriminatory barter, to prevent the weaker countries from buying in the cheapest markets and to render them peons of their more powerful trading partners.”<sup>4</sup> The currency under strict exchange control had been broken up into two currencies, one external without a fixed gold price, the other internal but with a fixed gold price, nominally retained to sustain domestic confidence. The communication between them was maintained under the surveillance and scrutiny of the authorities. The original pattern for this “double-barreled” monetary system had been provided by Lenin.

Between April 1929 and September 1936, forty-seven countries left the gold standard by abandoning a fixed price for gold. But a majority of these devaluing countries either fixed a new gold price *de jure*, or established a *de facto* parity rate to the dollar. For short intervals, exchange rates were permitted to fluctuate within limits set by both direct and indirect controls. Even this limited experience with “floating” exchange rates sufficed to discourage further experiments, for it became apparent that exchange instability did not bring the anticipated equilibrium in the balance of payments. Actually, domestic markets were further destabilized.<sup>5</sup>

Fluctuations of an allegedly floating sterling, as an example, between September 1931 and March 1932, were restrained by the relatively high discount rate of the Bank of England of 6 per cent, by curbs imposed on the British money supply, and by severe foreign exchange restrictions. This was a system of “flexible” gold prices. When it failed to establish a stable equilibrium price for sterling—Montagu Norman had hoped to return once more to the old parity—the Treasury’s Exchange Equilization Account took over the management of sterling’s external value in 1932. The idea was to separate domestic and international money,<sup>6</sup> “to insulate our [British] internal credit system from the effects of pressure in favor of or against

sterling.”<sup>7</sup> The purpose of the various stabilization funds was simply to control foreign exchange transactions, a function which any of the central banks could have performed. But the stabilization funds operated secretly, without publicity, i.e., without the public’s being aware of what actions were taken or necessary to maintain the official exchange rates.

The fact that the major devalued currencies were soon back “on gold” or on a gold-convertible unit, has been widely overlooked. The currencies which retained their gold parities belong in another category. Behind “exchange barbed wire” and under extremely severe direct controls, mentioned above, the par value of the German mark (and of a number of Central European and Latin American currencies) had been more or less preserved in domestic circulation and *partly* also in its external relations to other currencies. But the respective currencies had been “blocked” with their external use narrowly limited. They could be liquidated abroad, if at all, only at a discount. This was a thinly concealed devaluation. Some types of blocked mark came near to being a “floating” currency; fluctuations in their market value depended on the market’s expectations of their potential liquidation.

A special, indeed a unique, case of restored gold parity, was that of the U.S. dollar after the January 31, 1934, devaluation. It had returned to a gold standard, to one of a novel sort.<sup>8</sup> After the downfall of the Gold Bloc in September 1936, the dollar was (and remained more or less until August 15, 1971) the one and only currency “convertible” into gold at a fixed price, even if only to foreign money authorities.

Sterling was permitted to decline by as much as 30 per cent in September 1931, and to “fluctuate” around that level. In 1933–1935 its value was adjusted to the American dollar. This was a second devaluation of sterling, this time of the deliberately “competitive” kind, for commercial advantage.<sup>9</sup> It brought sterling back to the old parity (\$4.86) to the dollar.

The more sterling depreciated in terms of gold, the louder British spokesmen asserted its “victory” over gold. Gold had left the pound, not the other way around, was a favorite slogan, launched by Keynes. It was a Pyrrhic victory. The true “victors” were the speculators who had sold sterling short, and the foreign debtors who owed in sterling. The speculators won, too, in the “battle of the

dollar” and of the French franc. With devaluation of the U.S. dollar, the greatest victor of all emerged: the gold-mining interests.

Between 1929 and 1939, the physical volume of annual gold output had doubled and the value per ounce had risen on the average by 70 per cent in terms of the depreciated currencies, with South Africa the chief beneficiary and Russia second.<sup>10</sup> This growth of output was fostered by declining prices for raw materials and mining equipment and by the increased availability of cheap native labor. But it was the devaluation of the leading currencies—South Africa itself followed sterling in January 1933—that gave the decisive impetus.<sup>11</sup>

The total world gold production, U.S.S.R. included, rose from \$400 million in 1929 (in dollars of the old parity) to about \$1,400 million in 1938 (in dollars of the new parity), which would have been \$826 million in dollars of the old parity. It about doubled. Moreover, the artificially boosted price permitted the profitable exploitation of low-grade ores and the conservation of the high-grade seams.<sup>12</sup> This was the greatest subsidy ever bestowed on a single industry. The tremendous increase of gold reserves brought on by the enhanced price of gold laid the groundwork for the monetary and credit developments of subsequent decades, the global inflation of prices, profits, and wages.

The apparent eclipse of gold, the monetary standard, was the unprecedented triumph of gold, the commodity. But even as a “failure,” gold remained the ultimate standard and reference of monetary value. Its price in terms of national currencies had risen everywhere; it had regained temporarily the position of the dominant payment instrument in international relations and of the sole basic monetary reserve. It was a revealing statement by Secretary Henry Morgenthau, evidence of a belated reversal to orthodoxy:

For the excess of goods we shipped and for the dollar credits we granted we have taken gold in the last six years instead of promissory notes. The phrase “good as gold” still has real meaning in the world. I prefer the gold to pieces of foreign paper. I think most Americans agree with me.<sup>13</sup>

The prohibition of private gold holdings in the United States and in the totalitarian countries, and their accumulation in governmental hands, were manifestations of the scramble for gold by national



TABLE IX-1  
Foreign Exchange Rates in Seven Nations, 1931-1937  
(gold value as a percentage of the 1929 parity)

Monthly averages	France	England	Belgium	Italy	Sweden	Switzerland	USA
1931 VIII	100.0	99.8	100.2	99.4	99.8	101.0	100.0
IX	100.2	<sup>a</sup>	100.0	98.2	<sup>a</sup>	101.0	100.0
X	100.5	79.9	100.6	98.1	86.3	101.6	100.0
XI	100.1	76.4	100.0	97.9	77.4	100.9	100.0
XII	100.1	69.3	100.0	97.1	69.8	101.0	100.0
1932 III	100.4	74.8	100.2	98.5	74.1	100.2	100.0
VI	100.5	74.9	100.2	97.2	69.8	101.1	100.0
IX	100.5	71.3	99.7	97.4	66.4	100.0	100.0
XII	99.6	67.4	99.6	97.1	66.8	99.7	100.0
1933 III	100.0	70.4	100.6	97.6	67.9	100.4	<sup>a</sup>
IV	100.0	70.2	99.8	97.4	67.0	99.6	95.4
V	100.0	68.8	99.8	98.7	64.4	99.6	85.0
VI	100.0	69.3	100.0	98.9	64.8	99.6	81.3
VII	100.0	68.6	100.4	100.5	64.2	100.3	71.7
IX	100.0	64.7	100.4	100.0	60.5	100.4	67.5
XII	100.0	67.3	100.0	100.0	63.0	100.3	63.9
1934 III	100.0	62.3	99.8	97.0	58.3	99.6	59.5
VI	100.0	61.6	99.8	97.0	57.7	100.0	59.4
IX	100.0	60.3	100.2	96.9	56.4	100.5	58.7
XII	100.0	60.4	99.9	96.4	56.5	99.7	59.4
1935 III	100.0	58.1	<sup>a</sup>	93.7	54.4	99.7	59.2
IV	100.0	59.0	72.4	93.5	55.3	99.6	59.4
VI	100.0	60.1	72.2	93.0	56.3	100.4	59.3
IX	100.0	60.3	72.1	92.0	56.4	100.1	59.4
XII	100.0	60.2	72.0	91.1	56.3	99.8	59.4
1936 III	100.0	60.3	72.1	89.6	56.5	100.5	59.1
VI	100.0	61.3	72.3	88.8	57.4	99.9	59.4
IX	<sup>a</sup>	61.1	71.8	<sup>a</sup>	57.2	<sup>a</sup>	59.1
X	70.3	59.5	71.5	62.1	55.7	70.4	59.1
XII	70.4	59.6	71.8	59.0	55.8	70.4	59.1
1937 III	69.3	59.3	71.6	59.0	55.5	69.8	59.1
VI	66.9	59.9	71.6	59.0	56.1	70.0	59.1
VII	57.4	60.3	71.5	59.0	56.4	70.2	59.1
IX	53.1	60.1	71.5	59.0	56.3	70.3	59.1
XII	51.2	60.6	72.2	59.0	56.8	70.8	59.1

SOURCE: League of Nations, *Annuaire Statistiques*, 1935-1936, 1937-1938, passim.

<sup>a</sup>Devaluation.

authorities. Many of them “scrambled” indeed, using every trick in the mercantilist bag and inventing new ones, in order to attract gold, to hold on to what they had, and to avoid having to pay in gold. Nevertheless gold’s internal role as a regulator of the credit volume and, indirectly, of internal price trends had been curtailed—projecting a trend of monetary policy initiated in the 1920’s. This role was by no means eliminated, however. The “gold standard” of the late 1930’s was different from its predecessors in a basic concept: gold was to serve as a reserve and a “buffer,” but for external purposes only. The domestic economy was henceforth to be insulated, more or less, from gold movements and foreign exchange rate vagaries in order to protect the national economy against the uncontrollable effects of cyclical “winds” blowing elsewhere. Administratively, the management of foreign exchange rates and of the gold flow was separated from the domestic monetary affairs. But the technical separation of international and domestic monetary concerns could not last long. Surplus countries on the receiving end of the “hot money” flow, Britain and the United States in particular, soon found that the gold influx affected domestic commodity prices, incomes, and the stock market in an inflationary direction. Eviscerated as the gold standard was—an international dollar standard based on gold—the volume and value of the currency remained loosely dependent on the inflow and outflow of gold.

Freed, seemingly, from the discipline of the balance of payments, a limping gold standard emerged in the devaluing countries with an indirectly maintained new gold parity, but with the reservation that this parity might be changed if that needed to be done to maintain domestic prices and employment. Exchange control (allocation) was even more effective in interposing “a barrier between world [prices] and domestic prices, so that monetary and general economic [full employment] policies could be chosen and executed, at least temporarily, without regard to their effects on the balance of payments.”<sup>14</sup> Actually, behind foreign exchange restrictions and a host of petty regulations, Germany, well prepared for an upturn by Brüning’s policy of cost deflation, was the one and only country that managed to establish full employment in the late 1930’s—by “contra-cyclical” policies, i.e., resource mobilization for war.

The monetary “revolution” of the 1930’s brought about a fresh redistribution of gold. During the panics and the dissolutions of the

gold exchange standard (1929–1934) the Gold Bloc countries were the chief gainers.<sup>15</sup> With the demise of the Gold Bloc, the United States absorbed the lion's share of the greatly increased gold output, with Britain second, countries which had stabilized their currencies more or less. Their gold imports largely represented “hot money” streaming in at first in expectation of sterling and dollar revaluations, then, after 1934, fleeing from France and elsewhere. As the war threat drew closer, in 1938–1939, the flight of capital from Europe to America totally distorted the global pattern of gold distribution, three-fifths of the world's monetary gold reserves accumulating in the United States.

The monetary revolution has a nonidentical twin: the *fiscal revolution*. Since the fourteenth century, coin-clipping and deficit-financing were closely related at the source: the mismanagement of the public purse, due to wars, revolutions, and princely luxuries.<sup>16</sup> For almost five centuries, clipping the coin was a widely used technique in Europe to reduce the public debt. Under the sway of the classical economists, an annually balanced budget—overbalanced, to amortize war-born debts—was the categorical imperative of government finance, the correlate of the automatic gold standard.<sup>17</sup> Both rules went into eclipse in the Great Depression. Budgets were unbalanced as revenues declined and the political pressure to support unemployed workers, bankrupt farmers, tottering banks, and other victims of the cyclical downturn was heating up.

Deliberate deficit finance to combat the depression made its debut under President Hoover; Professor Henry C. Simons of the University of Chicago seems to have been the first economic theorist to have raised the practice to the rank of a maxim of statesmanship. As “contra-cyclical” finance, it was belatedly, but most effectively, popularized by J. M. Keynes in his *General Theory* of 1936. Once the valetudinarian principle was accepted, the government was duty bound to offset the decline of “total demand” by unbalancing the budget. And once annual balancing had been disavowed, annual deficits became established as a permanent practice, with rare exceptions—to say nothing of overbalancing the budget and amortizing domestic debts.

This is the gist of the celebrated fiscal revolution.<sup>18</sup> It is the counterpart and correlate of the basic change in the structure of the standard. The *departure from the discipline* of the balance of pay-



ments permits the subordination of the money managers to the dictates of the fiscal managers. The central banks have a relatively free hand, indeed, almost entirely “free” under flexible exchange rates, to absorb (or to provide the credit facilities to the banking system in order that it absorbs) the debt instruments issued by the fiscal authorities. The discipline of the balanced budget went overboard with the discipline of maintaining a balance of payments.

The two “revolutions,” the monetary and the fiscal, are two sides of the same coin: of the creeping inflationary process that serves to create and to maintain “high-level” (full) employment and to stimulate “growth.” Thus the utopia of Eternal Prosperity, at stable prices, has been replaced, in effect, by the more sophisticated and more insidious ideology of Perpetual Inflation. What this means in practice was forcefully formulated by Malcolm Bryan, president of the Federal Reserve Bank of Atlanta, on March 19, 1959: “Thoughtful men can hardly have failed to notice that the spoliation of peoples in our day by inflationary thievery, disguised with Machiavellian slyness as necessity or welfare, has doubtless exceeded by far the lootings by the world’s greatest conquerors.”

By jettisoning financial discipline, Western society’s doors and windows have been opened wide for a multitude of movements, the common earmark of which is: Denial of Discipline. Financial revolution has laid the “logical” and psychological foundation for the revolt against all values and institutions of our civilization.

## **B. Was the Gold Standard Doomed?**

As it evolved in the last decades previous to 1914, the gold standard was a world-wide integrated and synchronized system of monetary “checks and balances,” with an unwritten and highly flexible “constitution,” yet a far cry from the textbook model of perfect automatism. Its prime virtue, however, was that the rule of a fixed price of gold imposed discipline on the participants in the “game,” the discipline of the balance of payments, and inspired confidence. As long as the major central banks were observing this discipline, and they did in effect, adjustments in the balance of payments were brought about, as a rule, without substantially affecting the general level of incomes, prices, and employment.

The fiscal chaos created by World War I called for deflation. It was

mandatory, also, in order to correct the incentives distorted by an unprecedented inflation and *de facto* devaluation of currencies, to restrain the speculative excesses and to restore the rational pattern of international trade.<sup>19</sup> The deflation came, but as early as 1922, both Benjamin Strong and Montagu Norman recognized that it had been stopped short of accomplishing its purpose.<sup>20</sup> To restore economic sanity and financial confidence, budgets and currencies were stabilized, and most currencies revalued upward: either to the old parity or at any rate to a gold price far above the depreciated level.<sup>21</sup> But confidence turned into overconfidence. A formidable new expansion (1924–1929) got under way, enlarging and duplicating the mal-investments of the preceding ten years. The gold exchange standard and the international capital flow permitted and fostered a credit inflation that financed rising living standards, growing inventories, and fantastic expansions and overvaluations.

Had the boom been halted, or slowed down effectively, two or three years before the crash, the correction might have been relatively “tolerable.” A single measure of “cooperation,” invoking the “transfer clause” of the Dawes Plan, might have halted the boom. In 1926, speculation in capital assets and commodities had not as yet reached a fever pitch. Of the some 280-point rise of the Dow-Jones industrial average between the end of 1923 and September 1929, no less than 240 points occurred after April 1926.<sup>22</sup> The dilution of the gold reserves by foreign exchange (paper) claims had not advanced too far to be brought under control. The overextension of raw material production was still at an early stage, and so was the overflow of international credit. The reckless growth of private debt in the United States started in 1923,<sup>23</sup> but even so, a mere recession, rather than a major depression, may have been indicated in 1925–1926. After 1925, massive capital misallocations were induced as the profit inflation and the sanguine expectations were not restrained.<sup>24</sup> The result was a world-wide “fundamental disequilibrium” with rigidities built into the economic fiber of society. These vitiated the responsible decision-making by entrepreneurs as well as by investors and consumers. The functioning of the price mechanism and the efficacy of central bank policies were impaired.<sup>25</sup>

By the late 1920's the productive apparatus of almost every nation had been vastly enlarged and at excessive cost, frequently with scant regard to realistic prospects for profitable sales. The utopian concept

of a stabilized price level had taken hold of the public imagination. It was at or around this time that the malignant deterioration of credit standards—rapidly growing illiquidity—became almost universal.

It is notable in this context that “of the [domestic] bonds issued in the United States in 1927, 1928, and 1929, 31.1 per cent went into actual or pending default [by December 1931], as compared with a much lower percentage for the bonds issued in previous years.” The difference was attributed to “conditions of (increasing) overcompetition and irresponsibility” in the investment banking industry.<sup>26</sup> Similarly, the foreclosure rate on mortgage loans granted by insurance companies in 1925–1929 was 54.1 per cent, as against 31.5 per cent on mortgage loans extended in 1920–1924.<sup>27</sup>

The sharp acceleration in the decline of credit quality took place in the years 1926–1929. It was in those years that speculation in risky stocks, low-grade bonds, and commodities, in farm land and urban real estate, grew to fantastic dimensions. In Europe some central banks began to tighten the respective national money belts, but in a tentative fashion only. Generally, the public as well as business were unaware of the precipice toward which they were heading.<sup>28</sup> The lessons of the 1920–1921 crisis or of the 1926 Florida real estate crash were not absorbed; nor was much attention paid to the fact that prime commodity prices were weakening, business inventories accumulating, and debts skyrocketing. A slump was indicated; in its first phase, it was of the “conventional” kind. That ended in the spring of 1931. The German banking debacle inaugurated the second act of the great crisis, the truly devastating 1931–1933 episode. By destroying national confidence and international credit, causing tremendous capital losses, and carrying commercial warfare to a level of intensity unparalleled in peacetime since the seventeenth century, the departure from gold magnified the crisis beyond all precedents.

Patently, the abandonment of the gold standard must be understood in its frame of reference—the Great Depression. But did the depression necessitate, or “force,” the “revolution” in monetary policy? It may suffice to review briefly the decisive turning points. In the United States, the monetary breakdown was engineered, admittedly in order to inflate the price level. The dollar was not “forced off” by a run on the gold reserve; there was no danger of such a run of serious proportions. The dollar was in such a strong position that



even a severe and protracted crisis of the domestic credit system and a substantial budget deficit could not appreciably affect the international confidence in its ultimate convertibility at the \$20.67 per ounce rate. Raising the American gold price was a deliberate and arbitrary act of an indoctrinated President. It aggravated the depression abroad without accomplishing its objective at home.<sup>29</sup> Mass unemployment lingered on until World War II.

The downfall of the French franc, too, was “engineered”;<sup>30</sup> it is a virtual certainty, based on all available evidence, that nothing of the sort would have occurred had it not been for the repercussions of the dollar devaluation and the New Deal. Similarly, Franklin D. Roosevelt’s monetary experimentation might never have been seriously contemplated had it not been for the default of sterling. That, in turn, might never have occurred if the German credit system had not broken down.

Did Berlin have any alternative to “going off?” Apparently not; it is a generally accepted thesis that Brüning had carried the deflation to the utter limit of the “tolerable.” In reality, his political dependence on the Hindenburg clique—the landed gentry and the military establishment—forced him to stop short in two directions. He was compelled to support relatively high prices for basic food in a futile attempt to maintain farm incomes, this in the face of severe unemployment and sharply declining wages. Secondly, he was not permitted to reduce Germany’s armaments and her military expenditures. Not being able to balance its budget, the Reich was not credit-worthy either abroad or at home.

Brüning’s heroic efforts to save the mark were largely futile, since he was unable to carry the deflation to its logical conclusion. At home, he exposed himself to the scorn of the nation. Abroad, he could scarcely hope to attract financial help for what amounted to clandestine war preparations. Given the desperately illiquid condition of most German credit institutions, bankruptcy in some form, overt or concealed, became unavoidable.<sup>31</sup>

The unexpected and unplanned freezing of foreign balances in Germany sparked a vicious run on sterling. The British authorities resisted, for they had no plan or intention to “go off”; on the contrary, they feared dire consequences if they did. But the British surrendered to the panicked creditors and the eager speculators when, in the absence of Montagu Norman, the authorities came to

the conclusion that the only alternative—further deflation, such as by raising the discount rate over 4½ per cent—would be either politically inexpedient or financially futile. Actually, they might have saved sterling by further efforts, for there was no threat of a domestic run at the time. Britain's material and "psychological" resources (including international goodwill) were far from being exhausted. Within a few weeks, the prime cause of the panic, the budgetary deficit, was brought under control and the labor unrest had quieted down. But there was no "last-minute" attempt made to save sterling. By all indications, a temporary suspension of convertibility, accompanied by the same measures applied right after sterling's debase-ment—namely, higher interest rates, peremptory although temporary foreign exchange restrictions, budget balancing—could have stopped the panic at once and might have restored the world-wide confidence in sterling within a few weeks.

To save the remnants of the gold reserve was a prime motive for repudiating the gold standard of Germany, Britain, and Sweden. Sweden came under fire eight days after Britain devalued, for the speculators expected that the krona would follow sterling. Each was presumably a temporary emergency, to be dealt with by emergency measures. But soon, other motives emerged. In the agricultural countries of Eastern Europe and South America, devaluation and exchange rationing were seized upon as devices to lighten the burden of excessive foreign debts. Moreover, the commercial motive became operative: the obvious, if unfair, advantage in foreign trade accruing to the country that broke the "rules of the game," a motive raised to emotional levels on the wings of violent nationalistic sentiments.

The most significant effect of devaluation was, of course, its inflationary impact. The experience of the 1930's confirmed the lessons taught by currency depreciations in the 1920's. Without exception, every reduction in the "gold content" of a currency unleashed price-inflationary tendencies, some almost instantaneously, by impeding commodity imports and fostering commodity exports; by diluting the currency base and inviting credit expansion; by discouraging the export of funds for investment abroad and encouraging their import; by "freeing" the monetary administrations, for a while, from the inhibitions imposed by the "discipline of the balance of payments" over the volume and price of money; and by generating, or stimulating, inflationary expectations.

In each country, a multitude of forces was in operation, making it difficult to isolate and pinpoint the long-run impact of the devaluations. At that, the inflationary impact in each country was partly offset by the combined deflationary effect on the world markets. But the short-term “benefits” of devaluation were exploited for all they were worth. To inflate the domestic price level by devaluation was admittedly the objective of President Roosevelt and Prime Minister Blum, also of several minor powers. In due course, inflating prices, or at least halting their further decline, became generally recognized as the “benefit.” Post-devaluation price increases did show up in every case, but were limited by offsetting factors, such as the continued rise of raw material outputs, the unrelenting liquidation of debts, and the impact of “valuta-dumping” on the world markets.

The long-run impact of the “devaluation cycle” is still with us nearly forty years later in the form of a revulsion against the gold standard and its discipline. Among all the monetary legends and myths bequeathed by the upheavals of the interwar era, the one most tenaciously held is that the gold standard was inherently “doomed.” In reality, its abandonment was the result of random accidents and human frailties.

## Notes to Chapter Nine

1. Typical of such wishful thinking is the statement by Friedman and Schwartz:

A

With the departure from the gold standard of country after country . . . the United States came to be effectively on a fiduciary [fiat money] standard. Gold is currently a commodity whose price is legally supported, rather than in any meaningful sense the base of our monetary system. (*U.S. Monetary History*, p.12.)

However, by the time they arrived at their own page 683–684, the authors discovered that:

the legacy of history and the use of gold as a vehicle for fixing exchange rates still give it a monetary significance possessed by no other commodity subject to government price-fixing.

The authors seem to have overlooked the generally known fact that the central banks of the world continued, until August 15, 1971, to accept the dollar as convertible into 1/35 of an ounce of gold.

2. In 1931–1932, the foreign exchange reserves of twenty-four European central banks declined by \$1.8 billion, while their gold reserves rose by \$1 billion. In 1932, the gold exchange standard was revived within the Sterling Area. See chap. 4, sec. D, above.
3. Howard B. Ellis, *Exchange Control in Central Europe* (Cambridge: Harvard University



- Press, 1941), and Kenyon E. Poole, *German Financial Policies, 1932-39* (Cambridge: Harvard University Press, 1939), are the best analyses of the blocked currency systems in Central Europe. See also H. Rittershausen, *Internationale Handels und Devisenpolitik* (Frankfurt: Knapp, 1955); Raymond Mikesell, *Foreign Exchange in the Postwar World* (New York: Twentieth Century Fund, 1954), chap. 4.
4. League of Nations, *International Currency Experience*, p. 221. See A. G. B. Fisher, "The German Trade Drive in South-Eastern Europe," reprint from *International Affairs* (London), March-April 1936. About the vast bureaucratic apparatus of controls, see A. T. Bonnell, *German Control over International Economic Relations, 1930-1940* (University of Illinois Press, 1940).
  5. See chap. 2, sec. B, chap. 3, sec. C and sec. D, chap. 7, sec. D, above. "Exchange depreciation tends to strengthen internal inflationary forces," according to Jacob Viner (*International Trade*, p. 92).
  6. Separation of domestic and international money management had been intimated by Montagu Norman in 1929, when sterling was under pressure. (Clay, *Lord Norman*, pp. 227 f.)
  7. Norman Crump, in *Lloyd's Monthly Bank Review*, January 1937, p. 13.
  8. See chap. 7, sec. C, above.
  9. See chap. 7, sec. B, above. Table IX-1 presents the percentage gold value (selected monthly averages) of seven important currencies from August 1931 to December 1937.
  10. See chap. 4, sec. B, and Table IV-3, above.
  11. F. W. Paish, "Causes of Changes in Gold Supply," *Economica* (1938), pp. 379 ff., has shown that major variations in the volume of gold output were far from accidental, or random.
  12. The gold supply of the industrial nations was further enhanced by the partial liquidation of hoards in India (\$220 million in 1934) and in other primary producing countries whose merchandise exports had shrunk disastrously. See Table IV-4, above.
  13. Address of Secretary Morgenthau before the National Institute of Government, May 3, 1940.
  14. League of Nations, *Report on Exchange Control* (1938), p. 22.
  15. See chap. 7, sec. D, above.
  16. See A. Landry, *Les Mutations de la Monnaie* (Paris: H. Champion, 1910); Nicole Oresme, *Traictie de la Première Invention des Monnoies* (ca. 1360).
  17. See chap. 1, sec. A, above.
  18. The political and ideological history of the American concept of "contra-cyclical finance" has been presented and glorified by Herbert Stein, (*Fiscal Revolution*)
  19. See chap. 2, sec. E, above.
  20. See chap. 2, note 27, above.
  21. See chap. 3, sec. A, above.
  22. Again, a single preventive measure might have spared America some very great losses: imposing margin requirements on security loans, preferably no later than in 1927.
  23. See chap. 6, sec. B, and Table VI-4, above.
  24. "The domestic [inflationary] functions of the bank of issue [central bank] are paramount of everything." Benjamin Strong wrote Montagu Norman, July 14, 1922. (Clarke, *Bank Cooperation*, p. 31.)
  25. See Robert L. Hill, "The Role of Rigidities in the Failure of the Gold Standard," *Weltwirtschaftliches Archiv* (Kiel), November 1, 1956, pp. 85-106. See chap. 2, sec. E, above.
  26. G.W. Edwards, *The Evolution of Finance Capitalism* (New York: Longmans, Green, 1938), p. 231.
  27. R. J. Saulnier, *Urban Mortgage Lending by Life Insurance Companies* (New York: National Bureau of Economic Research, 1950), Table B10. See chap. 6, sec. B, sec. E, above.

28. See chap. 6, sec. F, chap. 8, sec. A and sec. C, above.
29. See chap. 7, sec. C, above: "An outrageous devaluation [that] produced an outrageous concentration of gold in the United States." Jacob Viner.
30. See chap. 8, sec. D, above.
31. See chap. 7, sec. A, above.





# Index

*Page numbers in italics refer to information given in footnotes*

- d'Abernon**, Lord, Economic Mission, 81  
"ability to pay", German, 260, see transfer problem, reparations  
"accelerators", 227  
"acceptance houses, London, 1931, 293  
acceptance market, U.S., 120, 241  
Aftalion, Albert, 57  
age of central banking, 14–21  
Agricultural Marketing Act, 1929, 226–27  
agricultural technology, 1920s, 245  
agriculture, pre-1914 importance, 19  
American dollar, 1968, 189  
Amsterdam, financial center, 10, 118  
Anderson, Benjamin M. Jr., 31–32 (quoted), 115, 150 (quoted), 166, 178 (quoted), 245, 317  
anti-labor coalition, Hitler's 1933, 264  
Argentina, 81, 119, 200, 207, 251  
assembly line, see conveyor belt  
Australia, 200, 220, 228, 251, 291  
Austria, 143, 146  
    and Bank of England, 201  
    banking system, 247  
    central bank cooperation, 153  
    customs union, 1931, 291  
    debts, 142, 217, 261  
    economic problems, 1920s, 200  
    foreign trade balance, 201  
    French influence, 1930, 201  
    German rapprochement, 201, 291  
Austria, inflation, 37, 71  
    stabilized schilling, 74, 252  
Austria-Hungary, 3, 7, 27, 155  
Austrian Kredit-Anstalt, collapse, 1931, 250–53, 270–71  
Austrian National Bank, 252  
Austro-Hungarian National Bank, 18  
autarchy, 141, 282  
automatism of gold standard, see gold standard; automatism  
automobile, influence of, 238  
Ayres, Leonard, 248 (quoted)
- Babson**, Roger W., 225  
Bachmann, Dr. G. 290–91, 295  
Bagehot, Walter, 15 (quoted), 320  
balance of payments, discipline, 9, 179, 330, 334–36, 340  
    mechanism, 14, 114  
    and tariffs, 183  
    see nation by name  
balance of trade, see nation by name  
balanced budget, xxi, 5, 7, 25, 52, 76, 335, see nation by name  
Baldwin, Stanley, 107

- Balkan wars, 131  
 Balog, T., 188  
 bank acceptances, pensioned, 118  
 Bank charter question, 1832, 308  
 bank deposits, *see* nation by name  
 bank failures, U.S. in 1920s, 217, 233, 299  
 Bank Holiday (U.S.), 1933, 245, 280, *see* United States, bank failures  
 bank note legal reserves, 16  
 Bank of England, 20, 27, 65, 87, 113, 146–48, 171, 276, 278  
   Austrian loan, 252  
   Bank of France, 72, 158, 187  
   changing objectives, 52  
   credit cut, 151  
   devaluation, 277, 294, *see* Great Britain; devaluation  
   emergency loan, 187  
   and gold, 7, 26, 76, 129  
   helped others stabilize, 142  
   Keynes joins board, 140  
   loses independence, 49  
   notes, 31  
   war financing, 32, 162  
   *see* Norman, M  
 Bank of France, 6, 11, 14, 20, 26, 48, 85, 158, 255, 269  
   and Bank of England, 158, 187  
   *see* Moreau, E; Moret, C.  
 Bank for International Settlements, 137, 152, 291, *see* Dawes Plan, Parker, reparations, transfer clause, Young Plan.  
 Bank of Italy, 48  
 Bank of Netherlands' 1931 losses, 158  
 Bank of Norway, 121  
 Bank Polski, 191  
 Bank Rate, 18, 40, 74, 94–95, 107, 144, 270–71, *see* Bank of England  
 Bank of South Africa, 271  
 Bankers' banks, *see* central banks  
 "banking school", 15, 22, 307, 325, *see* real bills, self-liquidating paper  
 Banque-Enquete, 1860, 16; German, 1935, 229  
 Banque de Paris et des Pays-Bas, 194  
 Basic chemicals, 221  
 Baudhuin, Prof. F. 284  
 Beaverbrook, Lord, 103, 107  
 Belgian Congo, copper, 220  
 Belgian National Bank, 180  
 Belgium, 19, 200  
   capital movements, 198–99  
   coal, 102  
   devaluation, 284–85  
   exchange rates, 1931–37, 333  
   export interests, 284  
   franc stabilized, 71, 74, 143  
   inflation, 1920–25, 38–39  
   loans, 194  
   money system, 1914, 155  
 Benham, Frederic, 270–71 (quoted)  
 Berlin, financial center, 10, 22, 118, 150  
 Berlin bankers, 1931, 253  
 Berliner Handelsgesellschaft, 231–32, 254  
 Bevan, Aneurin, 78  
 Bevin, Ernest, 79, 96  
 Big Five banks, British, 265  
 Big Five banks, German, 230–31, 247, 291  
 bilateral trade agreements, 330  
 bimetallism, 7, 11  
 Black Friday, 1927, Germany, 174, 230  
 blocked currency systems, 282, 331, 342  
 Blum, Leon, 287–88, 341  
 Board of Governors of the Federal Reserve System, *see* Federal Reserve Board  
 "le boche payera", 166  
 Boer War, 1899–1902, 131  
 Bolivia, 207, 220  
 Bolshevism, 35, 55, 60, *see* Russia  
 bond flotations, 1920–30, 213  
 Bonn, Prof. Moritz J., 278  
 bonuses on foreign loans, U.S., 206–07  
 "boom and bust", 1919–21, 24, 40–41  
 Boulding, Prof. Kenneth, 327 (poem quoted)  
 Bouniatian, Mentor, 57

- Boyle, Andrew, 65, 84, 104, 135  
 Bradbury, Lord, 49, 91  
 Bradburys, see currency notes, 1914  
 Brain Trust, 281  
 Brazil, 7, 221, 226  
 Breimyer, Harold, xviii  
 Bresciani-Turroni, 293 (quoted)  
 Bretton Woods Agreement, 1944, 113, 141, 281, 328  
 British Columbia, 220  
 brokers' loans, U.S., 1920s, 304, 317  
 Brooks, John, 294 (quoted)  
 Brown, Prof. W.A., 118–20, 276 (quoted)  
 Bruning, Chancellor Heinrich, 50, 167–68, 254–55, 257, 262–63, 291, 334, 339  
     and deflation, 168, 259–60  
 Brussels Conference, 1920, xx, 3, 133–34, 152  
 Brussels, financial center, 10, 27, 118  
 Bryan, Malcolm, 336  
 Bryan, William Jennings, 8  
 Bucharest, bank panic, 291  
 Budapest, 252, 291  
 budget deficits, see nation by name  
 Buffet, Congressman Howard, xxiii (quoted)  
 Building Trade Workers, 79  
 Bulgaria, 74, 142–43, 155, 202  
 Bullion Committee Report, 1810, 16  
 Burgess, Randolph, 144, 153  
 Burke, Edmund, 293 (quoted)  
 Bury, J.B., 67 (quoted)  
 business cycles, control of, 55, 57, 240, 298  
     and money, 312–13  
     pre-war, 20  
     see depressions, Great Depression, Kondratieff, panics  
 butter, surplus, 222  
  
 Cagan, Prof. Philip, 312  
 “call money”, 170, 237, 242, 318  
 Canada, 200, 213, 220  
 Cannan, Prof. Edwin R., 58  
 capital flows, 120, 142, 168, 198–99, 200, 202–03, 337  
     disequilibrating, 1920s, 169–79  
     embargo on, 189  
     perverted, 1920s, 326  
     sterling crisis, 159, 175  
     see balance of payments, gold flows, tariffs, nation by name  
 capitalism, battered, 1920s, 59  
 capitalists, xix  
 Cassel, Prof. Gustav, 17, 22, 88–89, 110, 124, 132, 151  
     and gold shortage, 129  
     quantity theory of money, 58, 90–91, 152, 285  
     see gold shortage, Keynes, monetarists, purchasing power parity, quantity theory  
 Cassel-Kitchin axiom, 128, 308, see currency school, gold shortage  
 cement, overproduction, 220  
 central bank cooperation, 11, 32, 76, 119, 123, 133, 135, 139, 141–46, 148, 152, 153, 159, 187, 194, 224, 228, see Norman, M.  
 central banks, pre-1914, 19, 123  
     in 1920s, 323  
     independence of, 50–51, 65, 137  
     issuing functions, 342  
     policies, xxi, 45–54  
     runs on, 1931, 159  
     see by name of nation  
 central European crisis, 1931, 251–64  
 central reserve city banks, 34  
 Ceylon, rubber, 219  
 “chartal” unit, 57  
 Chartist movement, 78  
 Chateau Frontenac, Quebec, 1931, 268  
 “cheap money”, 54, 138, 274  
 checks and balances, monetary, 336  
*Chicago Tribune*, xviii  
 Chicago Wheat Pit, 225  
 Chile, 7, 220, 246, 329  
 China, 8, 125–26, 200  
 Churchill, Winston, 22, 49, 65, 76, 87, 103, 107



- Chlepner, Prof. B.S., 295 (quoted)  
 "City", xxii, 10, 27, 69, 77, 85, 87, 93,  
 114–21, 139, 170, 172, 175, 180,  
 189, 251, 264, 269, see London's  
 financial center  
 classical economics, 2, 335  
 Clay, Sir Henry, 94, 265 (quoted), 294  
 coffee, overproduced, 221, 226  
 coin clipping, devaluation likened to,  
 281  
 Colombia, coffee, 221  
*Commercial and Financial Chronicle*,  
 xviii, 236  
 commercial paper discounted, U.S., 315  
 Commerzbank, failure, 253  
 Committee for Monetary Research and  
 Education, xvi  
 commodity dollar, 139  
 commodity, markets, 1930s, 246  
   prices, 222  
   support schemes, 219  
   surpluses, 220  
   trading, 1920s, 247  
   see commodity by name  
*Commodity Price Controls*, 246  
 common stocks, N.Y. listings, 248  
 Commune, Paris, 6  
 Communists, 254, 288, see Bolshevism,  
 Russia  
 "compensatory balances" (deposits),  
 324  
 confidence, financial, shaken, 1934, 284  
 Conservation Movement, xix  
 "conspicuous consumption", 242  
 construction cycles, U.S., 214  
 consumer credit, France, 287  
 contra-cyclical policies, 144, 240, 287,  
 334–35, 342  
 convertibility of currency, 114, 251, see  
 specie resumption  
 conveyor belt (symbol), 238  
 copper, surplus, 220, 227  
 "corners", speculative 246  
 corporate indebtedness, U.S., 215, 244  
 cost of living, British, 89, 96–97  
   Massachusetts, 89, 97  
   U.S., 96–97, 283  
 Cotton Control Board, 84  
 cotton spinning industry, 1920s (Brit-  
 ish), 265–66  
 cotton surplus, 222  
 "country banks", 34  
*Courier de Nice*, 31 (quoted)  
 "crawling peg", 280  
 credit, contraction, 304  
   controls, 139, 318  
   expansion, xxi, xxiii, 1, 33, 131, 311,  
   318  
   institutions (mortgages), 216  
   markets, 120  
   notes, 1914, 27  
   quality of, 18, see real bills  
   rationing proposed in U.S., 317  
 creditor countries, eight, 1919–38,  
 198–99  
 Cuba, 226, 245  
 cultural change, after World War I,  
 24–25  
 Cunliffe Committee Report, 75, 106,  
 107  
 Cunliffe, Lord, 49  
 currency expansion, twelve nations,  
 1913–19, 33  
 currency notes, 1914, 27, 31, see Brad-  
 burys  
 "Currency School", 15–16, 22, 308, see  
 "Banking School", Keynes,  
 monetarists quantity theory  
 currency swaps, 1931, 269  
 Currie, Prof. Laughlin, 58, 298–99, 310,  
 see Keynes, monetarists, quan-  
 tity theory  
 Customs union, Germany and Austria,  
 1931, 167, 252, 255  
 Cutten, Arthur W., 225  
 cyclical indicators, 1929, 249  
 Czechoslovakia, 153, 194, 200  
   deflation, 44, 63  
   foreign trade balance, 1929–32, 201  
   stabilization, 64, 74, 200  
*Daily Mail* (London), 103  
 Daladier, President Edouard (France),  
 288

- Danat Bank, 207, 231, 244, 253–54  
 Danzig, 142, 147–48, 157  
 Davis, Richard, 313 (quoted)  
 Dawes Plan, 50, 74, 144, 146–47, 153, 160–61, 166–67, 173–74, 191, 193, 206, 337  
     Germany's capacity to pay, 161  
     loans, 282  
     and Reichsbank, 160  
     "welfare" clause, 161  
     see Gilbert, transfer mechanism, Young Plan  
 debt inflation, 1920s, 245  
 debt management, 30, 41, 51  
 debts, British, 98–99  
     intergovernmental, 160  
     U.S., 1920s, 337  
     see interallied debts  
 "dédommagement intégral", 160  
 deficit financing, 28, 65, 106, 251, see nation by name  
 deflation, of 1920–21, 29, 56, 60, 336  
     Czechoslovakian, 44, 54  
     in debtor nations, 207  
     deliberate, 63  
     in France, 1920s, 54, 100  
     in Germany, 1920s, 54; in 1931, 259, 263, 334  
     in Great Britain, 54, 75, 77, 88, 96, 100  
     groups favoring, 73  
     in Italy, 63  
     myth of, 262  
 deflation,  
     in U.S., 1873–79, 43; in 1920s, 54  
     see depressions, Great Depression, nation by name  
 demand (function) for money, 90, 297, 308–09, 313–14, see Friedman, monetarists, Nurske, quantity theory  
 Denmark, depression, 1924–28, 73  
     money system, 1914, 155  
     prices, 1913–19, 33  
 deposit turnover, 302, see velocity of deposits  
 depreciation of currencies, see cost of living, devaluation, inflation, retail prices, wholesale prices  
 depression, Denmark, 1924–28, 73  
     France, 1900–02, 20  
     U.S., 1920–21, 41  
 Deutsche Bank, xviii, 172, 206, 218–19, 232  
 devaluation, 113, 276, 280  
     benefits expected, 341  
     British vs. American, 281  
     competitive, 92, 274, 331  
     consequences, 332, 341  
     currencies back to gold, 331  
     cycle, 341  
     and dumping, 295  
     ethics of, 276–78  
     groups favoring, 1920s, 73  
     Keynes favors, 93  
     see nation by name  
 devisen, 141, 145, 155, 157, 180, 190, 341, see central bank reserves, foreign exchange  
 dinar (Yugoslavian), 71  
 dirigism, 29, 54–63, 97, 100, 122, 139, 317, see Friedman, Keynes  
 Disconto Gesellschaft, 218  
 discount policy, British, 49, 94, 100–101, 265  
     Federal Reserve, 41, 46, 237, 318–20, 326  
     German postwar, 47  
     see nation by name  
 discount rates, see nation by name  
 division of labor, international, 61–63  
 "dole", 98, 101  
 dollar (U.S.), devalued in 1834, 280  
     devaluation doubted, 1932, 283  
     stabilized, 1934, 280  
     standard, based on gold, 334  
     strength before devaluation, 279  
 dollar bonds, Germany, 155  
 Dow-Jones industrial average, 1923–29, 337  
 Dreyse, 153  
 dumping and devaluation, 295  
 Dupriez, L., 284

- East Elbian estates**, 1931, 292
- Eastern countries**, 1931, 261
- Economic Consequences of Mr. Churchill*, 95
- economic freedom**, and gold, 5, see also  
Buffett H. and Spahr, W.
- economics**, as a science, 58
- Edens, William M**, 246 (quoted)
- Egypt**, balance of payments, 125
- "elastic currency", 19, 315
- electricity**, progress, 238-39
- Ellis, Prof. Howard S.**, 293 (quoted)
- embargo**, on capital exports, 189
- England**, see Great Britain
- equity financing**, 1920s, 209
- Erickson, Prof. Edgar**, xvii
- Estonia**, 142, 294, see also Gold Bloc,  
gold standard
- Ethiopia**, 8
- "exchange barbed wire", 256, 331
- exchange**, controls, 256, 331  
depreciation, 342  
dumping, British, 92  
rationing, 329, 340  
see devaluation, devisen, exchange  
rates, nation by name
- Exchange Equalization Account**, British,  
330
- exchange rates**, fixed, 37, 140  
flexible, 12, 192, 280, 330  
floating, 42, 47, 95, 280, 289-90, 330-  
31, see Friedman  
fluctuating, 43  
free, France, 48, 290  
multiple, Germany, 256, 331  
in 7 nations, 1931-37, 333  
see nation by name
- Exchequer**, British, orders gold suspension,  
1931, 268
- external value of money**, 88, see deflation,  
hyper-inflation, inflation
- extravagance**, and inflation, 40
- Factors of production**, xix-xx, see variable  
proportions, law of
- farm debts**, U.S., 244, 245
- farm parity movement**, 246
- farm production**, worldwide, 183
- Fascist dictatorships**, 59
- Federal Association of German Industry**, 177
- Federal Farm Board**, 226
- Federal Reserve Act**, 66
- Federal Reserve Bank of N.Y.**, 319, see  
Strong, Benj.
- Federal Reserve Board**, 65, 66, 280,  
321-23  
credit controls, 318  
split, 46
- Federal Reserve**, credit controls, 197,  
241, 315, 317-18  
credit expansion, 183, 243, 320-21  
discount rates, 41, 46, 237, 318-20,  
326
- federal securities**, collateral for notes,  
327
- Federal Reserve System**, xxiii, 14, 297,  
322, 323
- Federation of British Industries**, 107
- fiat money**, 8, 30-31
- finance bills**, English, 264
- "finance papers", 1920s, 51
- financial centers of world**, see Berlin,  
City, London, New York, Paris
- Finland**, 107  
devaluation, 73  
money system, 1914, 155  
pays debts, 192  
stabilization, 74
- fiscal policy**, 106, 247, 336  
British, 48  
contracyclical, 144, 240, 287, 334-35,  
342  
see fiscal revolution, nation by name
- "Fiscal Revolution" of 1930s, 329,  
335-36
- Fisher, Irving**, 58, 139, 152, 208, 240,  
244, 249 (quoted), 323, 324  
(quoted)  
see Friedman, monetarists, quantity  
theory
- fixed exchange rates**, 37, 140



- flights of capital, France, 1920s, 180  
 floating sterling, 330  
 Florida land boom, 222, 224, 236, 338  
 flotation process, 220  
 "forced" money supply, 306  
 Ford, Henry, 238–39  
 Fordney-McCumber tariff, 1922, 182  
 foreign exchange depreciation, 35  
 foreign exchange holdings, of central banks, 141, 155, 341, see *devisen*  
 foreign investments, German, confiscated, 99  
     U.S., 1919–34, 203  
     world, 1860–1914, 3  
     see *nation by name*  
 foreign trade, British, 1920s, 77, 81, see *nation by name*  
 forward exchange market, 18, 269  
 France,  
     balance of trade, 150, 185, 289  
     banking, 1931–33, 233–34  
     budget deficits, 1930s, 287, 289  
     capital flows, 171–72, 180, 183, 186, 188–89, 198–200, 288–89  
     colonies, 190  
     Commune (Paris), 6  
     deflation, xxii, 289  
     devaluation, xx, 287–88, 290, 339  
     discount rate, 1928–35, 194  
     exchange rates, 1931–37, 333  
     exports after devaluation, 288  
     exports, "Invisible", 1920s, 186  
     farm subsidies, 295  
     floating exchange rates, 43, 290  
     foreign exchange, 186, 190  
     foreign investments, 119, 189–90  
     foreign trade quotas, 295  
     free exchange rates, 48  
     gold hoards, private, 295  
     Great Depression, 190  
     imports, composition, 1925–30, 185  
     inflation, 38–39, 185, 188, 287–88  
     monetary policy, 194  
     money supply, 157, 312  
     prices, 33, 288–89  
     real wages, 1930s, 288  
     retail prices, 288–89  
     sit-down strikes, 1935, 287  
     stabilization, xxii, 48, 71, 143, 171, 185, 194  
     standard of living, 1930s, 288  
     and sterling, 188–89, 194  
     unpopularity (growing), 164, 177, 188, 262  
     wholesale prices, 111, 289  
 Franco-American agreement, July 6, 1931, 260  
*Frankfurter Zeitung*, 188  
 free trade, Britain, 1846, 274  
 freedom, J. S. Mill defines, xviii  
 Freedom Study Committee, xv, xvii  
 Friedman, Prof. Milton, xxiii, 65, 152, 299, 304, 311, 313, 323, 324 (quoted), 341 (quoted), see *currency school*, *dirigists*, *monetarists*, *quantity theory*  
 Friedmanites, 90  
 front populaire, 1936, 288  
 full employment, concept, 141, 329, 336  
 Funk, Walter, 261  
  
*General Theory* (Keynes), 91, 106, 153 (German edition), 334  
 Genoa Conference, 1922, xx, 3, 48, 133–34, 139, 148–49, 152, 156, 224  
     selected resolutions, 148–49  
 George, Prime Minister Lloyd, 49  
 German Historical School, 57  
 Germany,  
     ability to pay, 47, 172–73, 191, 260, 292  
     balance of payments, 165, 260  
     balance of trade, 99, 165  
     banking crisis, 142, 172, 189, 194, 229, 251, 253, 261, 291, 292, 338  
     bank liquidity, 229, 247, 251  
     Banque-Enquête, 1933–35, 229  
     Black Friday, May 13, 1927, 174  
     Bolshevist threat, 55, 66  
     bonds, 1933, 155  
     capacity to pay, 47, 172–73, 191, 260, 292

Germany (*continued*)

capital flows, 99, 165, 177–78, 251  
 collateral loans, 1931, 257  
 commercial banks, 229, 261, 291  
 compared with Britain, 1925–31, 98  
 cost of living, 1924–32, 175–76  
 debts, 174, 200, 204–05, 207, 217,  
   229, 255–56, 258, 261, 282, 292  
 deflation, 1930s, 339, *see* Brüning, H.  
 devaluation threat, 1931, 256, 259,  
   261, 331, *see* Germany; banking  
   crisis  
 dollar bonds, 155  
 Emergency Decree, July 15, 1931,  
   256  
 “exchange barbed wire”, 256, 331  
 exchange controls, 256, 282, 330–31,  
   and *see* Schacht, H.  
 farm problems, 228, 292  
 federal budget, 234  
 food prices, 1931, 292  
 foreign aid to, 205, 255  
 foreign investments, 99, 243  
 foreign trade policies, 1931, 292  
 Great Depression, 261  
 illiquid banks, 229, 251  
 industry, 98–99, 177  
 inflation, 1914–23, xix, 37–39, 41, 44,  
   65, 71, 112, 325, 326, *see* Dawes  
   Plan, Versailles Treaty, Weimar  
   Republic  
 interest rates, 1932, 258  
 inventories, excessive, 218–19  
 liquid capital, 1930, 244  
 long term debts, 1932, 257  
 manufacturing costs, 1925–29, 109  
 middle class, 1920s, 64  
 monetary collapse, 1931, 189, *see*  
   Germany, banking crisis  
 money supply, 1924–32, 176  
 mortgage banks, 66  
 prices, 1913–19, 33, *see* Germany, in-  
   flation  
 rearmament, 167, 190, 262, 293, 339  
 reparations, 74, 162, 164, 205, *see*  
   Dawes Plan, Gilbert, Versailles  
   Treaty, Young Plan

savings banks, 1925–30, 291  
 short term debts, 174, 256, 258, 292,  
   293  
 Social Democratic Party, 66  
 Social Insurance System, 66  
 social progress, 1920s, 293  
 stabilization, 44, 74, *see* Dawes Plan;  
   Germany, inflation  
 Standstill Agreements, 256, *see*  
   Hoover Moratorium, Lausanne  
   stock exchange, 1927, 174  
   wholesale price index, 1924–32, 176  
 Gerschenkron, Prof. Alexander, 262–  
   63, 293  
 Gilbert, S. Parker, 161, 173–74, 193,  
   207, 232, *see* Bank for Interna-  
   tional Settlements, reparations,  
   transfer clause  
 Giro-Zentralen, 232  
 Glass-Steagall amendment, 1932, 327  
 global confidence crisis, 1933, 322  
 Goebbels, Dr. Joseph, 255  
 gold, as a commodity, 341  
   discoveries in 19th century, 7  
   economies in use of, 8, 122–23, 128,  
   130, 150, 156  
   flows, 33, 128–29, 144, 151, 183–84,  
   186, 267, 320, 334  
   hoards, xxii, 121, 151, 295, 326,  
   342  
   mining, 128, 151, 332  
   as money, 341  
   movement not free, 28, 63, 71, 287,  
   332  
   neutralized, 193  
   points (import and export), 8, 11,  
   169  
   price of, 9, 139, 141, 151, 330  
   production, 124–25, 128, 130, 152,  
   332, 342  
   reserves of central banks, 28, 70, 151,  
   179–81, 286, 335, 340  
   equal in 1928 to 1913, 126  
   in France, 179, 185, 188  
   in Germany, 179–80  
   U.S. requirements, 126–27, 151,  
   315

- U.S. holdings, 46, 130, 179, 183, 281, 316, 321, 326
- shortage theory, xxii, 13, 28, 70, 102, 113, 123–24, 126, 128, 130, 132, 179, see Cassel, Kitchin, Friedman, Hardy, monetarists
- Gold Bloc, 1933–36, 130, 233, 279, 284–86, 329, 331, 335. See Belgium, Estonia, France, Italy, Netherlands, Poland, Switzerland
- gold bullion standard, 76, 112, 116–17, 121–22, 130, 150, 154, 280
- gold coin standard, 68, 116–17, 122
- Gold Delegation of the League of Nations, 1930, 123
- Gold Discount Bank, 191
- gold exchange standard, 72, 112, 116–17, 119, 130, 136, 140, 145–46, 148–49, 151, 154, 156–59, 194, 298, 337, 341
  - capital flows, 159
  - and devaluation, 158
  - international liquidity, 159
  - and Norman, M., 159
  - new type, xxi, 156–57, 190
  - old type, 155, 190
  - role of London, 115
  - technique, 156
- gold standard, 325, 341
  - advantages, 9, 13
  - alternatives, 11–14
  - automatic features, 13, 18, 26, 94, 104, 123, 160, 335–36
  - and balanced budget, 5
  - “barbarous relic”, xxiv
  - Belgium returns to, 30
  - breakdown, 1930s, xix, 27, 270, 272, 328–29, 341
  - and the City, 10, 118
  - coin standard, 66, 116–17, 122
  - criticized, 13, 60, see Friedman, Keynes
  - decentralized credit markets, 120
  - defined, 4, 8
  - discipline of, 1–6, 9, 13, 20, 22, 30, 53, 122, 152, 328
  - and economic freedom, 2, 5, 6
  - external “buffer”, 334
  - France stabilizes, 30
  - and free trade, 12
  - “game”, 9, 11, 14, 17, 20, 45, 104, 114, 257, 271, 315, 336, 340
  - Germany stabilizes, 29
  - Great Britain stabilizes, 26, 29
  - international, 1, 94
  - Italy stabilizes, 30
  - “Keynesian trap”, 271
  - and Marxism, 3, 11
  - number of nations on, 8, 107, 116–17, 284
  - Netherlands stabilizes, 29
  - qualified gold bullion standard, 1930s, 334
  - respect for, 3
  - return to, 42, 54, 60, 114, 170
  - Sweden stabilizes, 29
  - and Switzerland, 71
  - and tariffs, 12
  - in United States, 1919, 71
  - and World economy, 6, 10
  - World War I’s effect on, 21, 25
  - see nation by name
- Goldschmidt, Jacob, 207, 230–31, 247, 253
- Goliembiewski, Prof. Robert,
- Great Boom of the 1920s, 296
- Great Britain, balance of payments, 82–83, 92, 109, 123, 139, 180, 228, 274
  - balance of trade, 87, 90, 99, 266, 273
  - bank deposits, 1926–29, 110
  - budget deficits, 76, 267, 269
  - capital flows, 99, 170–71, 198–99
  - coal mining, 102, 111
  - compared with Germany, 1925–31, 98
  - and deflation, 1920s, 64, 107, 269
  - devaluation, 1931, xx, xxii, 96, 140, 175, 188, 194, 234, 268–72, 275, 282, 293, 329, 339–40
  - effects, 270–71, 274–75, 279
  - Germany compared to, 98
  - later devaluations, 70



- Great Britain (*continued*)  
     possibilities earlier, 80, 93, 98, 101, 187  
     and discount rate, 1931, 271  
     exchange rates, 1931–37, 333  
     foreign investments, 92–93, 108, 171, 200  
     foreign trade, 77, 81, 83–84, 108, 109, 110  
     general strike, 1926, 102  
     gold standard, 1715–1914, 26  
     income tax, 98  
     industry problems, 1920s, 69, 77–81, 93, 105, 109  
     inflation, 1914–25, 38–39  
     “invisible” items, 82–83, 90, 175, 180  
     liquidity, 248, 264  
     money supply, 311, 325  
     National Government, 1931, 267  
     “New Era” sought, 1920s, 53  
     public debt, 111  
     reparations, 162  
     ship building, 84  
     stabilization, 1925, xxii, 75–76, 101, 109, 153  
         devaluation possibility, 1920s, 80, 93, 98, 101  
     steel industry, 84  
     strikes, 1925–26, 78  
     tariffs, 140, 182, 274  
     textiles, 84, 108, 111  
     unemployment, 86, 95–97, 100–03, 109, 111, 274  
     wage-price structure, 1920s, 155  
     war debts, 162  
     war financing, 32, 162  
     wholesale prices, 33, 124  
 Great Depression, 1929–35, xx, 24, 65, 96, 112, 123, 138, 154, 190, 243, 247, 261, 272, 283, 296, 298, 301, 313, 335, 338, *see* gold standard, Keynes, unemployment  
 Greece, 7, 142–43, 157, 202  
 Greenbacks, 7  
 Gregory, Sir Theodore, 95–96  
 Grigg, P.J., 65, 135  
 Haber ammonia process, 222  
 Haiti devalues, 278  
 Halsey Stuart and Co., 206  
 “hand to mouth” buying, 218  
 Hardy, Prof. Charles O., 131  
 Harrison, Governor George L., 143–44, 255, 268, 272, 276, 294, 319  
 Harrod, Sir Roy, 4, 6, 153  
 Harvey, Sir Ernest, 268, 272, 275, 277  
 Hatry fraud, 235, 242  
 Harvard Business School, 236  
 Haus, Mrs. and Ford Motor Co., 239  
 Havenstein, Rudolph, 47, 65  
 Hawtrey, Prof. R.G., 156  
 Heckscher, Ely, 107  
 Hegel, Friedrich, 59  
 Helfferich, K., 65  
 Henderson, Prof. Hubert, 76, 102, 162  
 “high powered money”, 308  
 Hindenburg, President Paul von, 255, 260, 262, 264, 339  
 Historical School, German, 65  
 Hitler, Chancellor Adolf, xviii, 5, 64, 169, 254, 262–64, 282–83  
 “hoarding” gold, 1930s, 151, *see* gold  
 Holland, *see* Netherlands  
 home mortgages, 1925–34, U.S., 216  
 Honduras, 8  
 Hoover Moratorium, June, 1931, 167–68, 177, 192, 254, 260  
 Hoover, President Herbert, 111, 168, 226, 259, 280, 320, 322, 327, 335  
 “hot house prosperity”, U.S., 1920s, 236  
 “hot money”, 75, 334–35  
 Hughes, Secretary of State, Charles Evans, 191  
 Hungarian Commercial Bank of Pest, 232  
 Hungarian General Credit Bank, 252  
 Hungarian National Bank, 151  
 Hungary, 143, 200  
     banking system, 153, 247  
     Bolshevism, 1920s, 55  
     foreign trade, 1929–32, 201  
     inflation, 37, 71, 74  
     League loans, 142

- payments data, 243
- pengoe, 71
- stabilization, 74
- hyper-inflation, 100, 310
- Income tax**, British, 98
- inconvertible paper money, 12
- independence of central banks, 50–51, 65, 137, see central banks, Norman, Strong
- India, balance of payments, 125, 190
  - capital flows, 190
  - debtor, 200
  - gold hoards, 342
  - money system, 156
- industrial growth, 3% pre-1914, 7
- industrial production index, U.S., 1933, 284
- inflation, after-effects, Germany, 44
  - after World War I, 25, 37
  - British, 1797–1814, 61
  - controlled, 1930s, 329
  - “creeping”, 30
  - cycle with deflation, 24
  - and devaluation, 340
  - in Germany, 1918–23, 37, 44, 98
  - pleasant side, 42, 56
  - of profits, U.S., 1920s, 311
  - and reserve requirements, U.S., 34
  - in U.S., little in 1920s, 34, 311, 323
  - in various nations, 1913–29, 33, 35, 38–40, 155
  - and wages in U.S., 44
  - war-time, 29, 35
  - see nation by name
- “inside trading”, U.S., 248
- Institute for Currency Research, Reichsbank, xviii
- instrumentarium of central banks, 43
- Insull, Samuel, 236
- intellectual climate of 1920s, 59
- interallied debts, 35, 72, 98, 154, 160–69, 183, 191, 192, 243, see Hoover moratorium, Lausanne Treaty, reparations
- interest rate differentials, 1931–32, 170
- interest rate-gold flow mechanism, 177
- internal value of money, 88
- “international bankers” conspiracy, 103
- “international capitalists”, 69
- international credit, see international indebtedness, international liquidity
- international gold standard, 8–11, 94, 138, 159, see gold standard, gold exchange standard, Keynes, Norman
- international indebtedness, 178, 196–207, 210–12, 243, see international liquidity
- international liquidity, 20, 132, 178, 318, see gold standard
- International Monetary Fund, 1944, 140–41
- international monetary system, 1931–33, collapse, 251
- international stabilization fund suggested, 1922, 137
- international trade network, 42, 61–63, 330, see division of labor, gold standard
- inventories, excessive in U.S., 1920s, 219
- Invergordon mutiny, 267
- Investment bankers, American, 201, 236
- “invisible” items, British, 82–83, 90, 180
- Ireland, banking inquiry, 1802, 16
  - capital movements, 1929–38, 198–99
- Italy, banking system, 247
  - Bolshevism, 1920s, 55
  - debtor, 1930s, 292
  - deflation, 1920s, 63
  - exchange rates, 1931–37, 333
  - gold coin, 1920s, 150
  - inflation, 1914–25, 38–39
  - lira, 1934–on, 295
  - money system, 155–56, 295
  - nationalism frustrated, 1920s, 53
  - prices, 1913–19, 33
  - stabilization, 71, 74, 143
  - suspends, 284

- Jacobssen, Per**, 193  
**Japan**, debtor, 200  
     inflation, 1914–25, 38–39  
     prices, 1913–19, 33  
**Jevons, Prof. Stanley**, 57  
 joint stock banks, British war financing, 32  
**Jones, Prof. Robert Huhn**, xvii  
**Juglar, Prof. Joseph Clement**, 57  
**Jugoslavian dinar**, 71  
**Jung, Dr. Carl**, 293  
**Junkers, Prussian**, 228, 260
- Kellogg-Briand Peace Pact**, 237  
**Kemmerer, Prof. Donald L.**, xv–xvii, 117, 249 (quoted)  
**Kemmerer, Prof. E.W.**, 107, 143, 153  
 “key currency”, 160  
**Keynes, Lord John M.** xxi, 76, 79, 84, 88–89, 96, 100, 102, 104–05, 107, 109, 110, 111, 140, 153, 162, 168, 191, 206, 273, 280, 293, 331  
     advocates gold standard, 1, 4  
     free trader, 93  
     and *General Theory*, 91, 111 (German edition), 335  
     and Germany, 1931, 260  
     and inflation, 44 (quoted)  
     influence of, 95  
     intergovernmental debts, 162  
     “internationalized” by Norman, 141  
     “Keynesian trap”, 272–73  
     as little Englander, xxi, 93, 106  
     on money, 26, 301  
     and Nazis, 153, 250  
     opposes devaluation, 4  
     opposes gold standard, 4  
     quantity theory of money, 58, see Cassel  
     and tariffs, 93  
     and unbalanced budget, 106  
     Versailles Treaty, 262  
     see Norman, M.  
**Keynesian economics**, 95, 227  
     economists, 69, 90  
     literature on M. Norman, 121  
     trap, 272
- Kindersley, Sir Robert**, 134  
**Kitchin, Joseph**, 124–25, see Cassel, Hardy, Norman  
**Knapp, Georg Friedrich**, 57, 66  
**Knight, Prof. Frank H.**, 58 (quoted)  
**Kondratieff cycle**, 247  
**koruna, Czechoslovakian**, 73  
**Kredit Anstalt, Austrian**, 250–53, 270–71, see Austria; gold standard, breakdown  
**Kreuger, Ivar**, 73, 236, 248, 284
- Labor, government (British)**, 1931, 187  
     leaders’ influence, xix–xx  
     obstructionist tactics, 79–80  
     parties in Europe, 108  
     productivity (British), 1920–38, 85  
**Lancashire spinning industry**, 265–66  
**Lanborn, Ody H.** 246  
**Latin Monetary Union countries**, 128  
**Latvia**, 202  
**Lausanne Agreement**, 1932, 169, 192, 260  
**Laval, Premier Pierre**, 255, 289  
**Law, Chancellor of the Exchequer Bonar**, 49  
**Law, John**, 152, 239  
**Layton, W.**, 264, 292  
**lead supply**, 220  
**League of Nations**, 93, 142, 164, 197, 228, 237  
     Financial Committee, 133, 136  
     financial guardian, 48  
     Gold Committee reports, 123, 125, 128, 142, 151, 194  
     gold estimates, 129  
**Lee-Higginson Co.**, 172, 244  
**Leffingwell, Russell**, 64  
**Leith-Ross, Sir Frederick**, 192 (quoted)  
**Lenin, Vladmir**, 330  
**Lescure, Jean**, 57  
**levy on capital**, 135  
**life insurance policy reserves**, 324  
**Lilly Endowment, Inc.** xvi–xvii



- "liquid savings", 126
- liquidity, 58, 306
  - bank, 35, 300, 322
  - crisis, 232–34
  - duty of Federal Reserve, 1920s, 296
  - standards, Germany, 247, 293
  - standards, Great Britain, 264
  - and supply of money, 306
  - U.S. banks, 1930s, 322
  - see nation by name
- "little England" viewpoint (Keynes), xxi, 91
- Lindert, P.H., *Key Currencies*, 190
- "limping" resource allocations, 35
- Lithuania, money system, 1924, 157
- Little Entente, 72
- Livermore, Jesse, 242
- loans, Latin American, 155, 204
- "long waves", price trends, 130
- Locarno Pact, 237
- London Conference of 1933, 282–83
- London, financial center, 21, 45, 115, 125, 150, 173
  - gold market, 276
  - and gold standard, 10
  - see City, Norman, M
- London Stock Exchange, 27
- London Ultimatum, 1921, 98
- Louvain University economists, 284
- Ludendorff, General Erich
- Lundberg, Professor Erik, 314
- Luther, Hans, Reichsbank president, 1930–33, 50, 172, 230, 230, 254–55, 257, 259–60, 262–63, 293
- MacDonald**, Prime Minister Ramsey, 102, 267, 294
- MacLeod, Dr. A.N., 307 (quoted)
- MacMillan Committee Report on Gold Standard, 1931, 4, 10, 17, 79, 94, 96, 111, 120, 172, 179, 230, 266, 293, 301, 309
- McKenna, Reginald, 76, 79, 96, 182
- McNary-Haugen bills, 226
- macro-economic viewpoint, 206
- Malaya, rubber, 219–20
- managed money advocates, 28, 88, 104
- margin requirements, 342
  - Belgian, 1927, 317
  - German, 1927, 174, 317
  - U.S., 241–42
- Marin, Louis, resolution, 1925, 160
- mark, German, 259, 331
- marketing, antiquated in Britain, 81
- Marx, Karl, 5
- Marxists, 3, 11, 57
- May Committee, see MacMillan Committee
- Mayer, Prof. Robert W., xvii
- Mellon, Secretary of the Treasury Andrew, 182
- mercantilism, revived, 60, 334
- merchant marine, British, 77
- Midland Bank, London, xviii
- Mill, John Stuart, xvii, 308 (quoted), 325
- Miller, Adolph, 65
- minimum wage laws, xix
- Mitchell, Charles, 241, 249
- Moley, Raymond, 294 (quoted)
- "monetarists", 241, 244, 296–301, 306–307, 309–10, 312–14, 323, 324, see currency school, Friedman, Keynes, neoteric, quantity theory
- monetization of debt, 30
- monetary, chaos, 71
  - gold and commodity prices, 179
  - parallels, 1960s, xxiv
  - policy, 1928–29, 242–43
  - policy revolution, 329–36, 338
  - system in colonies, 156
- money, demand for, 90, 297, 308–09, 313–14
  - external value of, 88
  - internal value of, 88
  - "narrow concept", 33
  - public attitude toward, 1
  - see deflation, hyper-inflation, inflation
- money management, 15, 17, 336, 342
- money markets, 32, 145–46, see financial centers, London, New York, Paris

- money supply, 313–14  
 concept, 244  
 defined, 302  
 estimates, xxiii  
 France, 1920s, 310, 312  
 Germany, 310  
 Great Britain, 1920s, 310–11  
 twelve nations, 1913–19, 33  
 U.S., 37, 304  
 see Currie, Friedman, Keynes,  
 monetarists, quantity theory  
 see nation by name  
 “mono-culture” countries, 221  
 moratorium, *de facto*, German, 1931,  
 259, see Hoover moratorium  
 Moreau, Governor Emile (Bank of  
 France), 5, 48, 50, 87, 134, 152,  
 171, 175, 187, 193, 194, 265, 293,  
 see Norman, Poincare, Strong  
 Moret, Governor Clement (Bank of  
 France), 268  
 Morgan, J.P., 107, 143, 161, 193, 269,  
 294  
 Morgenthau, Secretary of Treasury  
 Henry, 332  
 Moroccan crisis of 1905, 118  
 Morton, Prof. Walter, 326 (quoted)  
 Mosler, Dr., 247  
 most favored nation clauses, 43  
 Moulton, Harold G., 229  
 “multipliers”, 227  
 municipal debts, 1920s, 244  
 Mussolini, Premier Benito, 48, 63, 254  
 mutiny in British navy, 1931, 267–68
- Napoleonic wars**, 131  
 National Bank of Belgium, 14  
 National banks (U.S.), 1913–19, 36, see  
 country banks, reserve city  
 banks  
 national budgets, six nations, 234–35,  
 see other nations by name  
 National Monetary Commission, U.S.,  
 16  
 nationalizing railroads, France, 287  
 natural resources, xix–xx,
- Nazis, 153, 167, 227, 254, 283, 293  
 “near money”, 304–06, 309, 311, 325,  
 see savings and loan associations  
 Netherlands, bank deposits, 1925–26,  
 325  
 banking system, 1933, 233–34  
 capital movements, 198–99  
 creditor, 200  
 debts, 1920s, 217  
 devaluation, 1936, 288, 290–91  
 in Gold Bloc, 130  
 gold coin, 1920s, 150  
 gulden, 107  
 inflation, 1914–25, 38–39  
 prices, 1913–19, 33  
 and sterling’s devaluation, 187  
 stabilizes, 1925, 71, 75, 107  
 Netherlands Bank, 14, 76, 87, 187, 276–  
 78, 294, see Dr. Vissering  
 Netherlands East Indies, money system,  
 156  
 New Deal, xix  
 Newfoundland, lead, 220  
 “New Monetary System”, 152  
 New York, financial center, 10, 118,  
 226  
 New York Stock Exchange, 178, 217,  
 222, 235, 248, 250  
 New Zealand, suspends, 251  
 Niemeyer, Sir Otto, 76, 134, 136  
 Nigeria, tin, 220  
 nitrates, synthetic, 222, 246  
 non-convertible currencies, capital  
 flight, 169, see capital flows  
 Nordwolle and Ultramar, insolvent,  
 1931, 253  
 “normalcy” of 1920s, 24, 46, 138, 154  
 Norman, Governor Montagu (Bank of  
 England), xxi, 28, 32, 47, 49–52,  
 64, 65, 66, 80, 84, 100–01, 103–  
 04, 108, 111, 112–13, 121, 123,  
 133, 135–36, 143, 145–47, 152,  
 153, 159, 168, 171, 173–75, 180,  
 187–88, 191, 222, 228, 252, 259,  
 264–66, 272, 275–76, 278, 293,  
 310, 326, 330, 337, 339, 342

- and Bank for International Settlements, 137
- Cassel-Keynes approach, 91
- on "cheap money", 138, 274
- and Dawes Plan, 149, 160
- and devaluation (British), 268–69
- deputy governor, 1918–20, 75
- failure of life work, 146
- and Fisher's commodity dollar, 139
- favors gold bullion standard, 122
- gold standard policy, 94
- and gold exchange standard, 159
- and going off gold, xxii
- international viewpoint, 94, 106
- controversy with Keynes, 86–96, 106
- and liquidity criteria, 264
- nervous condition of, 293
- and Roumania, 72
- and Schacht, 142
- meets Strong, 55
- and Versailles Treaty, 134
- Northern Rhodesia, copper, 220
- Norway, depression, 1924–28, 73
- money system, 1914, 155
- prices, 1913–19, 33
- Noyes, Alexander Dana, 236
- Nurske, Ragnar, 43 (quoted), 90 (quoted)
- Open market operations**, U.S., 31, 33, 54, 279, 319
- organized labor's power, 104
- Oriental hoarders, 125–26, see China, Egypt, India
- Osthilfe, 292
- Ottawa Agreement, 1932, 140
- overconfidence, 1920s, New York, 248
- Palyi, Dr. Melchior**, xv–xxiii
- Panama, devalues, 278
- panics, 17, 27, 274
  - Great Britain, 16
  - Sweden, 1907, 17
  - U.S., 41
  - see Great Depression, stock market crash
- paper standard nations, 1919–37, 116–17
- Paris, as financial center, 10, 118, 194
- "parity depression", Scandinavia, 1924, 73
- Pearson, Prof. Frank A., 281, see Warren
- Peel's Act of 1844, 16, 26, see Bank of England, banking school
- pegging currencies, wartime, 35
- pengoe, Hungarian, 37, 71, 74
- pensioning bank acceptances, 118
- "Peripheral" central banks, 156
- Perpetual Inflation idea, 336
- "perpetual prosperity", 1920s, 218, see Fisher
- Pershing, General John J., 249
- Persia, 8
- personal freedom, and gold standard, 2
- Peru, 71, 251
- "perverted elasticity", 225
- peseta, Spanish, 71
- petroleum, overproduction, 220
- Philippines, money system, 1914, 156
- Philipps, Prof. Chester A., 66
- phylloxera, 20
- Pigou, Prof. Arthur C., 57
- "pocket battleships", 168, see Germany; rearmament
- Poincare, President Raymond (France), 51, 65, 87, 187–88
- Poland, 143
  - banking system, 247
  - financial problems, 1925–26, 143, 190, see Kemmerer, E.W.
  - foreign trade, 1929–32, 201
  - illiquid, 1931, 261
  - inflation, 37, 71
  - stabilizes, 74, 107
  - suspends, 284
  - see Gold Bloc, zloty
- Popovich, Dr., 63
- Popular Front, France, 1936, 287–89
- Portugal, 74, 143, 155
- Prague, no crisis in 1931, 291
- price controls, 35



- price levels, 1850–1913, 22, 30; 1920s, 42, 240, 311  
 gold production, 131  
 long waves, 13  
 secular trend, 131  
 stability, 42  
 twelve nations, 1913–19, 33  
 and wars, 131  
 see deflation, Fisher, inflation, retail prices, nation by name  
 “prime money”, defined, 306  
 printing press money, 1914, 28  
 production, world, 7, 22  
 profit inflation, postwar, 37–311  
 protectionism, 1930s, 182, 274, see devaluation, import quotas, tariffs  
 public debt, see nation by name  
 “public relations”, of central banks, 54  
 purchasing power parity, 88–90, 109, 110, 186, 295, see Cassel, Keynes, Rist
- Quality of credit**, 19, 91, see real bills, self-liquidating paper  
 quantity theory of money, xxiii, 58, 110, 123, 152, 227, 241, 244, 245, 281, 297–98, 308–09, 312, 324  
 formula, 301  
 rediscovered, 25  
 “school”, 1935, 285  
 see Currie, Fisher, Friedman, Keynes, monetarists  
 quasi-acceptances, German, 230  
 quasi-automatic money system, 123, see gold standard: automatic features  
 Quesnay, Pierre, 134–35, 152  
 “quicksilver standard”, 87
- Radcliffe Report**, 306–07,  
 radio industry, booms 1922–on, 239  
 railroad debts, American, 244  
 Rasin, Dr. Alois, 44  
 Rathenau, Walter, 35
- raw materials, countries producing, 251  
 problems, 1931, 251  
 prices, British, 96  
 surpluses, xxi, 224–25, 337, 341  
 see name of raw material, Stevenson Plan, valorization  
 rayon, 222  
 “real bills”, 15, 233, 300, 315  
 doctrine defended, 300  
 see quality of credit, self-liquidating paper  
 real estate, Florida, 1926, 338  
 “real money”, 304–05  
 real wages, British, 1922–25, 97  
 rearmament, Germany, 167, 190, 262, 293, 339, see Nazis, pocket battleships  
 reconstruction, postwar, 32, 37, 42, 50, 160, 166  
 Austria, 50  
 France, 160, 166  
 Reconstruction Finance Corporation, 294, 322  
 refrigerators, 1920s, 239  
 Reichsbank, 11, 20, 27, 47, 147, 158  
 in 1931, 172, 174–75, 177, 253, 256–57, 259, 263  
 helps inflation, 31  
 independence guaranteed, 1924–29, 50, 160  
 and money supply, 175  
 sells sterling, 187  
 see Dawes Plan, Luther, Schacht, Young Plan  
 Relm Foundation, xvi, xvii  
 Rentenmark, 71  
 rent controls, 35  
 reparations, Germany, 98, 133, 137, 154–55, 165–66, 173, 177, 190, 191, 192, 205  
 under Dawes Plan, 161, 191  
 final cancellation, 169, 192  
 to France, 186  
 suspended, 1931, 173, 177, 192, 255, 260–61

- see Brüning, Germany's ability to pay, Gilbert, Hoover moratorium; Lausanne Agreement, Ruhr occupation, Schacht, Versailles Treaty  
 repurchase agreements, 150  
 reserve city banks, 34  
 reserve currency, 114, 140, 156, see gold exchange standard, Norman  
 reserves, "pyramiding" of, 1920s, 158  
 reserve ratios, U.S., 326  
 reserve requirements, U.S., reduced, 34, 317  
 retail prices, 1850-1913 (British), 30  
 1913-19 (12 nations), 33  
 "revaluations of debts, Germany, after inflation, 44  
 revalorisation integrale, 87  
 revolutions, and inflation, 45  
 Revolution of 1848, 26  
 Rhineland, evacuated, 167  
 Ricardo, David, 2, 28, 88  
 Riksbank (Sweden), 17, 72  
 Rist, Prof. Charles, 132  
 Rittershausen, Prof. H., 247  
 Roosevelt, President Franklin D., 227, 281-83, 285, 294, 321, 339, 341  
   anti-international policies, 283  
   devalues dollar, 280  
   economics, 283, 294  
   election promises, 279  
 Roosevelt, Theodore, xix  
 Ropke, Prof. W., 257  
 Rösler, Dr. 231  
 Rothbard, Prof. Murray, 227 (quoted)  
 Rothchild, Baron Alphonse, 252  
 Rothchild, N.M. and Sons, 293  
 Roumania, 119, 143  
   money, 1914, 155  
   stabilization, 72, 74  
 Rousseau, Jean-Jacques, 58  
 Routh, Guy, 80  
 rubber, overproduction, 219  
 Rueff, Jacques, 268  
 Ruhr, occupation of, 74-75, 102, 160, see reparations  
 "run" on the pound, 189, see Great Britain  
 devaluation  
 Russia, 7, 119, 202  
   gold mining, 332  
   gold standard, 2, 131  
   inflation, 71  
   money, 1914, 155, see Bolshevism  
 Russo-Japanese War, 2, 131  
  
**St. Germain Treaty**, 134  
 Salter, Sir Arthur, 21, 80, 134-153  
 Samuel Commission, 1926, 102, 111  
 San Salvador, 8  
 Santo Domingo, 156  
 Sauerbeck price index, 124  
 Savers' League, 263  
 Savings banks, Germany, 1925-32, 254  
 savings and loan associations, deposits, 214, 304, 325  
 saving, forced, 12  
   "productive", 12  
 schilling, Austrian, 71  
 Schacht, Dr. Hjalmar H.G., 50-51, 135-36, 145-47, 152, 153, 172, 174-75, 177, 191, 192, 193, 229-30, 247, 256, 261, 263, 282, 292  
   favors gold standard, 5  
   and Young Plan, 166-67  
 Schaeffle, Albert E.F., 57  
 Schleicher, Chancellor Kurt von, 264  
 Schmoller, Prof. Gustav, 65  
 Schumacher, H., 65  
 Schumpeter, Prof. Joseph, 57  
 Schwartz, Dr. Anna, 304, 313, see Friedman, monetarists, quantity theory  
 self-liquidating paper, 115, 300, see quality of credit, real bills  
 "self-socialization", 156  
 Serbia, 1914, 27, see Yugoslavia  
 share capital of savings and loan associations, 325  
 "shiftability" of assets, 1920s, 229-30

- short term loans, defined, 244
  - German, 1928–31, 172, 174
  - British, 1920s, 176
- Siepmann, Harry, 252
- Simons, Prof. Henry C., 335
- silver, demonetized, 8
- silver standard, nations on, 7–8, 116–17
- sit-down strikes, 267, 287
- Skinner, Ernest, 49
- skyscraper era, 236
- sledding cotton, 222
- Smith, Adam, 5
- Smoot-Hawley Tariff Act, 1930, 182, 227
- Snowden, Philip, 49, 267
- Snyder, Dr. Carl, 323
- social climate favoring business, 239
- “social engineering”, Keynes, 301
- “social justice” vs. gold, Great Britain, 101–06
- social reforms of 1920s, Great Britain, 53
- Socialist Planners, 274
- Socialists, France, 1930s, 288
- “Solidarity of international money markets”, 169
- Solmsen, Dr. G. 292
- Somary, Felix, 3, 138
- South Africa, Union of, 125, 130, 143
  - debtor, 200
  - gold mining, 128, 332
  - stabilized, 1924, 71
- South America, 221
- South Sea Bubble, 1720, 235
- Soviet Russia, 227, see Bolshevism, Communism, Russia
- Spahr, Prof. Walter E. 151, 296
- Spain, 7, 33, 71, 119, 155
- Sparkassen, 1925–32, 254
- Spencer, Herbert, 238
- Sprague, Prof. O.M.W., 193
- stability, money’s prime requirement, 11
- stabilization of currencies, Central Europe, 100
  - in France, 100, 185, 188
  - in Great Britain, 69, 92, 95–96, 103
  - loans, 202
  - postponed, after war, 70–74
  - practice followed, 1920s, 74
  - rate question, 73
  - sterling rate, 69
  - in Sweden, 75
  - see nation by name
- stabilization funds, 331
- Stamp, Josiah, 102
- standard of living, Germany, 1920s, 197
- Standstill Agreements, German, 256
- State banks, U.S., 1913–19, 36
- state theory of money, 1906, 57
- Stein, Herbert, 111
- Sterling area, 140–41, 153, 159, 180
- sterling crisis, 1927, 138
- sterling’s devaluation, 1931, 272–73, 276, 278
  - end of an era, 278
  - first of three, 70
  - Netherlands Bank, 276–77
- Steve, George, xvi
- Stevenson Plan, 219
- Stewart, Dr. W.W., 108, 111, 120, 209, 309
- Stille Reserven, German, 1931, 253
- Stinnes, Hugo, 206–07
- stock exchange, German, 1927, 230
  - New York, 66
  - boom, 241, 249, 326
  - boom criticized, 241
  - boom defended, 299
  - crash, 1929, 178, 208–09, 225, 235, 248, 250, 304, 319, 322, 324, see Great Depression
  - speculation, 1920s, 144, 170, 217, 235, 315, 326
- stock flotations, U.S., 1920–30, 213
- stock of money, U.S. 1929, 302
- store of value, vital function of money, xx, 11
- Storer, R.W., 304
- Strakosch, Sir Henry, 24, 128, 134, 222
- “street loans”, U.S., 241
- Stresa Conference, 1933, 200



- Streseman, Chancellor Gustav, 167  
 strikes in Great Britain, 1925–26, 78  
 Stringher, Governor Bank of Italy, 48  
 Strong, Governor Benjamin, 46, 51, 54–55, 64, 65, 66, 76, 88, 91, 103, 120, 133, 135–38, 143–44, 152, 156, 168, 171, 190, 315, 317–18, 326, 337, 342  
 Stuart, Harry, 244  
 Suess, Prof. Edward, 123  
 sugar, surplus of, 219–20, 226  
 “supply of money”, assumptions, 307  
 Supreme Allied Council, conferences, 1920, 1922, 3, see Brussels, Genoa  
 suspension of gold convertibility, British, 268  
 Svenska Handelsbanken, 283  
 swap operations, 189, 194  
 Sweden, banking system, 17, 72, 247  
   boom, 1920s, 107  
   capital movements, 1919–38, 198–99  
   devaluation, 340  
   exchange rates, 1931–37, 333  
   inflation, 1915–25, 38–39  
   manufacturing costs, 1925–29, 109  
   money system, 1914, 155  
   prices, 1913–19, 33  
   Riksbank, 17, 72  
   stabilization, 1924, 71, 107  
 Swiss National Bank, 290, 295  
 Switzerland, banking system, 233–34, 290, 295  
   capital movements, 1919–38, 198–99  
   creditor, 200  
   devaluation, 287, 290–91, 295  
   exchange rates, 1931–37, 333  
   Gold Bloc member, 130  
   gold coins, 1920s, 150  
   inflation, 1914–25, 38–39  
   prices, 1913–19, 33  
   reserves in gold, 1936, 290  
 Taine, H.A., 58 (quoted)  
 tariffs, European, 1920s, 100, see protection; nation by name  
 Taylorism, 238  
 tea, surplus, 226  
 “technocrats”, 35, 50  
 technology, 222  
 territorial expansion (Germany, Japan), 283  
 Tetrode, Dr., 277  
 Thiers, Adolph, 17  
 Threadneedle Street, see Bank of England; City  
 tin cartel, 219  
 Tocqueville, Alexis de, 101 (quoted)  
 Tooke’s *History of Prices*, 308  
*Tract on Monetary Reform* (Tooke), 4  
 Trade Union Congress, 267  
 trade, world, Britain’s share, 1913–38, 84  
 “trading on the equity”, 1920s, 208  
 “transactions velocity”, 302  
 Transatlantic phone service, 1920s, 150  
 transfer problem, reparations, 98, 101, 161–62, 166, 337, see Dawes Plan, Gilbert, Young Plan  
 “transferable credit instruments”, 307  
 transportation changes, U.S., 238  
 Transvaal mines, 1890s, 123  
 Treasury bills, British, “rolled over”, 51  
 Treasury Exchange Equalization Account, 1932, 330  
 Treasury Minute of Dec. 1919 (British), 107  
 Treaty of Versailles, see Versailles Treaty  
 Trianon Treaty, 134  
 Tugan-Baranovsky, Mikhail F., 57  
 tulip mania (Holland), 1634–36, 235  
 Turkey, 119  
 Twenties, not an era of inflation, 323  
 Twentieth Century Fund, 214  
 Uhlmann, R.F., 246 (quoted)  
 “underdeveloped countries”, 1913, 157  
 unemployment, British, 86, 95–97, 100–103, 274  
   concern over, 1920s, 56  
   see other nations by name

- Union of Socialist Soviet Republics, see Russia
- Union of South Africa, see South Africa, gold production
- United Kingdom, see Great Britain
- United States, agricultural loans, 1914–34, 216
  - balance of payments, 1933, 281
  - balance of trade, 1930s, 282
  - bank failures, 217, 232–33, 279–80, 299
  - Bank Holiday, 1933, 245, 280
  - brokers' loans, 217
  - building boom collapses, 1920s, 214
  - call loan rates, 66
  - capital flows, 177, 180, 198–99, 205, 243
  - consumer prices, 1920s, 209
  - corporation inventories, 218–19, 245
  - creditor nation, 183, 200, 204
  - credit expansion, 197, 218, 239, 309–10, 318
  - credit structure, vulnerable, 218
  - defaults, 211, 338
  - deflation, 1920s, 64
  - deposits, 1913–19, 36
  - devaluation, 1933–34, 227, 250, 276, 278, 280, 331–32, 338–39, 343
  - domestic debt, 208–09, 244, 338
  - foreign investments, 178–79, 244, 324
  - gold coins circulating, 1925, 150
  - gold movements, 1923–32, 316
  - gold reserves, ample, 1920s, 318
  - gross national product, 1916–29, 212
  - home mortgages, 1925–34, 216
  - immigration restrictions, 183
  - imports, 65% duty free, 1926, 182
  - industrial debt structure, 210
  - industrial production index, 1933, 284
  - inflation, 38–39, 64, 239, 302, 309
  - interest rates, 1919–20, 66
  - inventories, excessive, 218–219, 245
  - investment banking, 338
  - land values, 1920s, 245
  - liquidity crisis, 234, 300
  - major power, 1920s, 59
  - manufacturing costs, 1925–29, 109
  - margin requirements, lax, 1920s, 317
  - money supply, 1914–29, 150, 302, 304
  - near money, growth, 304
  - personal indebtedness, 214
  - physical production, 1880–1930, 303
  - prices, 1913, 33; 1920s, 296
  - public debt, 1916–21, 64
  - wholesale prices, 1924–32, 176, 296
  - world credit structure based on U.S. capital values, 242
- Untersuchung des Bankwesens*, 162
- Upper Silesia, 102, 231, see Jacob Goldschmidt
- up-valuations, 1920s, 74
- Uruguay, monetary developments, 71, 251
- “Valorization”** schemes, 219
- valuta-dumping, 284, 341
- variable proportions, law of, xix
- velocity of money, 302, 307, 310, 312
  - in Great Britain, 1920–28, 310
- Versailles Treaty, 1919, 44, 164, 166, 188, 191, 192, 262
- Vienna, 1914, 27
- Viner, Prof. Jacob, 192 (quoted), 342 (quoted), 343 (quoted)
- Vissering, Dr. G., 87, 135, 153, 277, 294
- Vocke, William, 193
- Volksbank of Zurich, 1936, 290
- Wage cuts**, British coal mining, 104–05
- wage dumping rationale, 1930, 182
- wage-price rigidities, 67
- Wall Street, investigated, 235
  - profits on foreign loans, 206
- war, length believed limited by financing, 2
- “war baby” industries, 41

- war debts to U.S., 32, 74, 98, 163, *see*  
Hoover moratorium, interallied  
debts Lausanne Treaty, repara-  
tions, nation by name
- war financing, Germany, 31  
Great Britain, 33  
U.S., 54  
*see* nation by name
- war indemnity, France, 1871, 26
- Warburg, Paul, 47, 65
- Warren, Prof. George F. 281
- Washington Agreement, 74
- Wasserman, Oscar, 232, 283
- ways and means bills, 31
- Webb, Beatrice, 105, 111
- Weimar Republic (Germany), 44, 64,  
161, 166, 173, 177, 207, 254, 261,  
263, 293  
and Dawes Plan, 161  
financially irresponsible, 261  
tottering, 1931, 177, 263  
unpopular, 166
- Weiss, Philipp, 248
- welfare clause, Dawes Plan, 166
- welfare, and inflation, 336  
and gold standard, 104  
programs, xix  
viewpoint, 52
- Wetzel, Frank, xvi
- wheat surplus, 1919–35, 221–22
- wholesale prices, 1913–19, 33  
France, 1935–37, 287  
Great Britain, 1850–1920, 30, 37  
U.S., 1920–22, 41–42  
*see* nation by name
- Wiegand, Prof. Carl, xv, 2, 26, 70, 114,  
155, 197, 251, 297, 329
- Wiggin, Albert H., 241
- Willis, Prof. H. Parker, 65, 315
- Wilson, Prof. Francis G., xvii
- Wilson, President Woodrow, 137
- Winnipeg Wheat Pit, 225
- working capital, 143–44  
needed in Germany, 1920s, 177
- World's banker, Great Britain, 75
- world trade, 1913–29, 130, 204
- World War I, 1914–18, xx, 1  
after-effects, xx, 24, 238  
and gold standard, 3, 25
- Young, Owen D., 164, 190
- Young Plan, 50, 137, 152, 164, 192, 193,  
237  
loans, 1930, 167, 260, 282
- Yugoslavia, 143, *see* Serbia
- Zeeland, Prime Minister Paul van,  
284–85
- zinc, overproduced, 220
- zloty stabilization, 106, *see* Poland























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