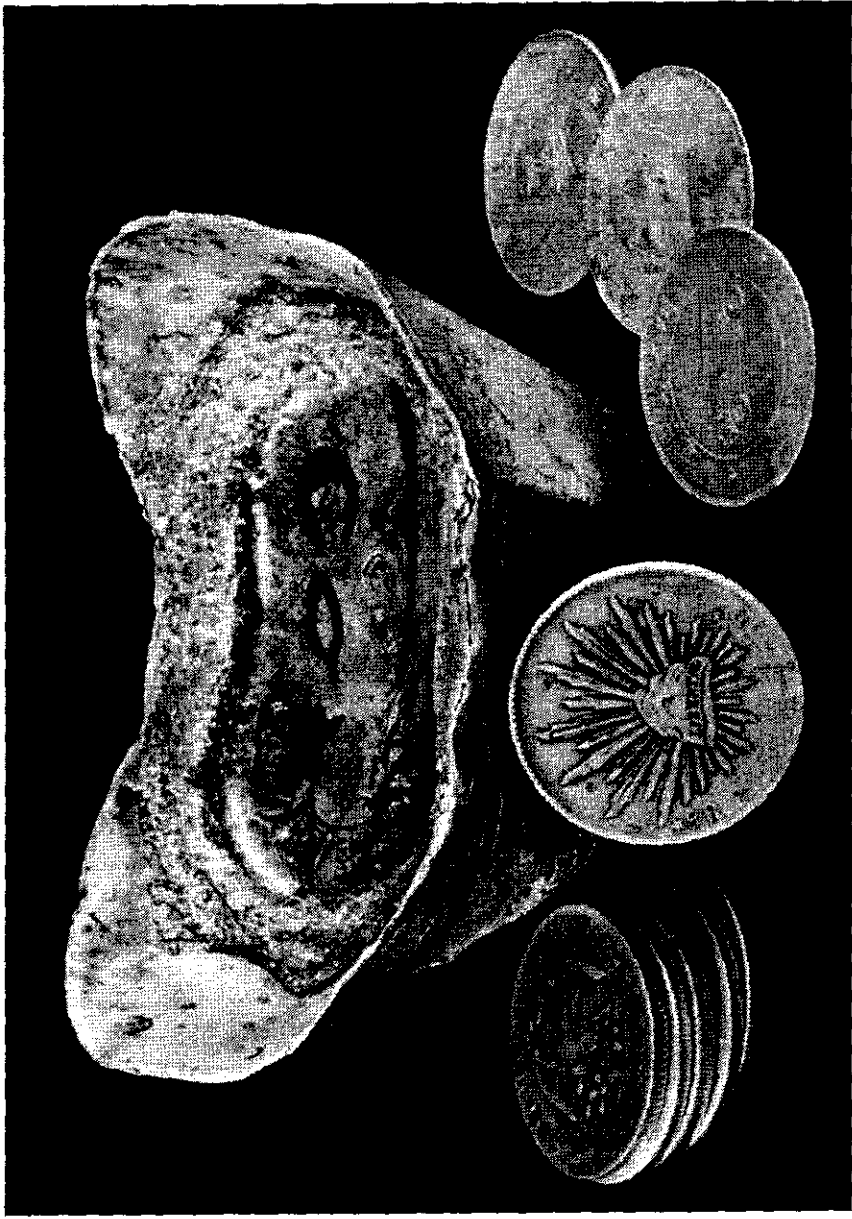


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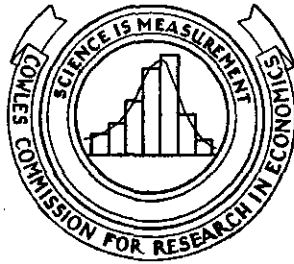


CHINESE SILVER MONEY
Shoe of sycee, Mexican dollars, Kweichow motor-car dollar, Yuan Shi-kai and Sun Yat-sen dollars.

SILVER MONEY

By

DICKSON H. LEAVENS



PRINCIPIA PRESS, INC.
BLOOMINGTON, INDIANA

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PREFACE

The purpose of this book is to present in one volume the background and principal developments in the use of silver as money since the beginning of the nineteenth century. The silver question was an important and controversial one from about 1876 to 1896, and again become a subject of dispute during the early 1930's. The present situation cannot be understood fully without some knowledge of the past.

The literature of the former period is extensive, and I have relied largely upon secondary sources for the earlier chapters of this book. For the recent period, comparatively few general surveys have appeared as yet, and I have made use of contemporary newspaper reports and published government documents. I have had no access to any inside sources or confidential information which eventually may make it possible for a future historian to write a fuller account of the developments of recent years and the real reasons therefor.

Since the material, especially for the recent period, has been gathered from diverse sources, it has seemed worth while to give references in considerable detail, for the sake of such readers as may wish to study the subject more fully.

A Selected Bibliography of the books and articles which have been found helpful in the preparation of this study has also been included. It is arranged by groups of chapters, and brief descriptive comments follow most of the titles. This Bibliography makes no pretense of being complete, but it is planned to be helpful to those who wish to pursue the subject further.

In the Appendixes are included various numerical data and the texts of important legislation enacted and executive measures taken concerning silver in recent years.

The charts have been planned with care to bring out certain quantitative aspects of the silver question which sometimes are lost sight of in controversial argument. Since statistical data are so quickly out of date, space has been left in many of the tables and charts for the reader, if he desires, to add figures for the next few years, although, in view of the sudden and violent changes in the silver situation, it cannot be guaranteed that sufficient space will be available on the vertical scales.

My interest in silver developed during a residence in Changsha,

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China from 1909 to 1928, where, as treasurer of Yale in China, I found the fluctuations in its price a perplexing problem. Since then I have spent much of my spare time on the general subject of silver, and was occupied for more than a year of full time in the preparation of this book. Just after the manuscript was completed and accepted by a commercial publisher in March, 1934, I was appointed a special agent of the Treasury Department to assist Professor James Harvey Rogers in his study of the silver problem in China and India. At the request of the Department, publication of the book was deferred while I was in its employ. A four-month stay in China was of great help in supplementing what I had read of the developments in that country during six years of absence, while two months in Bombay gave me a better appreciation of what I had formerly learned from the reports of the various commissions that had studied Indian currency.

Since then the manuscript has been completely rewritten and brought up to date as regards the numerous developments in the silver situation. I wish to emphasize, however, that I have not made use of any confidential material obtained while in the service of the Department, and that I have no knowledge of official opinion except what is available to the public.

My thanks are due to Alfred Cowles 3rd, president of the Cowles Commission for Research in Economics, for including this book in the series of Cowles Commission Monographs.

I am also grateful to Wallace B. Donham, dean, and Clinton P. Bidle, associate dean, of the Harvard Graduate School of Business Administration, by whose courtesy I had the use of an office at the school and the facilities of the Baker Library while writing the book.

I am indebted to C. W. Handy of Handy & Harman for furnishing me with an unpublished series of monthly high and low silver prices running back to 1893, which is shown in Chart 2, as well as for helpful correspondence and conversations on the subject of silver. The editors of several journals in the United States and China have kindly given me permission to use ideas or wording from articles of mine which they have published during the past twelve years; these articles are all listed in the Bibliography, but detailed references have not been made when a sentence or a paragraph here and there has been incorporated in the text. My wife, Marjorie B. Leavens, collected and preserved for me a mass of newspaper material about silver which appeared during my absence from the country in 1934, and which it would have been very difficult for me to assemble otherwise.

The Bibliography will give some idea of the numerous writers

PREFACE

whose works have had a share in educating me about silver. It has been my good fortune to have the acquaintance of the two who perhaps have been the most prolific in their publications about the white metal: to conversations and correspondence with Herbert M. Bratter of Washington and Eduard Kann of Shanghai I owe a great deal, as I do also to their comprehensive writings.

The manuscript has been read, in whole or in part, at various stages of its preparation, by the following, who have been kind enough to give me the benefit of their suggestions and criticisms, but the responsibility for all statements is wholly my own: Herbert M. Bratter, of Washington, D.C., author of *Silver Market Dictionary*, and numerous other publications on silver; Harold T. Davis, professor of mathematics at Northwestern University and research associate of the Cowles Commission; Eduard Kann, of Shanghai, exchange broker and author of *The Currencies of China* and numerous other publications on silver and Chinese economics; Y. S. Leong, of Washington, D.C., author of *Silver: An Analysis of Factors Affecting Its Price*; Richard S. Meriam, professor of business economics, Harvard Graduate School of Business Administration; Jeannette P. Nichols, of Swarthmore, Penn., who is engaged in a study of silver diplomacy with special reference to American politics; Joseph E. Reeve, of the Federal Deposit Insurance Corporation, who has made a study of monetary proposals for curing the depression; Frances V. Scott, research assistant, Harvard Graduate School of Business Administration; H. W. Spaulding, of Handy & Harman, New York bullion dealers; and Gerhard Tintner, assistant professor of economics, Iowa State College.

The proof has been read by Alfred Cowles 3rd and Francis McIntyre of the Cowles Commission, and by J. R. Kantor, professor of psychology, Indiana University, and editor of the Principia Press, all of whom have discovered errors which otherwise might have been overlooked and have made suggestions for greater clarity of expression; the responsibility for any mistakes which remain is my own.

My thanks are also due to Richmond F. Bingham, Grace E. Crockett, Forrest Danson, Mary Jo Lawley, Aileen C. MacLaughlin, Lucille Marian Nelson, Fred H. Shantz, Marion White, H. Catherine Williams, and Kathryn Withers, who have assisted in the preparation of the manuscript or charts or in seeing the book through the press. The Dentan Printing Company has also been very co-operative in the manufacture of the book.

DICKSON H. LEAVENS

Colorado Springs

February 8, 1939

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SILVER MONEY

CHAPTER I

SILVER AND GOLD BEFORE THE NINETEENTH CENTURY¹

Thence we sailed against the Spaniard with his hoards of
plate and gold
Which he wrung with cruel tortures from the Indian
folk of old.

CHARLES KINGSLEY, *The Last Buccaneer*

Silver and gold have been regarded as precious metals from the earliest times. Because of their beauty, their original use was as ornaments. The demand for this purpose made them universally acceptable as common media of exchange. The monetary use, in turn, created a new demand, which, as the economic system developed, became predominant.

The value of either metal in terms of other commodities and their relative values in terms of each other have varied greatly through the ages. These variations have resulted from differences in the absolute and relative production of gold and silver, from their changing popularity both for luxuries and for a medium of exchange, and from their movement between different countries. Laws and conventions which have fixed the relation of the two metals in the monetary system have also been an important factor.

Gold probably came into use before silver, because it was found in nuggets and in dust mixed with sand, from which it could be washed by crude methods. Silver, on the other hand, usually occurred in ores, from which it could be extracted only by smelting. Some silver in its native state, however, probably was available in prehistoric periods in Mexico, North America, and Egypt. It was found also in a natural alloy with gold called *electrum*. It is not improbable that, because of the relatively small supply of the white metal, silver may, in some prehistoric times and places, have been as precious as gold or even more so. With the development of mining and smelting, however, silver became more plentiful and less valuable than gold.

¹ This chapter has been based to a considerable extent on Rickard, *Man and Metals* and Jacob, *An Historical Inquiry into the Production and Consumption of the Precious Metals*.

References in the footnotes throughout this book will give only author's surname and the title of the book or article, abbreviated when possible. Full names and titles will be found in the Bibliography, at the end of the volume.

In classical times the two metals were well known. Athens operated silver mines at Laurium, and from them gave each citizen an annual dividend of ten drachmas during a prosperous period in the sixth and fifth centuries before Christ. Rome obtained silver from mines in Spain which were an important factor in her struggles with Carthage. In addition, she acquired much silver and gold as plunder from her conquered enemies. The adoption of silver coinage in 269 B. C. gave to money the name *argentum*, perpetuated in French as *argent*. Later, with the growth of luxury under the Empire, the tide turned; the precious metals began to flow outward in trade for the purchase of silk and other products of Asia. The coinage was debased gradually as Rome declined in power.

During the Dark Ages little gold and silver were mined in Europe. William Jacob estimated, on the basis of a 10-per-cent decrease every 36 years by abrasion and export, that the stock of the precious metals had declined to less than £35,000,000 by the year 806 A.D., but that from then until the discovery of America mining in Europe was revived to such an extent that the stock probably was maintained at about that level. Among the new silver mines were those at Joachimsthal in Bohemia, opened at the beginning of the thirteenth century. Here in the sixteenth century were coined the *Joachimsthaler*, later abbreviated to *thaler*, and then corrupted to *dollar*, a name adopted for the Spanish "pieces of eight" and their successors, which have circulated in so many countries of the world.

During the period from the fall of Rome to the discovery of America, the decreasing supply of the precious metals was accompanied by a declining price level. Under such conditions even the smallest gold and silver coins were too large for daily transactions. Europe during the feudal period was practically on a barter economy, with little use of any money.

In trade with the Orient there was a tendency to export silver rather than gold, since an ounce of gold was worth only eight or nine ounces of silver in Asia as against ten to thirteen ounces in Europe. To some extent gold came into Europe as silver went out. On the other hand, the Crusaders sometimes brought back both the precious metals as booty.

The discovery of America opened up large supplies of both gold and silver. At first these were obtained by plunder of the Indians. Afterward extensive mining operations were carried on by the Spaniards, especially in Bolivia, Peru, Colombia, and Mexico. At the same time mine production in Europe was increasing. As a result there was an enormous increase in the total money supply of Europe. World

TABLE 1
PRODUCTION OF PRECIOUS METALS, 1493-1800

	Gold	Silver	Ratio between quantities of silver and gold produced	Approximate total value
	Millions of fine ounces	Millions of fine ounces		Millions of pounds sterling
1493-1600	23	747	32	£ 290
1601-1700	29	1,272	44	460
1701-1800	61	1,833	30	730
Total	113	3,852	34*	£ 1,480

*Average ratio, 1493-1800

SOURCES

Ridgway, *Summarized Data of Gold Production*, p. 6; Merrill, *Summarized Data of Silver Production*, p. 3. Values have been computed very roughly on the basis of 15 ounces of silver = 1 ounce of gold = £4.

production for the next three centuries is shown in Table 1. The injection of this great amount of gold and silver into the monetary system of Europe brought about the transition from a barter economy to a money economy. This process was accompanied by rising prices and by increased economic activity, which had reactions on the whole structure of European civilization.²

As shown by the above table, the quantity of silver produced during the sixteenth century was 32 times that of gold, and during the seventeenth century was 44 times that of gold. The ratio between the value of equal weights of gold and silver, which had been about 11 to 1, rose gradually, with some setbacks, to about 15 to 1, where it remained for two hundred years until the latter part of the nineteenth century.³

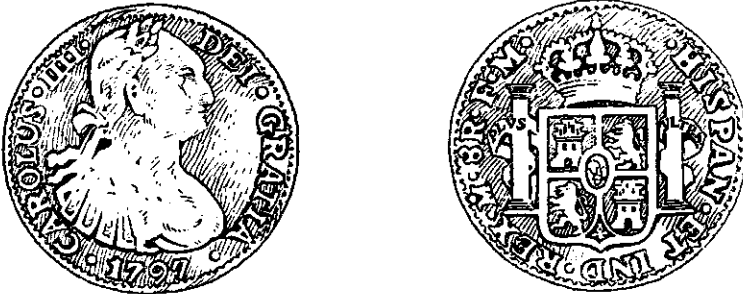
The American silver found its way into circulation partly through new coinage in various countries of Europe, and partly in the form of crude "pieces of eight" or coins of eight *reals*, struck in Mexico and South America. Later the minting was improved and the coin became known as the Spanish dollar. It bore the head of the reigning king on the obverse and the Spanish arms with the Pillars of Hercules on the reverse. During three centuries, when many European coins were being debased, the Spanish dollar was held very closely to its original weight and fineness and as a result it became practically a world currency. It was legal tender in the United States until 1857, and was long the principal medium of exchange in many parts of

² For an account of this process in Spain, based on an exhaustive study of original price data, see Hamilton, *American Treasure and the Price Revolution in Spain, 1501-1650*.

³ See Laughlin, *A New Exposition of Money, Credit, and Prices*, Vol. I, pp. 94-97, for a table and chart of estimates of the value ratio from the earliest historical times. A table giving annual figures from 1687 to date is included each year in *Annual Report of the Director of the Mint*.

Asia. After its coinage was stopped by the independence of the Spanish American colonies, the dollars of Carolus IV continued to be sought after in China, where they acquired a scarcity value well above that of their bullion content. Occasional specimens were to be found in circulation in the interior of China well into the twentieth century.

After Mexico became independent in 1821, the new Government continued to coin dollars or pesos of the same weight and fineness, but with a Mexican republican device, until Mexico adopted the gold standard in 1904. These dollars gradually replaced the Spanish dollars in the trade of the Far East. They made up the greater part of the silver coins circulating in China until the Chinese Government in 1914 began coining silver on a large scale. The term "Mexican" or "Mex." is still used in China to distinguish the Chinese dollar currency from American or "gold" dollar currency.



SPANISH DOLLAR

Two main features stand out in the history of European coinage during the sixteenth, seventeenth, and eighteenth centuries. First were the attempts to establish a fixed value ratio between the two metals for coinage purposes. Since different coinage ratios were set in different countries, and since the commercial market ratio might be still different, there was always a tendency for the coins of whichever metal was undervalued in the coinage ratio to be culled out and exported or melted for sale. Thus, when gold was undervalued, the circulation would consist chiefly of overvalued silver; to correct this, the government would set a new ratio, but very likely go too far, and the reverse process would set in. For example, the English guinea, so named because it was to be coined from gold brought from Guinea in West Africa, was set as equivalent to 20 shillings silver in 1663. Later conditions caused it to pass for as much as 30 shillings, although this was in terms of short-weight coins. Toward the end of the century it was set officially equivalent to 22 shillings, then to 21½ shillings, and

finally in 1717 to 21 shillings.⁴ Although the guinea coin was replaced later by a new 20-shilling sovereign, the name continues to this day as a money of account, or rather as money in which to state professional and club fees, marine insurance rates on heavy risks, and generally for any transactions that are considered a little superior to the plebeian pounds, shillings, and pence.

The other feature of European currency experience was the intentional debasement of coinage by the sovereign power and the attempt to continue its circulation at its old value. Here again, as soon as people realized what was being done, they tended to hold out any undebased coin which they had, and to circulate the overvalued coins.

The imperfect adjustment of the coinage ratio to the market ratio and the debasement of coinage both served to illustrate the well-known law stated by Sir Thomas Gresham, that, when two kinds of money have the same nominal value in circulation, the poorer money will drive the better out of circulation, because it will be profitable for holders of the better money to dispose of it elsewhere.

By the beginning of the nineteenth century both metals were in world-wide monetary use. The intentional debasement of coins no longer was so common. Long and sad experience had proved honesty to be the best policy. There remained, however, the problem of how to set the coinage ratio between the two metals, and this has continued an important question in the ensuing century and a third. It has dropped out of sight for considerable periods, and then has popped up again. The story of different attempts to solve it is the story of silver money.

⁴ Horton, *The Silver Pound*, pp. 70-77, 96-110.

CHAPTER II

SOME QUANTITATIVE ASPECTS OF SILVER

I often say that when you can measure what you are speaking about and express it in numbers you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge of it is of a meagre and unsatisfactory nature.

LORD KELVIN, *Popular Lectures and Addresses*

Some knowledge of the history of the production and price of silver will be helpful in understanding questions which arise in discussing silver money. Since silver has been related intimately to gold in the monetary system, it is necessary also to consider the production of gold and the relationship between the values of the two metals. The fundamentals of these topics are presented in this chapter. Technical details will be found in Appendixes I-V.

1. The Production of Gold and Silver

The top part of Chart 1 shows the production of gold since 1493. Annual figures are available since the 1870's; earlier in the nineteenth century, the chart is based on decennial or quinquennial totals. For the preceding centuries, the rectangles at the left are drawn with the same area scale as the main charts, so that equal areas represent equal quantities in any part of the chart. The middle part of Chart 1, for silver, is drawn in the same way.

The scales in each chart are in millions of fine ounces per year; it should be remembered that in weighing the precious metals the troy ounce of 480 grains is used instead of the avoirdupois ounce of 437½ grains. The scale for gold is drawn just 16 times as large as that for silver. Since an ounce of gold was worth about 16 times as much as an ounce of silver down to 1873, equal areas on the two charts represent approximately equal values prior to that date. After 1873, when silver declined in price, the value of the annual production of the white metal is exaggerated by these scales. For much of the subsequent period the silver curve should be compressed to about half its height to represent the gold value of the current silver production; and for most of the 1930's, when the market ratio has been in

the neighborhood of 80 to 1, it should be compressed to one-fifth of its height.

To measure the dollar value of the annual production there are two value scales at the right-hand side of each chart. One is in terms of pre-1934 dollars of 23.22 grains of fine gold; the other is in terms of dollars of 13 $\frac{7}{8}$ grains of fine gold, that is, \$35.00 per fine ounce, the standard set by President Franklin D. Roosevelt in his proclamation of January 31, 1934. The value of the gold can be read directly from these scales. For the period prior to 1873 the current value of the silver can be read with approximate correctness from the scale based on the 23.22-grain gold dollar and on silver at 16 to 1; and for most of the time since 1934 from the scale based on the 13 $\frac{7}{8}$ -grain dollar and on silver at 80 to 1. For the intermediate period adjustment must be made for the changes in the relative value of gold and silver from time to time.

The charts show by shading the division of the production between the United States, the British Empire, Russia, Mexico, South America, and all other countries, the last classification including some of the former regions at times when their individual production was not large enough to warrant a separate showing.

It is evident that from 1493 to 1850 Mexico and South America were the leading producers of both metals. During the 1850's and 1860's there was a large production of gold in California and Australia, making the United States and the British Empire the leading producers; Russia, which had been the chief producer before the United States took the lead, developed her Siberian placers and continued as an important source of supply. After a drop in total gold production in the 1870's and 1880's, South African production increased very greatly from about 1890, so that the British Empire in some years produced over 70 per cent of the world's gold; in the 1930's this percentage has been reduced by the increasing Russian output.

The United States first came into the silver picture with the development of the Comstock lode in Nevada in the 1860's, and since then has shared the leadership with Mexico, the two countries together producing about two-thirds of the world's silver, with Mexico ahead in recent years. The British Empire produces only about 15 per cent of the total.

In addition to the new mine production of both metals, the charts show, by areas enclosed in dotted lines, "Other Supplies" during certain periods. In recent years the increased price of gold, measured in depreciated paper currencies, has attracted to the market large quantities formerly hoarded or held in the form of ornaments in India

and China and to a lesser extent old gold in America and Europe. While there is always a certain quantity of scrap gold coming on the market, the offerings in recent years, plus that from India, which usually has absorbed the yellow metal, have been of such magnitude as to be an important factor in the current supply of gold.

In the case of silver, there were large sales of bullion derived from melted coins in the 1870's when Germany changed from a silver standard, as described in Chapter V. In 1918 and 1919 the United States under the Pittman Act, as described in Chapter XVII, sold to the Government of India about 200,000,000 ounces of silver derived from melted dollars. Since the World War, reorganization of monetary systems with reduced silver content of coins, or reduced need of coins in circulation, has caused a number of governments to dispose of large quantities of silver bullion. As early as 1932 there began an outward movement of silver from China, which had been absorbing silver on a very large scale ever since the war. After the passage of the American Silver Purchase Act of 1934 this outward movement was greatly accelerated and several hundred million ounces of the white metal have been exported or smuggled out of the country to find their way to the vaults of the United States Treasury. These various "Other Supplies" of silver will be discussed more fully later. The data are given in Appendix I as are the sources of all the data for Chart 1.

A few broad facts are evident from the charts. Before 1800, as pointed out in the preceding chapter, the production of silver was many times that of gold by weight and more than double by value. This condition continued down to the 1840's after which the large production of gold was two or three times that of silver by value. In the 1880's silver production in value nearly caught up with gold, but since then the production of gold has increased more rapidly than that of silver, so that the value of the gold produced in the last half century has been considerably more than the value of the silver, even figured at the 16-to-1 ratio, and far more at the actual current market ratios which averaged around 30 to 1 during the period.

2. The Price of Silver

The bottom part of Chart 1 shows the annual high and low price of silver in cents per ounce, 0.999 fine, as quoted in New York. Actual New York quotations are not available prior to 1874. From 1833 to 1873 the prices shown are the equivalents of those in London, taken at the par of exchange; these figures, of course, represent

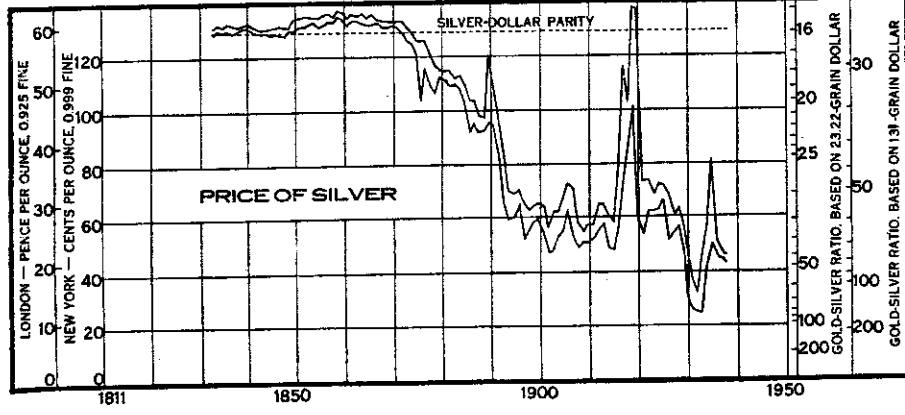
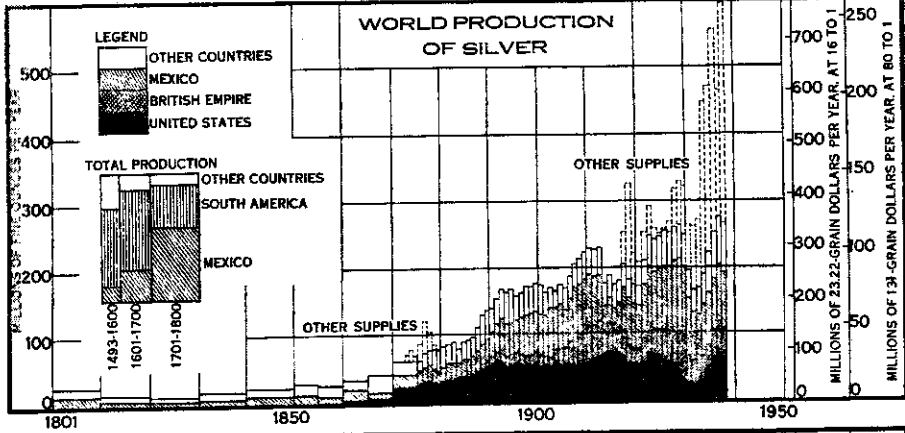
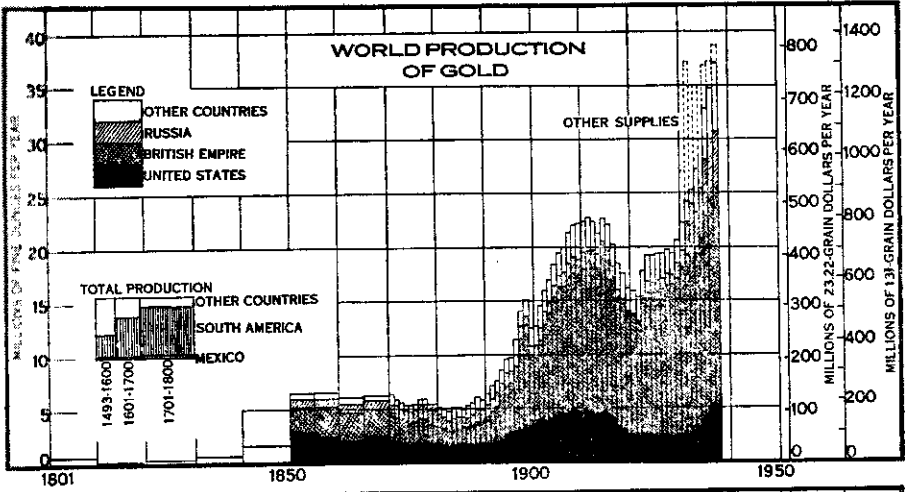


CHART 1.—GOLD AND SILVER, 1493-1938

prices in gold dollars, unadjusted for the depreciation of American currency after 1862. The figures from 1874 to date are actual New York prices. The rise in 1933 and 1934 is due in part to the departure of the United States from the gold standard and the reduction of the fine-gold content of the dollar to 13 $\frac{1}{2}$ grains on January 31, 1934. The broken line near the top of the chart represents the bullion parity of the silver dollar, or the American monetary value of silver, which, as explained below, is \$1.29+ per ounce. From 1834 to 1933, this was equivalent to a 16-to-1 coinage ratio between gold and silver.

Three additional scales are shown for this chart. That at the extreme left gives the equivalent price in pence per ounce, 0.925 fine (called standard or sterling silver), which is the way of quoting in London. This scale is applicable only when the pound is at its old par of \$4.8665. The first scale at the right-hand side gives the equivalent ratio between the values of equal weights of gold and silver when the dollar was 23.22 grains of fine gold. The scale at the extreme right gives the ratio when the dollar is 13 $\frac{1}{2}$ grains of fine gold as has been the case since January 31, 1934.

Since the price of silver often has fluctuated greatly in the course of a year, annual high and low figures are hardly sufficient to give a true idea of its movements. Chart 2 is included, therefore, to show monthly high and low prices, in London since 1871 and in New York since 1893. Data for these curves have been obtained from the annual table published by Pixley & Abell, long-established London bullion brokers, and from the records of Handy & Harman, leading New York bullion dealers. The New York annual highs and lows differ slightly in some cases from those of the Director of the Mint, which were used in Chart 1. Prices in both pence and cents are in the money current at the time, unadjusted for the wartime and recent depreciation of the pound sterling and for the depreciation of the American dollar since 1933. These curves are plotted on a ratio grid, so that equal vertical distances in any part of the chart represent equal percentage differences. At the bottom are indicated some of the important monetary events and legislation, in this country and abroad, which have influenced the price of the white metal.

Several facts are evident from Charts 1 and 2. Until 1873 the price of silver almost always was above \$1.29+, which corresponded to the coinage ratio of 16 to 1 between gold and silver. After 1873 it declined for 20 years, and after 1893 it fluctuated around a new level of about 60 cents per ounce, which corresponded to a value ratio of about 34 to 1. During the World War it rose to its former level,

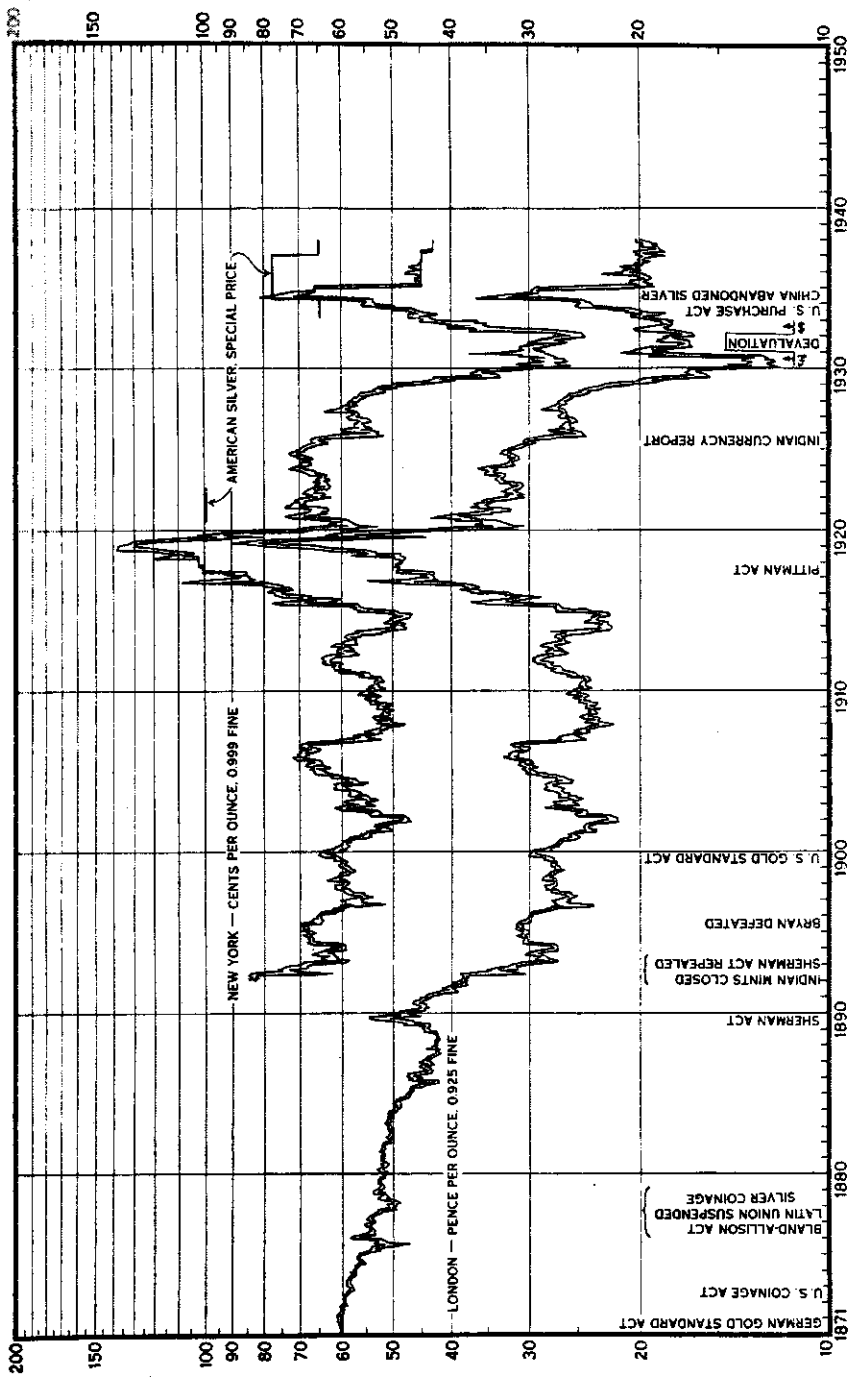


CHART 2.—MONTHLY HIGH AND LOW PRICE OF SILVER, 1871-1938

after which it declined again, reaching in 1932 an unprecedented low of 24½ cents (12 pence)¹ per ounce or a value ratio of more than 80 to 1. In 1933 the price of silver turned sharply upward, and the rise continued to a maximum of 81 cents per ounce in April, 1935, but later was stabilized at around 65 cents per ounce for several months. Early in 1936 it dropped to a new level around 45 cents per ounce, which, on the basis of the devalued gold dollar, again represented a value ratio of about 80 to 1. It dropped 2 cents more in the spring of 1938.

Long series of historical data on the production of gold and silver and the price of silver are readily available in such books as the *Annual Report of the Director the Mint* and Bratter, *Silver Market Dictionary*. They are, therefore, not repeated in this volume. For the convenience, however, of readers who wish to keep up-to-date records, Appendix II contains data for 1933-38, together with space for filling in figures for the next few years as they become available from current sources. In this way, it will be possible to keep Charts 1 and 2 up to date if the reader so desires.

3. Silver Markets²

It should be noted that the London price of silver for about a century has been set daily at a meeting of representatives of four firms of bullion brokers. They disclose to each other the net balances of their buying and selling orders at different prices, and fix the day's spot price at a figure which will move the greatest quantity of silver. A forward price, for delivery in 60 days, is also set; this facilitates transactions by producers and holders of silver at distant points. Because of the pre-eminence of London as the world's financial and commercial center and its relations with the Asiatic silver-using countries, it naturally has been the most important silver market, although silver is produced chiefly in the Western Hemisphere.

Transactions in New York have usually been carried out in a less organized way between buyers and sellers and their brokers, at prices related to the London price. The so-called "official" price is set

¹ Here and throughout the book, where a price in cents is followed by a price in pence in parenthesis, it is to be understood that the former is per ounce, 0.999 fine and the latter per ounce, 0.925 fine. The all-time low of 12 pence in London was actually reached in February, 1931; the London price in December, 1932, corresponding to the New York all-time low of 24 1/4 cents, was 16 3/8 pence in the then depreciated sterling currency.

² This section is based on Bliss, *The Bombay Bullion Market*, pp. 8-26; Bratter, *The Silver Market*, pp. 9-22; and White, *Silver, Its History and Romance*, pp. 165-179; which see for full details.

each day by Handy & Harman; originally it reflected the London price, but later was based on actual prices in New York, usually about $\frac{1}{4}$ cent below the market. Its principal function is as a basis for settlement between mines and smelters. Although it does not represent the exact market price, records of it are complete and extensive and so it is the most convenient indicator of the price in the United States. In recent years it has been practically pegged for months at a time by the purchasing policy of the United States Treasury. For a few years, from 1931 to 1934, trading in silver for spot delivery or for delivery in any of the 11 subsequent months was carried on at the National Metal Exchange, Inc. (later merged into the Commodity Exchange, Inc.), and served as a basis for speculation and for hedging.

In Bombay there is an organized bullion exchange where large transactions in gold and silver take place. This provides facilities both for speculators and for the distribution of the large quantity of silver that goes into the making of ornaments, as described in Chapter IX, Section 2.

4. The Relationship between Different Measures of the Price of Silver

Reference has been made already to the value ratio between gold and silver. This is the ratio between the values of equal weights of fine gold and fine silver, or, in other words, the number of fine ounces of silver equivalent in value to one fine ounce of gold. Such a ratio can be computed readily from the prices of the two metals at any place or time, and so offers a permanent basis of comparison, free from the influence of changing monetary standards or of different weight units.

It is convenient to be able to convert figures for the price of silver in New York or London into the equivalent price in the other center or into the equivalent value ratio. With the dollar and the pound both at their old gold values, the following formulas held true:

$$S' = 2.190S,$$

$$R = 943.00/S,$$

$$R = 2065.1/S';$$

where S = price of silver in London in pence per ounce,
0.925 fine,

S' = price of silver in New York in cents per ounce,
0.999 fine,

R = value ratio between equal weights of gold and silver.

The derivation of these formulas and the adjustments necessary when the currencies are off gold are explained in Appendix III.

It should be pointed out that the first formula, for converting London price to New York price, gives only a theoretical equivalent or parity. The actual New York price may vary above or below this by an amount not exceeding all costs of shipping silver bullion across the Atlantic.

5. *The Coinage Ratio and the Bullion Parity*

The value ratio, or market ratio, described above, represents the relationship between the current market values of the two metals considered as commodities. On the other hand, in any coinage system using both gold and silver, there is a conventional relationship between the two metals which is known as the coinage ratio, the legal ratio, the mint ratio, or the coinage rate. The coinage ratio is the ratio of the quantity of fine silver per monetary unit in the silver coins to the quantity of fine gold per monetary unit in the gold coins. For example, the American silver dollar, established by the act of 1837, weighed 412.5 grains, 0.900 fine, and contained 371.25 grains of fine silver; the American gold dollar, established by the same act, weighed 25.8 grains, 0.900 fine, and contained 23.22 grains of fine gold. The coinage ratio, therefore, was $371.25/23.22 = 15.988$ or approximately 16 to 1. This coinage ratio, originally set near the current market ratio, was continued for the coinage of silver dollars after silver began to fall in value relative to gold in the 1870's. In the case of subsidiary coins, the coinage ratio was changed in 1853 and 1873 as described in Chapter III. The change in the weight of the gold dollar in 1934 of course affected the coinage ratio for both the silver dollar and subsidiary coins, making the former 27.07 to 1.

Corresponding to any given coinage ratio is a bullion parity, that is, a price of silver per ounce at which the silver in the coin is worth exactly the face value of the coin. The bullion parity in terms of the currency concerned may be found by dividing the number of grains of fine silver in an ounce by the number of grains of fine silver per monetary unit in the coin. Thus the bullion parity of the American silver dollar is $480/371.25 = \$1.2929+$ per fine ounce, which is equivalent to $\$1.2916+$ per ounce, 0.999 fine. The bullion parity for any currency in terms of cents or pence (with those currencies at their old gold pars) may be computed from the coinage ratio by the formulas that were given above connecting the market ratio and the price of silver. This formula makes the bullion parity of the Ameri-

can silver dollar $2065.1/15.988 = 129.16+$ cents per ounce, 0.999 fine.

The bullion parity may be thought of as a melting point for the coin. When the price of silver is below the bullion parity, the coin is worth more as money than as a commodity. When the price of silver rises sufficiently above the bullion parity to allow for any loss which the coin has suffered from abrasion and for the costs of melting and refining, then the coin becomes worth more as a commodity than as money.

Another name for the bullion parity is the monetary value of silver. That is, in the United States, the monetary value of silver is \$1.2929+ per fine ounce or \$1.2916+ per ounce, 0.999 fine. The 1934 reduction in the content of the gold dollar affected the coinage ratio, but not the bullion parity, because the value of the silver dollar and the value of the bullion both were measured in the same depreciated currency. Therefore, silver dollars containing 371.25 grains of fine silver would still be worth melting if silver should rise above 129.16+ cents per ounce, no matter how much the weight of the gold dollar might be changed.

6. *A Chart of Coinage Ratios and Bullion Parities*

The coinage ratios and bullion parities of the silver coins of some of the principal countries of the world are shown in Chart 3 and Appendix IV.³ Chart 3 may be compared to a thermometer, with Centigrade, Fahrenheit, and Reaumur scales, and with points marked for "Freezing," "Temperate," "Blood Heat," "Boiling," and the like. The temperature scales are replaced by scales for S = the price of silver in London, S' = the price of silver in New York, and R = the coinage ratio. The marked points are replaced by the names of countries and their silver coins, set opposite the points corresponding to the bullion parities and coinage ratios of the coins.

The left-hand side of Chart 3 gives the status of silver coins in use before the World War. The right-hand side gives the status of silver coins in use after the war, when most nations had altered the fine content of their silver coins, as described in Chapter XVIII, and in many cases had altered also the gold content of their monetary units. The right-hand side is based on effective gold standards and so is not valid under present conditions, but is applicable to the years of monetary stabilization during the 1920's. The three central scales also give an easy way of finding the approximate equivalents of S ,

³ A similar chart, with special reference to Chinese exchange rates, may be found in Leavens, "A Chart of Silver and Exchange Parities."

S	PREWAR	COIN	S	R	S	POSTWAR	COIN	S
PENCE	COUNTRY		CENTS	RATIO	PENCE	COUNTRY		CENTS
						GERMANY	MARK, ETC.	
130			280		130			280
						ESTONIA	2-KROON	
						ITALY	20-LIRE	
120			260		120	UNITED KINGDOM	SHILLING, ETC.	
						RUMANIA	100-LEU	
								260
110			240		110	SWITZERLAND	5-FRANC	240
						LITHUANIA	LITAS, ETC.	
						BULGARIA	100-LEV, ETC.	
100			220		100			220
						POLAND	10-ZLOTY, ETC.	
				10		STRAITS SETTLEMENTS	DOLLAR	
90			200		90	ITALY	10-LIRE, ETC.	200
80			180		80	FRANCE	20-FRANC	180
						IRISH FREE STATE	SHILLING, ETC.	
						NETHERLANDS	FLORIN, ETC.	
						NETHERLANDS INDIES	FLORIN, ETC.	
						HUNGARY	PENGÖ, ETC.	
								160
70			160		70	LATVIA	LAT. ETC.	
	GERMANY	MARK, ETC.				ALBANIA	SUBSIDIARY	
	UNITED KINGDOM	SHILLING, ETC.				GREECE	20-DRACHMA	
	FRANCE, ETC.	SUBSIDIARY	140	15		UNITED STATES	SUBSIDIARY	140
	UNITED STATES	SUBSIDIARY				ALBANIA	5-FRANC	
60	FRANCE, ETC.	5-FRANC			60	CZECHOSLOVAKIA	10-KORUNA, ETC.	
	NETHERLANDS	FLORIN, ETC.				UNITED STATES	DOLLAR	
	NETHERLANDS INDIES	FLORIN, ETC.				MEXICO	PESO	
	UNITED STATES	DOLLAR	120					120
						AUSTRIA	SCHILLING, ETC.	
50	STRAITS SETTLEMENTS	SUBSIDIARY			50	STRAITS SETTLEMENTS	SUBSIDIARY	
	PHILIPPINES	SUBSIDIARY				BRITISH INDIA	RUPEE	
	PHILIPPINES	PESO	20	20		PHILIPPINES	SUBSIDIARY	
	STRAITS SETTLEMENTS	DOLLAR	100			SIAM	BAHT	100
	JAPAN	SUBSIDIARY				PHILIPPINES	PESO	
40	BRITISH INDIA	RUPEE			40			
	SIAM	TICAL						
				25				
	MEXICO	SUBSIDIARY	80					80
	STRAITS SET.	DOLLAR BEFORE 1907						
	JAPAN	SUBSIDIARY BEFORE 1907						
30	PHILIPPINES	PESO BEFORE 1907			30	INDO-CHINA	PIASTRE	
	MEXICO	PESO BEFORE 1907	60					60
20			40	50	20			40
10			20	100	10			20
0			200		0			0

CHART 3.—COINAGE RATIOS AND BULLION PARITIES OF SILVER COINS

S' , and R at times when both the United States and England were on their old gold standards.⁴

A few facts are evident from Chart 3. The left-hand side shows that the prewar ratios in many Western countries were bunched closely in the neighborhood of 15 or 16 to 1; those of Asiatic countries tended to be between 19 and 25 to 1. The right-hand side shows that after the war most countries raised the bullion parities and so decreased the coinage ratios. The reasons for the difference of ratios between countries and between periods will be made clear in later chapters.

⁴ For a similar chart based on the conditions of 1935, see Leavens, "Silver Coins to the Melting Pot." For a convenient nomographic chart by means of which the bullion parity corresponding to any exchange rate may be found for the principal coinages of the world, see G. A. Roush, "Melting Point of Silver Coinage the Resultant of Price and Exchange Rates."

CHAPTER III

BIMETALLISM IN THE UNITED STATES, 1793-1873¹

How happy could I be with either
Were t'other dear charmer away.

JOHN GAY, *The Beggar's Opera*

1. *The Establishment of the American Currency System*

During the colonial period a great variety of foreign currency circulated in America. Although some accounts were kept in pounds, shillings, and pence, the Spanish dollar had become the predominant money by the time of the Revolution and was the natural basis on which the new republic could establish its currency.

The Constitution, adopted in 1789, placed the monetary system under the control of Congress by the following provision:

Article 1, Section 8. 1. The Congress shall have power . . .

5. To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures

Section 10. 1. No state shall . . . coin money, emit bills of credit, make anything but gold and silver coin a tender in payment of debts, . . .

Congress in 1792 adopted, on the recommendation of Alexander Hamilton, a bimetallic standard of money, defining the dollar in terms of both gold and silver. The silver dollar was to weigh 416 grains, 1485/1664 or 0.89243 fine, containing 371.25 grains of fine silver, this being the approximate average content of the Spanish dollars then in circulation. Thus the bullion parity or monetary value of silver was $480/371.25 = \$1.2929+$ per fine ounce, or $\$1.2916+$ per ounce, 0.999 fine. The gold eagle was to weigh 270 grains, $1\frac{1}{2}$ or 0.916 $\frac{2}{3}$ fine (i.e., the British gold-coin standard), containing 247.5 grains of fine gold, or 24.75 grains to the dollar. The coinage ratio, therefore, was $371.25/24.75 = 15$ to 1. This ratio was stated explicitly in the act of 1792:

Section 11. *And be it further enacted*, That the proportional value of gold to silver in all coins which shall by law be current as money within the United States, shall be as fifteen to one, according to quantity in weight, of pure gold or

¹ This chapter has been based to a considerable extent on Hepburn, *A History of Currency in the United States* and Laughlin, *The History of Bimetallism in the United States*.

pure silver; that is to say, every fifteen pounds of pure silver shall be of equal value in all payments, with one pound weight of pure gold, and so in proportion as to any greater or less quantities of the respective metals.²

This law also provided for unlimited coinage ("free coinage"), without any charge ("gratuitous coinage"), of both metals as presented by holders:

Section 14. *And be it further enacted*, That it shall be lawful for any person or persons to bring to the said mint gold and silver bullion, in order to their being coined; and that the bullion so brought shall be there assayed and coined as speedily as may be after the receipt thereof, and that free of expense to the person or persons by whom the same shall have been brought.³

The right of free coinage of gold continued down to 1933, when the use of gold coin was discontinued. This right, and the converse privilege of melting up gold coins into bullion, are essential to the full operation of a gold-coin standard. The right of free coinage of silver was terminated in 1873. From 1792 to 1873, however, the United States was legally on a bimetallic standard, both gold and silver being freely convertible from bullion to coin and vice versa, except as regards subsidiary coin after 1853.

It was Hamilton's intention to make the coinage ratio equivalent to the market ratio. The chosen figure of 15 to 1 was close to the actual fact in 1792, but, unfortunately for the new monetary system, there began about that time an increase in the production of silver and a decrease in the production of gold, which made the white metal relatively cheaper. The market ratio in Europe rose as high as 15.74 to 1 by the year 1799, and for the next half century was usually between 15.5 and 16 to 1, with occasional fluctuations outside those limits.

2. *Difficulties in Keeping Both Metals in Circulation*

At the beginning, while the market ratio was close to 15 to 1, the bimetallic system worked satisfactorily enough, and both metals were presented at the mint for coinage. Later, as the American market ratio of the precious metals adjusted itself to the higher European market ratio, there was a tendency for Gresham's law to operate. Since an ounce of gold was worth only 15 ounces of silver at the mint, but more than 15 ounces elsewhere, gold tended to be used elsewhere, and more silver was presented at the mint. This ten-

² *Laws of the United States concerning Money, Banking, and Loans, 1778-1909*, p. 476.

³ *Ibid.*, p. 477.

dency began to appear before 1810 and was marked in the 1820's. Thus, the circulation tended to be predominantly silver, and gold was exported.

Nevertheless, American silver coins did not have the field free to themselves. The law provided that Spanish dollars and other foreign coins should be legal tender if not below certain weights, and these made up a large part of the circulation. Full-weight Spanish dollars contained more silver than American dollars, and were hoarded by bankers. Slightly underweight Spanish dollars passed in ordinary use. American dollars and subsidiary silver coins were exported in large quantities to the West Indies, where they were accepted in exchange for full-weight Spanish dollars, which were imported, melted up, and sold to the mint at a profit. Thus, an endless stream of silver circulated through the mint, profiting only the manipulators. As a result, President Jefferson ordered the suspension of coinage of silver dollars in 1806, after less than one and one-half million had been coined prior to that year. No more were coined until 1836. The coinage of subsidiary silver continued, however; nearly \$33,000,000 in half dollars were coined in the years 1793-1833 inclusive, and something under \$2,000,000 in quarters, dimes, and half dimes. It was estimated that only about half of the silver coinage remained in circulation, while such foreign coins as circulated were worn and underweight.

The currency difficulties had begun to suggest that bimetallism was impracticable because the market ratio could not be prevented from fluctuating. Great Britain in 1816 had adopted the single gold standard. From 1817 on Congress considered various proposals, including the continuance of bimetallism with the coinage ratio changed to bring it closer to the market ratio. France in 1803 had adopted bimetallism at a ratio of 15.5 to 1, and this would have been the logical ratio for the United States to choose.

Finally the ratio was changed by the coinage act of 1834. The fine content of the silver dollar was left unchanged at 371.25 grains and the fine content of the gold dollar was reduced from 24.75 grains to 23.2 grains, which made the coinage ratio 16.002 to 1. In 1837 the fine content of the gold dollar was adjusted to 23.22 grains, which made the coinage ratio 15.988 to 1, although it is usually spoken of as 16 to 1. At the same time the fineness of both gold and silver coins was changed to 0.900. This made the gross weight of the gold dollar 25.8 grains and of the silver dollar 412.5 grains. Since the silver content of the dollar was unchanged, the bullion parity or the monetary value of silver remained at \$1.2916+ per

ounce, 0.999 fine. This was equivalent, on the basis of the 23.22-grain gold dollar, to 58.98+ pence per ounce, 0.925 fine.

The market ratio in 1834 was between 15.5 and 16.0 to 1, so that the 16-to-1 coinage ratio intentionally overvalued gold, just as the act of 1792 unintentionally had overvalued silver. As a result, gold coinage increased considerably in comparison with silver, as shown by Table 2.

TABLE 2
COINAGE OF THE UNITED STATES, 1793-1873

	Gold	Silver Dollars	Subsidiary Silver
1798-1833	\$ 11,825,890	\$1,439,517	\$34,835,561
1834-1848	64,512,740	954,873	36,257,043
1849-1873	775,775,807	5,636,848	67,141,057

SOURCE: Summarized from annual figures given in Annual Report of the Director of the Mint.

3. *The Effects of Increased Gold Production*

In the late 1840's and early 1850's, gold discoveries in California, Russia, and Australia began to pour into the world markets a flood of the yellow metal unprecedented in volume. It was the more impressive because the production of gold in the three preceding decades had fallen below the level attained at the turn of the century. Gold now depreciated in terms of commodities, or, in other words, the general price level rose.⁴ Silver, the production of which was increasing only slightly, shared in the price rise, although only to a limited extent, because of the effect of French bimetallism with its coinage ratio of 15.5 to 1, which will be discussed in the following chapter. The market ratio decreased from about 15.7 to 1 in the 1840's to about 15.3 to 1 in the 1850's. Thus, the American coinage ratio of 16 to 1 became even more out of line with the market than before. The force of Gresham's law in driving silver out of circulation was increased. This was of little importance in the case of the small amount of silver dollars, but caused a serious shortage of small change. By 1853 the country for all practical purposes had been on a single gold standard for several years.

The need of subsidiary silver for daily use was so great that in 1853 Congress passed an act which entirely changed the status of these coins. Previously they had been proportional to the silver dollar in fine content, they had been coined without limit and gratuitously, and they had been unlimited legal tender. By the new act,

⁴ Jevons, *Investigations in Currency and Finance*, pp. 11-111.

their fine content was reduced to remove the incentive for melting; they no longer were to be coined for the public, but only for government account; and they were to be legal tender for not over \$5. Their weight was reduced to 384 grains to the dollar as compared with 412.5 grains for the standard silver dollar, both 0.900 fine. This corresponded to a coinage ratio of $384/25.8 = 14.88$ to 1 and to a bullion parity of \$1.389 (or 63.4 pence) per ounce, as compared with the coinage ratio of 15.988 to 1 and bullion parity of \$1.2916 (or 58.98 pence) per ounce for the standard silver dollar. Therefore, they were more valuable as coin than as bullion, unless silver rose above \$1.389 (or 63.4 pence) per ounce. The difference between \$1.389 (or 63.4 pence) per ounce and the actual cost of the bullion purchased for coinage represented a seigniorage profit to the Government; but, on the other hand, the Government was responsible implicitly for keeping the coins at a parity with other money, although there was no explicit provision for redemption until 1879.

The act of 1834 had been a first step toward placing the United States on the gold standard. The act of 1853 was a further step in the same direction. There was still unlimited coinage of the silver dollar, but from 1849 to 1872 the annual average market value of the bullion in a silver dollar was at least \$1.01 and rose as high as \$1.05 in 1859, so that there was little incentive to take the white metal to the mint for coinage.⁵ The total coinage of silver dollars from 1833 to 1873 inclusive was only six and a half million. It is probable that much of this was coined to be used in trade with China. Although silver dollars remained unlimited legal tender, they were an insignificant part of the currency.

The rise of commodity prices which accompanied the great increase of gold production caused serious concern among economists as to the future of monetary and price systems. Chevalier in France recommended the establishment of the silver franc as the sole standard.⁶ MacLaren in England suggested that that country might well consider changing from the gold standard to the silver standard; or, if that were too radical a proposal, that life insurance companies should issue policies payable in silver, which he believed would have, in the long run, a more stable value in terms of commodities.⁷ In this country, in 1859, the Holyoke Water Power Company, in making perpetual leases of water-power rights, stipulated that the annual rent per unit should be "260 ounces troy weight of silver, of the standard

⁵ A table of the annual bullion value of the silver dollar since 1837 is given in the *Annual Report of the Director of the Mint*.

⁶ Chevalier, *On the Probable Fall in the Value of Gold*, pp. 134-138.

⁷ MacLaren, *A Sketch of the History of the Currency*, 2d. ed., pp. v-vi.

value and fineness of the United States silver coinage of the year 1859 or its equivalent."⁸ In the late 1850's there was real justification for such expectation that gold would depreciate further and that silver would be a more stable measure of value.

These fears, however, were not realized, for gold production did not increase in the 1860's and actually began to fall off in the 1870's. At the same time the production of silver began to increase, after the discovery of the Comstock lode in Nevada in 1858. Meanwhile, the Civil War brought about the issues of Confederate currency in the South and of greenbacks in the North. Gold went out of circulation and was traded in at a premium which reached a maximum of 185 per cent in 1864; that is, \$100 gold was worth \$285 in greenbacks, or the greenback dollar was worth only 35 cents in gold. Silver dollars, of course, remained out of circulation. Silver subsidiary coins tended to disappear as soon as gold dollars rose enough to balance the lowered silver content of the coins.⁹ The Legal Tender Act, providing for the issuance of greenbacks, had been passed on February 25, 1862, and by July the newspapers were noting the shortage of small coin.¹⁰ Congress had to authorize the issue of fractional paper currency.

4. *The Coinage Act of 1873*

The country was still on a greenback basis in 1873, when a new coinage act was passed.¹¹ This act was primarily a revision of various laws regulating mint procedure, and had been under discussion since 1870. All through that time, the silver dollar was worth a few cents more than \$1.00 in greenbacks. There were no silver dollars in circulation, and there was no incentive to coin them except to get currency for the oriental trade, for which they were cheaper than Mexican dollars. The latter were at a premium over their bullion value because of an export duty in Mexico and because of a limited supply of them to meet the Chinese demand. It was brought out in the debates in Congress that the silver dollar of 412.5 grains could not circulate; at one time, the bill contained a provision for a silver dollar of 384 grains, proportional to the subsidiary coinage.

⁸ *Boston Evening Transcript*, Aug. 1, 1932.

⁹ In 1862 the market ratio between gold and silver was about 15.35 to 1. The subsidiary coins were based on a ratio of 14.88 to 1. Thus, when the gold dollar rose above 15.35/14.88 or \$1.032 in greenbacks, it became profitable to melt the subsidiary coins.

¹⁰ Carothers, *Fractional Money*, pp. 156-159.

¹¹ See detailed discussions in Hepburn, pp. 271-273 and Laughlin, pp. 92-105; and record of all documents and legislative proceedings concerning the act in *History of the Coinage Act of 1873*.

The act of February 12, 1873, as finally passed, omitted all mention of the standard silver dollar, but provided for subsidiary silver coins, whose weight was changed slightly to 25 grams or 385.8 grains to the dollar, making the coinage ratio 14.95 to 1 and the bullion parity \$1.3824 (or 63.1 pence) per ounce. It also provided for a new coin, a trade dollar of 420 grains, 0.900 fine, for use in oriental trade. The trade dollar was subject to free coinage; it also was included in the list of subsidiary silver coins which were legal tender up to \$5.00, but its legal-tender quality was removed in 1876. The act did nothing to take away the unlimited legal tender enjoyed by the previously minted silver dollars, of which, however, there were few in existence and none in circulation. In effect, however, the omission of the silver dollar from the act of 1873 really established the gold standard, because it left the privilege of free coinage to gold, but took it away from silver. Actually, the country was on a paper basis at the time and until specie payments were resumed in 1879. The implications of the act apparently were recognized by few in Congress or outside. If silver producers had realized what it involved, they probably would have protested before the bill was passed.

CHAPTER IV

BIMETALLISM IN FRANCE AND THE LATIN MONETARY UNION¹

They order this matter better in France.

LAURENCE STERNE, *A Sentimental Journey*

1. *The French Monetary System*

During most of the period when the United States was on a bimetallic standard with a coinage ratio of 15 to 1 at first, and of 16 to 1 after 1834, France was on a similar standard, with a coinage ratio of 15.5 to 1. A law of 1803 set as the monetary unit the franc of 5 grams of silver, 0.900 fine (1 gram = 15.4324 grains), and also provided for gold coins at the rate of 3100 francs to 1 kilogram of gold, 0.900 fine. There was to be unlimited coinage ("free coinage") of both metals, with a small charge for expenses (i.e., not "gratuitous coinage"). In effect this was a bimetallic standard, although it may be argued from the wording of the law that silver was the legal standard, and the gold coins merely supplementary.²

The law of 1803 perpetuated a coinage ratio established in 1785.³ Moreover the coinage ratio of 15.5 to 1 was fairly close to the current market ratio in 1803, as was the American choice of 15 to 1 in 1792. Most of the time from 1803 to 1850, however, the market ratio fluctuated between 15.5 and 16 to 1. Thus, silver was overvalued by the coinage ratio, and, therefore, as in America up to 1834, the coinage tended to be chiefly silver, and the white metal was imported in considerable quantity. During the same period there was a net export of gold, and gold coin disappeared almost entirely from circulation. These facts are brought out by Chart 4, although figures are not available for the whole period.⁴ It should be noted that the scale for the market ratio is upside down, so that the curve rises and falls with the price of silver, or just opposite to the movement of the ratio proper.

¹ This chapter has been based chiefly on Willis, *A History of the Latin Monetary Union*.

² Chevalier, *On the Probable Fall in the Value of Gold*, pp. 107-109.

³ Shaw, *The History of Currency*, pp. 172-173.

⁴ Sources of data for Chart 4: Price of silver, from *Annual Report of the Director of the Mint*; French gold and silver movements, coinage, and reserves, from Shaw, *op. cit.*, pp. 183-186.

The situation changed with the increase of the world gold supply, which began in the late 1840's. The price of silver rose; that is, the curve crossed the 15.5-to-1 line and, except for occasional lows, remained between that and 15 to 1 until 1866. Gold, therefore, was overvalued at the French mint. The chart shows large imports of gold and an even larger coinage, suggesting that the yellow metal was being attracted out of hoards. At the same time the silver coinage dropped to a minimum, and considerable silver was exported. These movements affected both the money in circulation and the reserves of the Bank of France, increasing the proportion of gold in both.

Thus, prior to 1850 France was in effect on a silver standard; after that date, silver was replaced rapidly by gold. The process was facilitated by the proximity of France to London. England in 1816 had adopted a gold standard, coining silver only on government account, although for the next few years she was in fact on a depreciated-paper basis. With London as the world's financial center and chief silver market, it was easy for silver to flow from there into France whenever the disparity between the coinage ratio and the market ratio permitted. When the tide turned in 1850, although London itself could not absorb silver, conditions in India were such as to favor the importation of the white metal into that country.⁵

Although the existence of legal bimetallism in France did not give that country a truly bimetallic currency, it served to steady the world market ratio. During the first half of the century, when there was a relatively small production of gold, an ounce of gold probably would have been worth more than 16 ounces of silver, if it had not been for the fact that it could, in effect, be obtained for 15.5 ounces of silver in France. After 1850, when all prices were rising contemporaneously with the increased production of gold, an ounce of gold probably would have been worth less than 15 ounces of silver, had it not been for the fact that 15.5 ounces of silver could be obtained for it in France. As Chevalier put it, France acted as a parachute to retard the fall of gold.⁶ Something of the extent of this retardation may be seen in the fact that from 1848 to 1870 France imported nearly two-fifths of the world's production of gold for the period.

The shift from silver to gold in the French currency system took place so rapidly that there soon began to be discussion as to the proper monetary policy for the country to pursue, some supporting the *status quo*, others favoring a single silver standard, and others a single gold standard. Chevalier urged keeping the silver franc as the standard,

⁵ Laughlin, *The History of Bimetallism in the United States*, pp. 122-134.

⁶ Chevalier, *op. cit.*, p. 62.

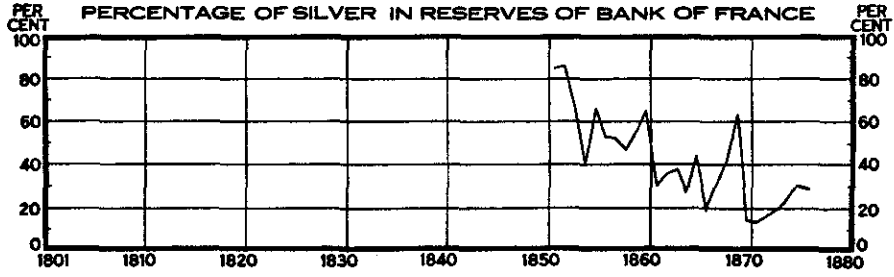
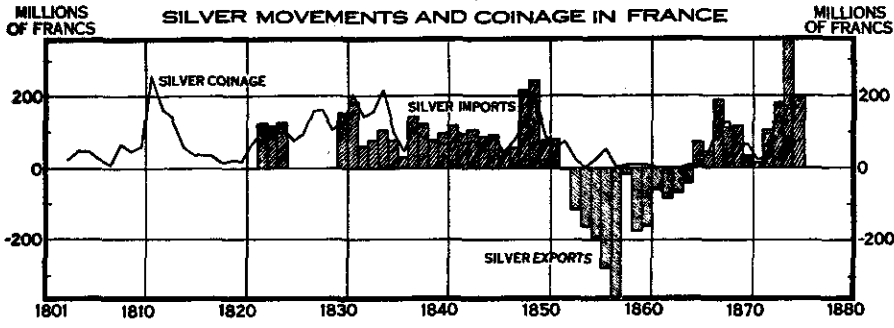
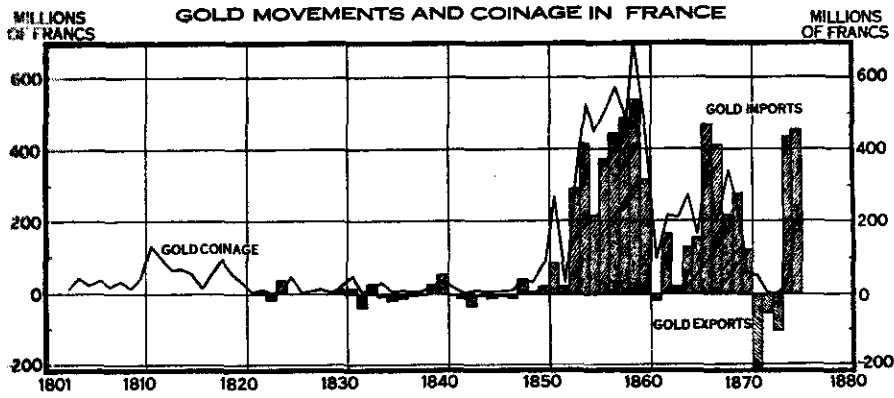
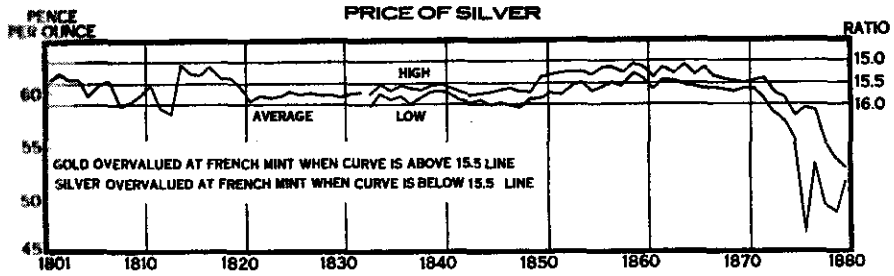


CHART 4.—THE RECORD OF BIMETALLISM IN FRANCE

but allowing gold, coined in units of weight with no expressed value in francs, to serve as limited legal tender at a value determined by the current market ratio.⁷ Meanwhile, a scarcity of small silver coins began to be felt. This did not come about as quickly as in the United States, for the French coinage ratio of 15.5 to 1 was not so far from the market ratio as was the American coinage ratio of 16 to 1, so that in the case of worn coins the amount lost by abrasion often was sufficient to make them not worth melting. Nevertheless, the scarcity eventually became critical, and in 1864 the fineness of the 20-centime and 50-centime pieces was reduced to 0.835, thus making their coinage ratio equivalent to approximately 14.38 to 1. This made them safe from the melting pot, for the market ratio did not fall below 15 to 1. The larger silver coins, however, were still unprotected.

2. *The Latin Monetary Union*

Meanwhile, Belgium, Switzerland, and Italy, all of which had coinages closely similar to that of France, but differing in details, also were experiencing the loss of silver coins. They likewise were increasing the proportion of gold in their currency and were looking favorably on gold as a standard. In Belgium conditions were worst, and in 1865 she proposed to France that the countries using the franc or its equivalent should form a union for the protection of their currency.

A conference of delegates from the four countries was held in November and December, 1865. The three smaller countries and the French delegates themselves favored a single gold standard, but French official policy, perhaps dictated by the Bank of France and other financial interests, favored the continuance of the nominal bi-metallism, regardless of the fact that the current market ratio made gold the actual currency. The treaty signed on December 23, 1865, establishing the Latin Monetary Union, therefore perpetuated the double standard. It provided for uniformity in the gold and silver coinage of the four countries. Gold coins were to be of five denominations, ranging from 5 to 100 francs, and to weigh 0.3225806 grams per franc, with a fineness of 0.900. The gold coins of any state were to be received freely by the treasuries of other states, provided they were not unduly worn. Silver 5-franc pieces were to weigh 5 grams to the franc, with a fineness of 0.900, thus continuing the 15.5-to-1 ratio, and likewise were to be received by the treasuries of the other states. All gold coins and silver 5-franc pieces were to be unlimited

⁷ *Ibid.*, pp. 134-138.

legal tender and subject to free coinage. Subsidiary silver coins, minted only for government account, of 2 francs, 1 franc, 50 centimes, and 20 centimes, were to weigh 5 grams to the franc, but with a fineness of 0.835, thus having a coinage ratio of 14.38 to 1. These subsidiary coins were to be legal tender between individuals in the issuing country to the extent of 50 francs, and were to be receivable at the public treasuries of other countries to the extent of 100 francs in one payment. Coins previously issued of different fineness were to be retired from circulation within a few years. Moreover, the new subsidiary silver was to be issued to an amount not exceeding 6 francs per capita. The union was to last for fifteen years.

The reduction in the fineness of subsidiary coins, begun by France in 1864, served the purpose of making it unprofitable for the public to melt them unless the market ratio should reach 14.38 to 1. After 1866 the market ratio, which for a decade and a half had been between 15 and 15.5 to 1, rose to between 15.5 and 16 to 1, so that gold again was overvalued slightly at the mints as it had been before 1850. The ratio remained close enough to 15.5 to 1, however, so that for several years bimetallism, modified by the special features protecting subsidiary coinage, worked with fair success in the Latin Monetary Union. The shift of the ratio, while not large enough to cut down greatly the importation of gold into France, changed the direction of the flow of silver, which had been exported steadily from 1852 to 1864, but from 1865 began to show a considerable net importation, most of which was coined.

The monetary question was not solved permanently, however, and continued to be discussed. The International Monetary Conference of 1867 (Chapter VII, Section 1) favored a universal gold standard, but bimetallism still had its advocates. Nevertheless, a strong tendency toward a gold basis for France and her allies was growing, when it was interrupted by the Franco-Prussian War of 1870-71. The developments following that war are discussed in the next chapter.

CHAPTER V

THE DEMONETIZATION OF SILVER IN EUROPE¹

... and great was the fall of it.

MATTHEW 7:27

1. *The Situation in 1870*

The total world production of gold during the two decades from 1851 to 1870 was nearly equal to the total production in the previous three and a half centuries (see Chart 1, page 9). Thus the world's supply of gold was practically doubled in less than a generation. There was, however, no great increase of silver. The total production of silver from 1493 to 1850 had amounted to about 33 times that of gold by weight, or more than twice that of gold by value. During the next two decades the production of silver was less than 6 times that of gold by weight. By 1870, the cumulative production of silver since 1493 amounted only to about 20 times that of gold by weight, or $1\frac{1}{2}$ times by value. Moreover, the large flow of silver to the Far East probably had left in the West a monetary stock consisting, in value, of at least half gold. Before 1850, silver, perforce, was the more important monetary metal. By 1870, however, enough gold was available in the Western world so that the gold standard became a practical possibility. The ensuing decade was to see this possibility become a fact in all countries of financial importance.

England had been legally on the gold standard from 1816. Portugal had taken advantage of the new gold supplies to go on the gold standard in 1854. The remainder of Europe, in 1870, was on either silver or bimetallic standards, but there was a strong sentiment for gold, as shown by the unanimity at the International Monetary Conference of 1867 (Chapter VII, Section 1). Numerous articles appeared on the desirability, not only of a universal gold standard, but also of a uniform international coinage, although some favored the continuance of bimetallism. The French Government strongly favored the gold standard, and, but for the Franco-Prussian War of 1870-71, probably would have induced the Latin Monetary Union to adopt it.

¹ This chapter has been based chiefly on Willis, *A History of the Latin Monetary Union* and Laughlin, *The History of Bimetallism in the United States*.

2. *Germany*

The Franco-Prussian War left Germany in a stronger position than her opponent, so that she was able to anticipate France in adopting the gold standard. The German states before the war had had what was in effect a silver standard with a small amount of gold in circulation at its market value, rather than at a fixed ratio. The new German Empire, financially strong with the French indemnity of five milliards of francs (approximately \$1,000,000,000) in hand, took the first step toward a gold standard late in 1871. A law was passed which provided for the minting of new gold coins at a coinage ratio of 15.5 to 1, as compared with the existing silver coins, and for the suspension of coinage of any more large silver coins. The unit was to be the mark, equivalent to 5.531 grains of fine gold. In July, 1873 another law definitely established the gold standard and provided for the coinage of new silver coins with the weight reduced one-tenth from the existing standard, making the coinage ratio 13.95 to 1 as compared with 14.95 to 1 for American and 14.38 to 1 for Latin Monetary Union subsidiary coins. These coins, of course, were to be minted only for government account. They were to be legal tender up to 20 marks, and the total issue was to be limited to 20 marks per capita. Old silver coins were to be withdrawn from circulation, but until withdrawn were to retain their full legal-tender rights.

Under this plan there were withdrawn more than 1,000,000,000 marks of the old silver coins, of which something over one-third were recoined. Most of the remainder, amounting to 7,104,800 metric pounds (of 500 grams), or approximately 114,000,000 fine ounces, was sold during the years 1873 to 1879, the greater part of the sales occurring after 1875.² There still remained about 450,000,000 marks of the old thaler coins in circulation, with full legal-tender power.

Germany by this action considerably reduced the potential monetary demand for silver, and dumped a large quantity of the white metal on the market. Regardless of the time of actual sales, the passage of the first law, in December, 1871, was clear notice to the world's silver market of what to expect. The market, however, did not immediately respond to this tip (see Chart 2, page 11). The low price in December, 1871 was 60½ pence per ounce, corresponding to a ratio of 15.59 to 1. The low for 1872 was attained in November at 59½ pence per ounce or a ratio of 15.92 to 1. About the middle of 1873 a real fall began, and in November the price reached a low of

² See Appendix I, Table B, for annual sales.

57 $\frac{7}{8}$ pence per ounce, or a ratio of 16.29 to 1, which seriously threatened the working of the coinage ratio of 15.5 to 1 in the Latin Monetary Union.

3. *The Latin Monetary Union*

In 1872, with the market ratio close to 15.5 to 1, less than 400,000 francs of silver 5-franc pieces had been coined in France. In 1873, nearly 155,000,000 francs of silver was presented for coinage. A similar situation occurred in Belgium. Obviously, if the ratio should continue above 15.5 to 1, the members of the Latin Monetary Union would find their gold currency rapidly being replaced by silver, just as the reverse process had taken place in the 1850's.

The countries of the union, therefore, were forced to take a succession of steps to protect themselves against a replacement of gold by silver. In November, 1873 France and Belgium limited the amount of silver to be coined daily. In December Belgium passed an act giving the Government authority to suspend the coinage of 5-franc pieces. In January, 1874 a convention of the Union met in Paris, at the request of Switzerland. At this convention Belgium and Switzerland advocated a gold standard, while France and Italy favored the maintenance of the *status quo*, modified by some restriction on the amount of silver coinage. The latter plan prevailed, and it was decided to limit the coinage of 5-franc pieces in 1874 to 60,000,000 francs in France and lesser amounts in the other countries, making a total of 120,000,000 francs. The agreement said nothing about restricting the right of the public to present silver for free coinage, within the limits set. France continued to allow free coinage, on a "first come, first served" basis. The other three countries, however, refused to coin for individuals, but purchased silver at the market price for coinage, thus making a seigniorage profit of the difference between 15.5 to 1 and the market ratio. The limitations were continued in 1875 and 1876, and in the latter year France took away the right of free coinage from individuals. Finally, by a new treaty in 1878, the Union suspended the coinage of 5-franc pieces, except that Italy was allowed to coin a limited amount to facilitate resumption of specie payments after a long period of depreciated paper.

The countries of the Latin Monetary Union coined no more silver for the public after 1878, but they had large amounts of 5-franc pieces, of full legal tender, in circulation. The free coinage of gold continued, but there was no obligation to redeem the silver 5-franc pieces in gold. These countries, therefore, were not on a strict gold

standard, but rather on what has been called the *étalon boiteux* or "limping standard."

The dissemination of each country's silver coins in circulation in the other countries belonging to the union brought about various problems of redemption and adjustment, but these did not affect the world silver situation.

4. Other Countries

The fall of silver induced a change to the gold standard in other countries of Europe. In 1873 Denmark and Sweden formed the Scandinavian Monetary Union, later joined by Norway, which unified the currency of these countries on a gold standard, replacing former silver standards. They sold a certain amount of silver, but it was negligible compared with Germany's large sales.

Holland had been on a bimetallic standard from 1816 to 1847, and after that on a silver standard. In 1872 the Bank of the Netherlands stopped a twenty-year practice of buying at a fixed rate all silver offered, and in 1873 the Government stopped silver coinage. In 1875 another law provided for coining gold at the ratio of 15.625 to 1 and for the continued suspension of silver coinage. The silver coins acquired a scarcity value after 1873. In 1883 a law was passed authorizing the melting and sale of 25,000,000 florins of silver coins, but this was not carried out except to provide silver for subsidiary coinage.

Russia in 1876 suspended the coinage of silver for individuals, except silver needed for trade in China. Spain in 1878 suspended the coinage of silver for individuals, but continued it on government account. Austria-Hungary discontinued the free coinage of silver in 1879.

By 1880 there was no longer any mint in Europe where silver could be presented for free coinage. There was still a certain demand for silver for subsidiary coins on government account, but these were of only limited legal tender. At the same time in many countries there were large silver coins, issued under former laws, which retained their full legal-tender qualities, and which formed an important element of circulation and of bank reserves. In view of the existence of these legal-tender silver coins, most European countries could not be said to be fully on the gold standard, but were on the limping standard. Moreover, some used depreciated paper from time to time, but none returned to the free coinage of silver. The white metal continued to be used in India and China, but gold was to be the money of Western countries.

5. *The Fall in the Price of Silver*

The price of silver had shown a downward trend, with fluctuations, during the decade from 1870 to 1880, as may be seen in Chart 2. It reached a spectacular low of $46\frac{3}{4}$ pence per ounce, or a ratio of 20.17 to 1, in July, 1876, but for most of the remainder of the decade was between \$1.10 (or 50 pence) and \$1.20 (or 55 pence) per ounce. The price continued in a general downward direction until 1893. The reasons for this great fall in price, extending over a period of twenty years, have been a subject of considerable controversy, partly because of the complexity of the economic forces operating, and partly because contemporary discussion lacked the necessary perspective.

The following were probably among the most important factors:

1. A fundamental cause was that, whereas before 1850 silver and gold both had been important monetary metals, the great gold production of the next two decades supplied enough gold to take the place of silver in large measure. The great advantage of gold as a standard for large transactions made it preferable, and, as we have seen, Europe generally adopted it in the 1870's. Thus, the monetary demand for silver in the Western world was largely removed, leaving only that of Asia. This naturally tended to make the price fall, since there were no longer any mints to receive silver at a fixed price.

2. The adoption of the gold standard in a way overshot its mark. The production of gold actually fell off in the 1870's and 1880's, and at the same time world industry and commerce were expanding. The supply of gold was hardly adequate for the world's needs. From about 1865 to 1896 there was a long period of falling commodity prices which were ascribed by many to the shortage of gold. Since the price of silver no longer was pegged by free coinage, it shared in the decline of other commodity prices.

3. At the same time the production of silver was increasing, in large part because of the exploitation of the Comstock lode in Nevada. The average annual world production rose from about 25,000,000 ounces in the 1840's to about 40,000,000 in the 1860's, 70,000,000 in the 1870's, 100,000,000 in the 1880's, and 160,000,000 in the 1890's. This rapid increase tended to lower the price.

These three forces certainly were sufficient, when taken together, to account for the general downward trend. The minor, or sometimes violent, fluctuations which occurred in the price are to be explained by more temporary causes, by the psychology of the market as influenced by the twenty-year discussion of the silver question, and by the varying national and international actions taken.

6. *The Berlin Silver Commission of 1894*

The fall of silver caused some reconsideration of the demonetization. Discussions in the United States and in international conferences will be described in the following chapters. A few words may be added here about the situation in Germany. In 1893 the German Government, although committed to the gold standard, recognized silver depreciation as a serious economic problem. It appointed a commission composed of officials, members of the Reichstag, representatives of various business interests, and university professors, to discuss the question.

... whether and by what means it seems practicable to raise and fix the price of silver.³

This commission held twenty-one sessions between February 22 and June 6, 1894. There was lengthy discussion and bitter argument over the causes and effects of the fall in the price of silver, and over various proposals for doing something about it. Some members were die-hard bimetallists and would be satisfied with nothing less than a return to the 15.5-to-1 ratio. Others were willing to accept compromise measures that would re-establish the monetary position of silver at a higher ratio. The majority, however, favored the continuance of the gold standard unchanged, or at least believed that it was inexpedient for Germany to take the lead in any attempt to secure international agreement. In summing up the chairman stated that he thought the assembly had reached an agreement in three directions:

That in fact the fluctuating and low price of silver involves certain injuries to our foreign trade, and also to our international productive life.

That Germany is not able alone to adopt effective measures to raise the value of silver.

That the raising of the value of silver by way of monopolizing, pooling, or subsidizing the silver production would certainly be impracticable.

No agreement had been reached on other points:

Whether in view of the free production the raising of the price of silver seems attainable at all; and if so, by what method?

What weight ought to be given to the economic interest injured by the decline of silver as compared with the interest of our entire economic life?

What ratio should be proposed between the price of gold and silver for an international regulation; and

Whether the remedies proposed by the various parties might not be more dangerous than the silver disease itself?⁴

³ *The Berlin Silver Commission*, p. 141.

⁴ *Ibid.*, p. 1184.

CHAPTER VI

THE SILVER QUESTION IN THE UNITED STATES, 1873-1893

... and heard great argument
About it and about, ...

OMAR KHAYYAM, *The Rubaiyat*

1. *The Situation in 1873*¹

The omission of the silver dollar in the Coinage Act of February 12, 1873 (Chapter III, Section 4) passed unnoticed. Only 8,000,000 silver dollars had been coined from 1793 to 1873, and probably most of these had been melted or exported. For ten years the country had used no hard money at all in ordinary transactions. In 1873 the silver in a dollar was worth a cent or two more than a gold dollar, and about thirteen cents more than a greenback dollar. There was no incentive for the holder of silver to have it coined. He could get a better price in the domestic or foreign silver market.

Although silver was absent from the currency, it had become, during this period, an important product of the country. Prior to 1860 the United States had furnished only a small fraction of 1 per cent of the world's total silver production, but with the development of the Comstock lode and other deposits it furnished nearly 20 per cent in the 1860's and 40 per cent in the 1870's and 1880's (see Chart 1-B, page 9). Although much of it was produced in territories, which had no vote in Congress, there were already in 1876 two important silver states, Nevada and Colorado; between 1889 and 1896 three more, Montana, Idaho, and Utah, were admitted to the Union. Thus, the political importance of silver was increasing, particularly in the Senate, where these small western states had as strong a voice as the larger and more conservative eastern ones.

Nevada and Colorado alone could not have swung the strong silver movement of the next two decades, had not other forces operated to create a demand for increased currency. The falling world price

¹ The earlier part of this chapter has been based chiefly on Hepburn, *A History of Currency in the United States*, Laughlin, *The History of Bimetallism in the United States*, Russell, *International Monetary Conferences*, and Byars (ed.) *An American Commoner*, Chapter XII, pp. 101-122, in which Richard P. Bland gives an account of the silver contests in which he played a large part.

level was bringing hardship to debtors, who were obligated to pay fixed amounts of money which represented more in commodities than at the time when the debts were contracted. In the United States this situation was aggravated for debts contracted in greenbacks. The post-Civil-War development of the West had induced much speculation in land; farmers were burdened with mortgages representing more than their land was really worth, even had the commodity price level not been falling. At the same time the creditor was gaining by the appreciation in value of both gold and greenbacks. In particular, the holder of government bonds, purchased with depreciated paper, but with principal and interest payable in "coin," which was interpreted to mean gold, became indeed a "bloated bondholder." The developing West was largely a debtor community, in contrast to the East which had loaned its accumulated capital.

Conditions were favorable, therefore, for agitation by the western debtors for inflation. This already had taken the form of a movement to retain and even increase the issue of greenbacks. The financial crisis of 1873 had stimulated it still further; in 1874 an inflation bill was passed but was vetoed by President Grant. In January, 1875, however, the conservative forces succeeded in passing a law providing for the reduction of the volume of greenbacks from \$356,000,000 to \$300,000,000, the resumption of specie payments on January 1, 1879, and the earlier replacement of fractional paper currency by subsidiary silver coins. Attempts were made later to repeal this act, but it was carried out, except that the greenback issue was finally left at \$346,681,016, at which figure it still stands.

When the greenback avenue of inflation was closed, the advocates of cheap money joined with the mining states in favoring silver. Reference to Chart 2, page 11, shows that the price of silver had been falling steadily since 1873 and took a sharp downward turn in 1876. The bullion parity of the silver dollar was \$1.29 (or 59 pence) per ounce, but with the gold dollar ranging from about \$1.10 to \$1.15 in greenbacks between 1873 and 1876, silver had to fall nearly to \$1.10 (or 50 pence) per ounce before silver dollars could replace greenbacks profitably. When this happened in 1876, silver producers and their spokesmen in Congress suddenly awoke to the fact that there was no longer free coinage of silver. Practically no use had been made of free coinage for a quarter of a century, because a better price for silver could be obtained elsewhere, but now it would have been a profitable privilege. A number of bills were presented in Congress to restore the use of silver. The omission of the silver dollar from the coinage act was referred to as the "Crime of 1873."

Members of Congress who had voted for the act claimed that they had not known that it would demonetize silver. Impartial studies of the evidence have shown that the significance of the measure was brought out fully in reports and debates before it was passed, and that many of the protesting congressmen were on record in words which showed that they must have understood it.

2. *The Bland-Allison Act of 1878*

No legislation on silver was enacted by the Forty-fourth Congress (1875-77) although a free-coinage bill proposed by Representative Richard P. ("Silver Dick") Bland of Missouri was passed by the House. Congress, however, appointed a commission, which reported in March, 1877, recommending bimetallism either at 15.5 to 1, to match the ratio of the Latin Monetary Union, or at 16 to 1, the old American ratio. In November, at the first (special) session of the Forty-fifth Congress, Bland secured the passage by the House, under suspension of the rules, of a bill for free coinage. In the Senate, where it was reported back from the Committee on Finance by Senator William B. Allison of Iowa, it was changed radically. Instead of free coinage of silver, the Senate bill provided that the Government should purchase and coin into dollars not less than \$2,000,000 and not more than \$4,000,000 worth of silver each month. This, of course, was an entirely different proposition. Under free coinage, silver producers would have been assured a price of \$1.2916 per ounce, 0.999 fine. Under the Allison plan, they would sell at the market price, which, to be sure, would be raised somewhat by the assurance of a steady new demand, but which still would fluctuate according to the variations of other demand and of supply. The Government would profit by a seigniorage equal to the difference between the market price and \$1.2916 per ounce, 0.999 fine.

President Rutherford B. Hayes, in his annual message to Congress, emphasized the dishonesty of making these dollars legal tender in payment of the government debt, technically payable in "coin," which commonly was understood to mean gold; he recommended a heavier silver dollar, containing nearly a gold dollar's worth of silver at the current price, and of limited legal tender. Secretary of the Treasury John Sherman recommended exempting existing bonds from payment in silver, and also favored payment of all bonds in gold.

The Bland-Allison act, as finally passed, with the Senate changes, was for silver purchase instead of free coinage. The 412.5-grain silver dollars (containing 371.25 grains of fine silver) were to be legal

tender for all debts, public and private, except where otherwise stipulated in the contract. There was also provision for the issuance of silver certificates, against deposit of dollars, in denominations of \$10 and up, which certificates would be receivable for public dues, but not legal tender for private debts. In addition, the President was instructed to call an international monetary conference for the purpose of establishing international bimetallism.

The act passed both houses, was vetoed by the President, and was passed over his veto on February 28, 1878. Meanwhile, a concurrent resolution, which did not require the President's approval, had been passed by the House, stating that silver dollars could be used for the payment of United States bonds.

The Bland-Allison act was in force for the next twelve years, but only the minimum \$2,000,000 worth of silver per month was purchased. These purchases absorbed over 60 per cent of American silver production, but were not sufficient to counteract the world forces tending to lower the price of silver, which declined slowly but steadily, decreasing the bullion value of the dollar from about 90 cents in 1878 to about 72 cents in 1889. Thus, in 1878, \$2,000,000 worth of silver per month provided for the coinage of about \$24,000,000/0.90 or about \$27,000,000 per year, while in 1889 it provided for the coinage of about \$24,000,000/0.72 or about \$33,000,000 per year. The Treasury, therefore, made a seigniorage profit ranging from \$3,000,000 to \$9,000,000 per year, totalling about \$68,000,000 during the operation of the act. The total quantity of silver purchased was about 291,000,000 fine ounces, at an average cost of \$1.058 per ounce.²

This addition to the country's currency was about two-thirds of the gold coinage during the same period. In view of the rapid economic and population growth of the United States the new silver coinage filled a need for additional currency and therefore did not cause the inflation which some had feared. This was especially the case after 1886 when a new law allowed for the issuance of silver certificates in denominations down to \$1. These circulated much more freely than the actual dollars, and became the pocket money of the nation.³

During the years when the Bland-Allison act was in force, the silver question did not die down. The proponents of silver still were endeavoring to secure unlimited free coinage; the opponents were trying to get the act repealed. President Hayes (1877-1881) and Secretary Sherman from time to time recommended to Congress suspen-

² *Annual Report of the Director of the Mint . . . 1894*, p. 17.

³ Taussig, *The Silver Situation in the United States*, pp. 75-78.

sion of the act. Presidents James A. Garfield and Chester A. Arthur (1881-1885) were opposed to free coinage, and no progress was made by silver advocates during their administrations. Secretary Hugh McCulloch, although favoring international bimetallism, pointed out the difficulties of the Treasury in 1884. Grover Cleveland, who became President in 1885, represented the Democratic party, which was divided on the question of silver. Mr. Cleveland personally favored stopping the coinage of silver dollars, but no action was taken either way during his first term of office.

3. *The Windom Plan*

During President Benjamin Harrison's term (1889-1893) the subject came up again in Congress. Secretary of the Treasury William H. Windom, in his report for the fiscal year ended June 30, 1889, discussed the silver problem and the various possible methods of continuing to use silver as money along with gold. He recommended that the Bland-Allison act be replaced by a law authorizing the issue of Treasury notes against deposits of silver bullion at the market price when deposited. These notes would be

. . . payable on demand in such quantities of silver bullion as will equal in value, at the date of presentation, the number of dollars expressed on the face of the notes at the market price of silver, or in gold, at the option of the government; or in silver dollars at the option of the holder.⁴

For example, if the market price of silver were 80 cents per ounce, notes to the amount of 80 cents would be issued for an ounce of silver deposited. Later, if the price of silver fell to 75 cents per ounce, these 80 cents in notes would be redeemable with $80/75$ or 1.067 ounces of silver. In effect, the dollar represented by such notes would have been a variable weight of silver, similar to the variable weight of gold proposed by Irving Fisher as a standard of currency or the "rubber dollar" of George F. Warren. As far as the user of the notes was concerned, he always could get them redeemed at their full gold value in silver bullion. The Government, on the other hand, would take the risk of a further fall in the price of silver, which would cause a loss if notes were presented for redemption. It was claimed, however, that the operation of the plan would tend to support the price of silver. Although the Windom plan was not adopted, it is of interest because similar plans were proposed forty years later when silver once more became a political issue.

⁴ *Annual Report of the Secretary of the Treasury . . . 1889*, p. lxxiv.

4. *The Sherman Silver Purchase Act of 1890*

A new silver purchase bill brought forth vigorous debate in both houses of Congress. The silver party in the Senate was able to bring about the passage of a free-coinage amendment, by a vote of 42 to 25 with the support of 14 Republicans and of all but 3 Democrats. The House turned this down by a small majority. The bill went to conference where a satisfactory compromise was worked out under the leadership of Senator Sherman. It became law on July 12, 1890. Senator Sherman's own account of his part in it says:

The authorship of this law has been generally credited to me, and it was commonly called the "Sherman Silver Law," although I took but little part in framing the legislation until the bill got into conference. The situation at that time was critical. A large majority of the Senate favored free silver, and it was feared that the small majority against it in the other House might yield and agree to it. The silence of the President on the matter gave rise to an apprehension that if a free coinage bill should pass both Houses he would not feel at liberty to veto it. Some action had to be taken to prevent a return to free silver coinage, and the measure evolved was the best obtainable. I voted for it, but the day it became a law I was ready to repeal it, if repeal could be had without substituting in its place absolute free coinage.⁵

The act as passed differed considerably from Secretary Windom's proposal. It provided for the purchase of 4,500,000 fine ounces per month at not to exceed one dollar for 371½ grains of fine silver, (that is, \$1.2916 per ounce, 0.999 fine) and payment for it with Treasury notes. The notes were to be redeemable on demand in coin. They were to be

... legal tender in payment of all debts, public and private, except where otherwise expressly stipulated in the contract, and shall be receivable for customs, taxes, and all public dues, and when so received may be reissued; and such notes when held by any national banking association, may be counted as part of its lawful reserve. That upon demand of the holder of any of the Treasury notes herein provided for the Secretary of the Treasury shall, under such regulations as he may prescribe, redeem such notes in gold or silver coin, at his discretion, it being the established policy of the United States to maintain the two metals on a parity with each other upon the present legal ratio, or such ratio as may be provided by law.⁶

The provisions of the Bland-Allison act for the purchase and coinage of silver were repealed, but it was provided that, of the silver purchased under the new act, 2,000,000 ounces per month should be coined into standard silver dollars, until July 1, 1891; thereafter,

⁵ Sherman, *Recollections . . .*, Vol. II, pp. 1069-1070.

⁶ *Laws of the United States concerning Money, Banking, and Loans, 1778-1909*, p. 590.

coinage was to be only to provide for the redemption of Treasury notes; seigniorage was to go to the Treasury.

The price of silver had fallen to about 92 cents per ounce in 1889. The discussion and passage of the bill raised the price in 1890 to a maximum of about \$1.21 in August and September, but thereafter it fell off steadily, going as low as 83 cents by the end of 1892.

This increased injection of a currency based on silver, at a time when the price of silver was depreciating more rapidly than in the previous decade, brought about a beginning of distrust of the American monetary system. Moreover, it satisfied neither those who wanted a gold standard nor those who wanted free coinage of silver. The subject continued to be debated in Congress; free-coinage measures were passed by the Senate, but in the House were defeated by filibusters or by vote. The silver question was not a major issue in the 1892 elections, but a third party, the Populists, got over a million votes on a platform favoring free silver and various radical monetary plans. Grover Cleveland, the Democratic candidate, and a Democratic Congress were elected.

5. Cleveland and the Repeal of the Sherman Act, 1893

Cleveland resumed the Presidency after four years' absence to find the Treasury in a much worse condition than when he had left it. The gold reserve was down nearly to \$100,000,000 which had been considered the minimum requirement to hold against the \$346,000,000 of greenbacks, and implicitly against the even greater volume of silver currency. Greenbacks were presented for redemption in gold. They were re-issued for government expenditures, and presented again for redemption in gold, making an "endless chain" which drained the gold reserve from the Treasury. Lack of confidence led to the liquidation of American securities by European holders and the consequent export of gold. In the spring of 1893 business conditions were bad in many parts of the world. There were numerous bank failures in the United States. Uncertainty as to Democratic action on the tariff and on the silver question was also a depressing factor for business.

President Cleveland at first made no open move toward assembling Congress, which normally would not meet until December. As business conditions became worse, he announced on June 5 his intention of calling a special session not later than September 15.⁷ On June

⁷ *American Review of Reviews*, Vol. 7, Apr., 1893, p. 266; Vol. 8, July, 1893, p. 23.

26, the Government of India, acting on the recommendation of the Herschell Committee which had been studying the problem for several months, closed the Indian mints to the free coinage of silver (Chapter X, Section 1). This action removed one of the most important factors in the demand for the white metal. The price of silver dropped 15 cents in a few days. This determined the President to hasten the assembling of Congress, and on June 30 he issued a call for it to convene on August 7 to consider repeal of the Sherman act.⁸

Throughout the summer, business depression and panic conditions continued. Among the symptoms were bank failures, railroad receiverships, closing of industrial plants, unemployment, fall of stock prices, decrease of the Treasury gold reserve below the standard of \$100,000,000, and a currency famine, which necessitated large issues of clearing-house certificates.⁹ Confidence was restored somewhat by the assembly of Congress but fluctuated as the discussions dragged along in that body. In October the editor of the *Commercial and Financial Chronicle* wrote that there appeared to be only one redeeming feature among the business ventures of the whole country, namely the success of the World's Fair at Chicago, where nearly three-quarters of a million visitors attended on one day.¹⁰

Congress assembled on the President's call, which attributed the money panic to the Silver Purchase Act of 1890 and asked for the repeal of the act. Although there might be difference of opinion as to the variety of causes for the panic, the act undoubtedly was an important factor, and most competent observers considered its repeal as the first essential for the restoration of confidence. After that was accomplished, the larger question of the whole monetary system could be taken up with more deliberation. Many who favored efforts to bring about international bimetallism felt that the repeal of the act was a prerequisite before other nations could be induced to consider the question dispassionately.¹¹ As long as American purchases supported silver, other nations would not have to do so, but if our support were removed and silver fell in price, England, with Indian currency to think of, and France, with her large volume of silver coinage, would feel the necessity of action.

The House of Representatives acted fairly expeditiously, rejected amendments proposed by Bland for free coinage at various ratios from 16 to 1 up to 20 to 1, and on August 28 voted 239 to 108 to re-

⁸ *Ibid.*, Vol. 8, Aug., 1893, p. 134.

⁹ *Ibid.*, Vol. 8, Sept., 1893, pp. 243-248.

¹⁰ *Commercial and Financial Chronicle*, Vol. 57, Oct. 14, 1893, p. 616.

¹¹ E.g., Senator Allison and President E. B. Andrews of Brown University. *American Review of Reviews*, Vol. 8, Oct., 1893, p. 372.

peal the silver-purchase clause of the act. One of the speakers against repeal was William Jennings Bryan who had "sprung into a considerable reputation by his eloquent, though wholly sentimental, plea for free silver."¹²

The Senate, however, had a strong minority of men who favored free silver. They adopted filibustering tactics, easily carried out under the Senate rules.¹³ Party lines were of little importance, eastern Senators largely favoring repeal and southern and western ones being chiefly for free silver. The fight was long drawn out, and created great interest throughout the country. In Colorado, Governor Waite talked about "insurrection and war" and "wading in blood to the horses' bridles"¹⁴ if Congress did not support free silver. Finally, the so-called Voorhees repeal act was passed by the Senate on October 30 by a vote of 43 to 32, and by the House on November 1 by a vote of 193 to 94.¹⁵

The act contained the following declaration:

And it is hereby declared to be the policy of the United States to continue the use of both gold and silver as standard money, and to coin both gold and silver into money of equal intrinsic and exchangeable value, such equality to be secured through international agreement, or by such safeguards of legislation as will insure the maintenance of the parity in value of the coins of the two metals, and the equal power of every dollar at all times in the markets and in the payment of debts. And it is hereby further declared that the effort of the government should be steadily directed to the establishment of such a safe system of bimetallism as will maintain at all times the equal power of every dollar coined or issued by the United States, in the markets and in the payment of debts.¹⁶

The act left the country with silver dollars or silver bullion coinable into dollars to a total of about \$570,000,000. These dollars were full legal tender and unredeemable. They formed a monetary element similar to the French 5-franc pieces which remained after further coinage of them was stopped in 1878. The United States thus was on a limping standard rather than a strict gold standard. In fact, the declarations above quoted stood explicitly for the continuance of some kind of bimetallism.

¹² *Ibid.*, Vol. 8, Sept., 1893, p. 247.

¹³ *Ibid.*, Vol. 8, Oct., 1893, p. 371; Nov., 1893, pp. 499-501.

¹⁴ *Ibid.*, Vol. 8, Sept., 1893, p. 247.

¹⁵ *Ibid.*, Vol. 8, Dec., 1893, p. 648. For a full account of the repeal session, see Nichols, "The Politics and Personalities of Silver Repeal in the United States Senate."

¹⁶ *Laws of the United States . . .*, p. 600.

CHAPTER VII

INTERNATIONAL MONETARY CONFERENCES¹

America has never lost a war and never won a conference.

WILL ROGERS.

The habit of summoning or taking part in international conferences, which has been conspicuous in recent years, is not a new development in American history. During the last third of the nineteenth century there were held four international monetary conferences, in three of which this country took the initiative. The story of them parallels and overlaps the developments in America and Europe described in the preceding chapters.

1. *The Paris Conference of 1867*

The first conference grew out of a movement towards international uniformity in weights, measures, and coinage, which began to develop about 1850. It is of interest to note as some indication of the contemporary American attitude toward monetary standards, that Samuel B. Ruggles, American delegate at the International Statistical Congress in Berlin in 1863, opposed the suggestion of uniform international gold and silver coins with a continuance of bimetallism, but favored an international gold standard, with the half-eagle and the sovereign reduced in weight to the equivalent of the French 25-franc piece. No agreement, however, was reached by this congress.

After the formation of the Latin Monetary Union, France, under Emperor Louis Napoleon, made overtures to the United States and other nations for joining the union, and in 1867 called an international monetary conference. Ruggles, who was one of the American delegates, obtained from Senator Sherman, then travelling in Paris, a letter approving an international uniform gold coinage, and speaking of a double standard as an "impossible effort."²

The conference assembled on June 17, 1867, with delegates from

¹ This chapter has been based chiefly on Russell, *International Monetary Conferences*, which presents an excellent condensation of the extensive original reports, together with background material.

² Sherman, *Recollections* . . . , Vol. I, pp. 406-409,

twenty nations, including many men of experience and wide knowledge of monetary science. The French chairman, Esquirou de Parieu, knew what he wanted, and led the delegates step by step to the approval of certain proposals. In the first place, it was voted that an international currency should be based on modifications of existing national systems, to reconcile them to each other, rather than on an entirely new basis. Next, it was agreed that the base for the new system should be that of the Latin Monetary Union, which already had united several countries, and that the gold coinage of other countries should be made in multiples of the 5-franc piece.

On the third day the important question of the standard was discussed. Of the twenty countries represented, only two, Great Britain and Portugal, were on the gold standard, the others having bimetallic or silver standards. Nevertheless, the discussion brought a general agreement, in which the American delegates concurred, that the gold standard was the only practicable basis for international uniformity. The conference voted, only Holland opposing, in favor of the gold standard, leaving each country which had a silver standard free to continue it temporarily during a transition period. The coinage ratio during the transition period was to be such as not to hinder the introduction of gold.

The conference seemed to show a surprising unanimity up to this point, but at a later session the British delegates announced that, although they had voted for the various resolutions because they were in harmony with their own gold standard, the British Government was satisfied with its present monetary system, and would not be likely to change except with very good reason; and that the British delegation could not bind its Government in any way.

This somewhat dampened the enthusiasm, and in the remaining discussions, on more technical details, there was not as much unanimity as at first. The conference adjourned at its eighth session on July 6, after referring the whole question to the individual governments.

The conference marked an important crystallization of monetary thought. Prior to 1850, the supply of gold was entirely inadequate for the world's currency needs, and silver had to play a large part in the currency of Europe. With the great quantity of gold which had been produced since 1849 the picture was changed entirely. There appeared to be a sufficient supply of the yellow metal, better suited for a universal standard on account of its more concentrated value, and the delegates at Paris naturally chose it. The unanimous opinion of the conference undoubtedly was a factor in inducing one nation after another in the ensuing years to adopt a gold standard.

The conference may be said to have been a failure as to its direct recommendations. Even in France there was banking opposition to a change from bimetallism, and no final steps were taken. In Germany opinion developed in favor of a gold standard, but the Government was not inclined to commit itself towards harmonizing its coinage with the franc. In Great Britain there was some support for the project, but the Government was not disposed to act until France should have adopted a gold standard. In the United States in 1868 the Senate Finance Committee reported favorably a bill drawn up by Senator Sherman to reduce the content of gold coins to correspond with the recommendations, and to discontinue coinage of the silver dollar, a plan which would put the United States effectively on a gold standard. There was little opposition to this proposal but Congress was occupied with the greenback inflationary struggle, and with its contest with President Johnson, and took no action. In 1870 the Franco-Prussian War broke out, and with the defeat of Louis Napoleon the prestige which he had given to monetary unity vanished, and the nations were left to go their own ways. Nothing more came of the plan for uniform coinage, but the gold standard made rapid progress, and by 1880 had been adopted by the United States and most of Europe, as outlined in the preceding chapters.

2. The Paris Conference of 1878

The demonetization of silver by so many countries during the 1870's made a considerable change in the situation. The silver question had become important in the American congress. The Bland-Allison act of 1878 contained a provision that the President should invite the members of the Latin Monetary Union and other nations to join in a conference to establish bimetallism internationally.

President Hayes sent out invitations to such a conference. Germany declined, because she recently had adopted the gold standard and was not disposed to change. Great Britain was not interested in considering any modification of her own gold standard, but, in view of her concern with silver in India, was willing to be represented at a conference to consider the relationship between coins of different countries. The Scandinavian countries accepted on the same basis. In all, twelve nations were represented by delegates who assembled at Paris on August 10, 1878.

The American delegates were Senator R. E. Fenton of New York; W. S. Groesbeck, who had been an expert on the 1876 commission; General Francis A. Walker, son of the economist, Amasa Walker, and

himself professor of political economy at Yale; and S. Dana Horton, a writer favorable to silver, who was secretary and later was made a regular delegate. They laid their cards on the table with two proposals. The first stated the desirability that unrestricted free coinage of silver as unlimited legal tender should be continued where in force and if possible restored elsewhere. The second declared that this could be accomplished by international agreement fixing a ratio between gold and silver and allowing both metals to be coined on the same terms.

The ensuing discussion of the proposals showed little chance of their adoption. France was in an attitude of waiting until the sale of German demonetized silver was completed; although she favored the continued use of silver, she was not ready to assent to the proposals in full. Belgium and Switzerland preferred a gold standard. W. C. Mees, president of the Bank of the Netherlands, a theoretical bimetalist who had opposed the gold standard at the 1867 conference, could not give the support of his Government to the American proposals, and personally felt that, while theoretically good, they were not practicable. He suggested that the United States might find in Asia, in South America, and in European states on a paper basis, allies who might join in a bimetallic league which would be large enough to maintain a legal ratio against the forces of supply and demand. Great Britain and the Scandinavian countries were unable to accept the proposals. George J. Goschen, a British delegate, author of the classic *Theory of the Foreign Exchanges*, considered the establishment of a fixed ratio economically impossible. Austria and Russia were not ready to support it. Only Italy, then on a depreciated-paper basis, approved.

Since opposition to the American proposals was practically unanimous, the European delegates asked to be allowed to draw up counter proposals. These stated, first, that it was desirable to continue the monetary use of silver in the world, but that the question of standard should be governed by the special position of each state or group of states; second, that the question of the restriction of the coinage of silver should be determined similarly; and third, that in view of the differences of opinion, it was useless to discuss the adoption of a common ratio.

The wording of these proposals was such that all the European delegations, except Italy, were able to accept them. The American delegates regretted that they could not concur fully, and the conference adjourned on August 29, after seven sessions. It had not accomplished the purpose for which it had been called. It disclosed,

nevertheless, a considerable change of attitude from the universal support of the gold standard, given by the conference of 1867. In 1878 there was little argument for a universal gold standard, which was considered impracticable except for the wealthiest nations. France, Holland, and Austria-Hungary were sympathetic to ultimate bimetallism, but did not think it could be established immediately. The supply of German silver hanging over the market was the principal factor which prevented the Latin Union and the United States from opening their mints to free coinage of silver.

3. The Paris Conference of 1881

The United States experienced a period of prosperity after the resumption of specie payments on January 1, 1879, but conditions in Europe were not good. As a result, there was more readiness to consider changes, and when the United States and France, in February, 1881, sent out a joint invitation for another conference, there was a more general response than in 1878. Germany accepted, as did Great Britain, and there were sixteen nations represented when the conference assembled at Paris on April 19.

After some disagreement, a questionnaire was adopted as the basis for discussion. This covered the question of whether the decline and the fluctuations in the price of silver had been harmful, whether it was desirable and possible to stabilize the price of silver by international agreement, and if so, how, and at what ratio.

Germany, which had not taken part in the 1878 conference, took the lead at this one. She admitted the desirability of rehabilitating silver, and, although she was too far advanced in her monetary reform to adopt bimetallism, she would be willing to consider co-operating by stopping or limiting her sales of silver, replacing gold and notes of 5-mark denomination by silver, which would involve 67,000,000 marks, and recoinng her 2-mark and 5-mark silver pieces at a ratio of 15.5 to 1 instead of 13.95 to 1.

The other gold-standard states, Great Britain, Denmark, Portugal, Russia, Greece, Norway, and Sweden, intimated with more or less firmness that they were not likely to give up gold.

Enrico Cernuschi, a leading French bimetalist, stated that the success of bimetallism depended on France, the United States, Germany, and Great Britain. The first two were in accord. If both the others agreed, it was assured. If one agreed, it might be possible. He suggested that nations which had profited by buying Germany's silver should reimburse Germany pro rata for the 96,000,000 marks

which she had lost on the transaction. Then all could start fresh with bimetallism. If Germany came in, all other continental states of importance would follow.

In the ensuing sessions, France, the United States, and the Netherlands were the principal supporters of bimetallism. India offered to continue free coinage of rupees for a definite period if a certain number of states united in free coinage at 15.5 to 1.

The conference took a recess from May 19 to June 30 in order to allow consultation with the home governments. After the recess, a communication was received from Moritz Levy, a Danish delegate who was not able to attend the later sessions. He did not favor bimetallism, but believed that it was desirable to do something for silver, in order to aid commerce with the Orient, to support the value of current silver circulation, and to offset the shortage of gold. For this purpose he recommended economizing gold by replacing all gold and notes of nominal value under 20 francs by silver coins, or, for convenience, by silver certificates. This would involve at least 2,000,000,000 francs of new silver coinage, thus helping the silver market and releasing gold for reserves. This suggestion was not discussed seriously by the conference, but came up again in 1892.

The American delegation opposed any half-way measures. It would welcome international bimetallism if participated in by a large group of nations, but was not willing to join with France alone in opening its mints and so running the risk of a drain of gold and the substitution of a circulation entirely of silver.

Some encouragement was given to the advocates of bimetallism by a statement of the Bank of England, obtained in answer to queries made by the American and the Italian ambassadors, as to whether the Bank would be prepared to exercise its statutory right to hold 20 per cent of its reserve against notes in the form of silver bullion instead of gold. The Bank intimated that it would be prepared to do so, provided silver again were made acceptable at the mints of other countries under such conditions as would insure the free interconvertibility of gold and silver at some fixed ratio, not necessarily the old one.

This statement was hailed as most significant by Pierson, a Dutch delegate. He considered it as an admission that the price of silver could be stabilized by bimetallism in several countries. If Great Britain admitted that, why should she not adopt bimetallism herself? He urged her to take the lead; but without success.

At the thirteenth and closing session on July 8, the French and American delegations made a declaration favoring a bimetallic agree-

ment between Great Britain, France, Germany, and the United States, and such other countries as would join, for free coinage of both metals, preferably at the 15.5-to-1 ratio. They had no hope of converting England and Germany at once, and proposed adjournment to the following year in the hope that diplomatic negotiations or changed circumstances might accomplish something in the meantime. The conference adjourned to April 12, 1882, but in fact never reassembled.

The third conference thus closed with a deadlock between France and the United States, on the one hand, favoring bimetallism, and Great Britain and Germany, on the other, holding fast to gold. Nevertheless, the bimetallic cause had made some progress. Germany attended the conference and offered to make real concessions. The Bank of England offer was not only important in itself, but, as Pierson pointed out, was an implicit admission of the bimetallic argument. The continued low price of silver and the current tightness of money made both these countries admit the need of some support for the price of the white metal. Even though they were not prepared to go very far themselves, they would have been glad to have other nations take action; their tactics in the conference were directed toward leading France and the United States to resume bimetallism. The latter countries, however, refused to be beguiled. On the other hand, they did not make any aggressive countermove. If the American delegates had been in a position to threaten the repeal of the Bland-Allison act, thus removing the artificial support to the silver market and at the same time putting the United States more into the international scramble for gold, it might have been enough to stir Great Britain to protect her Indian interests.

4. The Brussels Conference of 1892

During the decade, 1882-1892, American silver purchases were continued under the Bland-Allison and Sherman acts, and any attempts to repeal these were countered in Congress by efforts to pass a free-coinage law. Meanwhile, the continued depreciation of silver, checked only in part by the American purchases, began seriously to affect India, whose Government tended to favor a gold standard if international bimetallism could not be secured. In Great Britain there developed a considerable bimetallic sentiment, particularly among interests exporting to the East, such as the Lancashire cotton industry, the arguments then made about silver and oriental purchasing power being similar to the ones used again in 1930 to 1934.

In 1891 the United States Government began negotiations for

another conference. The British Government, as in the past, made it clear that it would not consider giving up the gold standard, but would be willing to participate in a conference for the consideration of measures to increase the use of silver as currency. Most other powers accepted. France, however, foreseeing failure, did not care to have the conference meet in Paris, so it was held in Brussels, where it finally assembled on November 22, 1892.

Nineteen countries took part and the British delegation included separate delegates for British India. Many countries however, were represented merely by their ministers to Belgium instead of by monetary experts. Mexico appeared for the first time. It is interesting to note that although silver had been her chief export, her delegates were not eager to raise its price. The low price of silver had decreased the gold value of her other products sufficiently to promote a demand for them abroad, so that the export of commodities other than silver had increased from 6,000,000 pesos in 1873 to 27,000,000 pesos in 1891 and was expected soon to surpass the 40,000,000-peso production of silver.

The American delegates at this conference, although instructed to press for international bimetallism, actually proposed first the discussion of plans for the enlarged use of silver as money, including the Levy plan and a somewhat similar one prepared by Adolph Soetbeer, the well-known authority on the production and prices of the precious metals.

Alfred de Rothschild of the British delegation presented another plan. He proposed that, on condition that the American purchases of 54,000,000 ounces per year were continued, the European powers should combine to purchase, say, £5,000,000 worth annually, for a period of five years, at not over 43 pence per ounce, suspending purchases if silver rose above that level. He also favored making silver coin legal tender up to £5 instead of £2. He felt that this plan would stabilize silver to the benefit of India and indirectly of the world.

The Rothschild proposal on its face was simple. The United States had been supporting silver by purchases; let European nations join her in doing the same thing. Three points, however, should be considered. In the first place, it was by no means certain that the United States would continue her purchases. There was a growing feeling in the country that the Sherman act would have to be repealed. The Rothschild proposal would force the United States to continue her expensive support. In the second place, although the United States would be obligated to buy 54,000,000 ounces per year, all the European nations together would be buying only about 28,000,000

ounces per year, at the current price of silver. In the third place, the Sherman Act provided for buying silver so long as the price was not more than \$1.00 for 371.25 grains of fine silver, which corresponded to a London price of about 59 pence per ounce, whereas Rothschild's plan allowed Europe to stop buying as soon as the price rose above 43 pence per ounce. The adoption of the plan would assure an American market for about one-third of the world's silver production for five years; the balance probably would be taken by the arts and by Asia, so that the price might be stabilized above 43 pence per ounce, in which case Europe would not have to put up anything. It is also interesting to note that 43 pence per ounce was the bullion parity corresponding to a value of 1s. 4d. for the Indian rupee. This was the value adopted a few months later at the suggestion of the Herschell committee, which had begun sitting in London shortly before the conference met in Brussels. Thus, the Rothschild plan was a very good one for British and Indian interests, involved little sacrifice for them or for other European countries, and left the United States to bear the main burden.

The Levy, Soetbeer, and Rothschild plans were referred to a committee. In this committee, the American member stated that if some agreement were not reached at the conference, it was probable that the Sherman act would be repealed. The Indian delegate said that, in case of no agreement, India would have to act for herself and take steps towards the adoption of a gold standard, and that such a course would be worse for the gold countries than for India. On the other hand, if some plan were adopted to stabilize silver, India probably would keep her mints open to free coinage or at least buy a fixed quantity for coinage.

The committee reported favorably on the Levy and Rothschild plans, slightly modified, with preference for the former. The conference itself, however, after several days of discussion, including a two-day speech by Senator J. P. Jones of Nevada, could come to no agreement on those or on other plans submitted. It adjourned at its tenth session, on December 17, 1892, until May 30, 1893, but in fact never reassembled.

5. Summary

Thus ended four international monetary conferences. The first, held in 1867 when gold was plentiful and silver at a premium, evoked an almost unanimous approval of the gold standard. The second, held in 1878, after the situation had been changed entirely by the actual

adoption of the gold standard in several countries and the concurrent depreciation of silver, found Great Britain and Germany strongly for gold, the United States for bimetallism, and France watchfully waiting, with the smaller states distributed among these three positions. By the third conference in 1881, France had lined up definitely with the United States for bimetallism; but Great Britain and Germany, although ready to make some concessions and anxious to persuade others to support silver, would not go far enough to bring about a practical agreement. The fourth conference, in 1892, in spite of greatly increased depreciation of silver and the imminent danger that both India and America would withdraw their support from the white metal, again found no unanimity.

CHAPTER VIII

THE ABANDONMENT OF SILVER BY THE UNITED STATES, 1893-1900

Speech is silver, silence is golden.

Republican slogan, 1896.

1. *The Attempt to Coin the Seigniorage*

The repeal of the Sherman act in 1893 did not close the silver question. In the regular winter session of the Fifty-third Congress Representative Bland brought up a bill for the coinage of the seigniorage on the Sherman-act silver.¹ The Bland-Allison act had provided for the immediate coinage of all silver purchased, and the transfer of the seigniorage profit to the Treasury, where it went into current revenue. In this way a total profit had been realized of about \$68,000,000 spread over a period of thirteen years.² By the Sherman act, only a small amount of the silver was to be coined, to provide for redeeming such Treasury notes as might be presented; the rest of the silver was to be held as bullion with the implicit idea that it served as a reserve against the notes. The total purchases had amounted, in round numbers, to 168,000,000 fine ounces, at a cost of \$156,000,000 which had been met by the issue of Treasury notes. This silver was sufficient for the coinage of \$218,000,000, making a potential seigniorage profit of \$62,000,000. On the coinage up to 1894 there had been realized a seigniorage profit of about \$7,000,000 which had been turned over to the Treasury. The Bland bill proposed that \$55,000,000 should be coined immediately and turned over to the Treasury, representing the balance of the seigniorage, and that thereafter, as rapidly as possible, the remaining bullion should be coined, producing just enough silver dollars to redeem the outstanding notes; and that the notes should then be redeemed, with the new dollars, which would readily pass into circulation in the form of silver certificates.

This would have made a considerable change in the composition of the currency. In the first place, \$150,000,000 of Treasury notes,

¹ *American Review of Reviews*, Vol. 9, Mar., 1894, pp. 266-267; Apr., 1894, pp. 389-390; May, 1894, p. 519.

² *Annual Report of the Director of the Mint . . . 1894*. p. 17.

which were full legal tender for all debts, would have been replaced by silver certificates which were not legal tender, although receivable for dues to the Government. In the second place, the silver purchased under the Sherman act, which formerly had served as a bullion reserve against the \$150,000,000 of paper money, would now serve as a silver-coin reserve against that plus the \$55,000,000 of seigniorage, which also would get into circulation through silver certificates. The bullion already had depreciated so that it was worth only about 67 cents per dollar of Treasury notes outstanding, and this plan would dilute the backing to less than 50 cents worth of silver, in a coined dollar, against each dollar of silver certificates outstanding. Thus, the fiat element of the currency, already large, would have been increased greatly. The effect would have been much greater than that of the gradual coining of the seigniorage under the former act.

This bill finally passed both houses of Congress, after much filibustering by its opponents and railroading by its supporters. Financial circles were strongly opposed to it, and the New York Chamber of Commerce appointed a committee to call on President Cleveland to urge a veto. The President, however, notified them that it would not be necessary to come, and a few days later, on March 29, 1894, vetoed the bill in a lengthy message.³ He based his action partly on the ambiguous wording, which would have led to difficulties in interpretation, but especially on the effects which the bill would have had in diluting the security behind the currency and in causing distrust of American finance, as previous inflationary legislation had done. An attempt to pass the bill over his veto failed.

A few words may be interpolated here as to the later history of this matter. Few dollars were coined in 1894 and 1895, but in 1896 coinage was resumed in quantity, as Treasury notes were redeemed gradually. In 1898 the Spanish War Revenue and Loan Act authorized and directed the Secretary of the Treasury to coin the remaining bullion as rapidly as the public interest might require, to an amount of not less than one and one-half millions of dollars per month.⁴ Finally, the Gold Standard Act of March 14, 1900 provided that as fast as dollars were coined, the Secretary should retire and cancel an equal amount of Treasury notes whenever they were received into the Treasury, whether for redemption or in the ordinary course of business, and that silver certificates should then be issued

³ *Commercial and Financial Chronicle*, Vol. 58, Mar. 31, 1894, pp. 536-537.

⁴ *Ibid.*, Vol. 66, June 18, 1898, p. 1197.

against the silver dollars.⁵ The coinage was completed in 1904,⁶ and thereafter not a single silver dollar was coined until the Pittman-act coinage beginning in 1921, which will be described in Chapter XVII. Within ten years the purpose of the Bland bill was fulfilled, but it was accomplished gradually, and accomplished after the election of 1896 and the Gold Standard Act of 1900 had allayed foreign and domestic distrust of our currency. This was quite a different matter from attempting it in 1894 when the financial structure was still in a delicate condition.

2. *Silver Propaganda*

During these years popular interest in the monetary question had been growing. In June, 1894, there was published a little book, printed on cheap stock in a yellow paper cover, called *Coin's Financial School*. The author, W. H. Harvey, presented arguments for the free coinage of silver, in the form of lectures by "Coin, a young financier living in Chicago." The book was written in a colloquial style, and illustrated with striking pictures and cartoons. In the accounts of the lectures, from time to time there were interpolated counterarguments purporting to be made by well-known opponents of free silver, such as Lyman Gage, president of the First National Bank of Chicago, and Professor J. Laurence Laughlin of the University of Chicago. In every case Coin apparently refuted all their arguments. His reasoning was very plausible. He started with the thesis that the original dollar intended by the act of 1792 was silver, and that gold coinage was defined in terms of silver, so that the omission of the silver dollar in 1873 was an unjustified change of standard; that this demonetization in the United States, followed by demonetization in Europe, was responsible for the fall of prices and for the current depression; and that the free coinage of silver should be restored. This little book, selling for 25 cents, together with other similar publications by the same author, reached a circulation of many million copies during the next two years, especially in the Middle West, and had a great influence on public opinion.

Numerous other pamphlets and books appeared on both sides of the question. Periodicals, both popular and learned, published articles on monetary questions, dealing chiefly with aspects of the silver problem, with increasing frequency, until in the autumn of 1896,

⁵ *Ibid.*, Vol. 70, Mar. 3, 1900, p. 411; *Laws of the United States . . .*, pp. 606-607.

⁶ *Annual Report of the Director of the Mint, 1934*, p. 67.

twenty-five or thirty such articles were appearing each month in American and European periodicals.⁷

There was good reason for this interest, because the long period of falling prices since 1865 undoubtedly had caused much hardship, especially to farmers and to debtors. Thus, the free coinage of silver, which seemed to promise cheaper money and higher prices, appealed very strongly to the agricultural class in the West, who saw their products selling at low prices and their liabilities for interest and principal on their mortgages remaining fixed in dollars. They can hardly be blamed for grasping at a solution which in any event was far more conservative than the greenback panacea of an earlier decade.

In the state and congressional elections of 1894, neither of the two large parties included the free coinage of silver in its platform, but both favored international bimetallism. Still, there was a large element in each party, and especially among the Democrats, in favor of free silver, that is, national bimetallism. Even such staunch Republicans as Senator Henry Cabot Lodge and Representative Tom Reed had suggested compelling other nations, by threats of tariff legislation, to join the United States in the free coinage of silver.⁸ Meanwhile the new Populist party, which stood firmly for free coinage at 16 to 1, was growing in power. It attracted to its ranks John P. Jones of Nevada, who had been a Republican senator for twenty-one years.⁹ In the elections, however, the Populists did not have much success. The Republicans obtained a majority in Congress. There had been a good deal of dissatisfaction with the discord shown in the Democratic ranks of the Fifty-third Congress and only the South went solidly Democratic.

Silver measures continued to be proposed and debated in Congress during 1895 and 1896, but no legislation was passed. President Cleveland, unlike many of his party, was a sound-money man and probably would have vetoed any extreme measures. Meanwhile, there was much interest in the question throughout the country. By the spring of 1896 it was evident that the silver issue was to be the most important one in the presidential campaign, and that it might split the Democratic party. The free-silver advocates were believed to have enough strength to secure a majority vote, which would determine the platform, but hardly enough to obtain the two-thirds vote required to nominate the presidential candidate.¹⁰

⁷ Based on actual count of articles digested or listed in the *American Review of Reviews*.

⁸ *American Review of Reviews*, Vol. 10, July, 1894, pp. 8-9.

⁹ *Ibid.*, Vol. 10, Oct., 1894, p. 376.

¹⁰ *Ibid.*, Vol. 13, May, 1896, p. 519.

3. *The Nominating Conventions*

In the Republican party, there was less uncertainty, and its convention at St. Louis, in June, 1896, unanimously nominated William McKinley of Ohio, and by a vote of 812½ to 110½ adopted a platform which declared for sound money, opposed the free coinage of silver except by international agreement, and favored the maintenance of all government bonds and currency at a parity with gold.¹¹ A small group of western Republicans, led by Senator Teller of Colorado, opposed this platform and withdrew.¹² McKinley had been noted especially for his work on behalf of tariff legislation, and there had been some doubts as to his position on monetary matters. After the nomination, however, he came out strongly against free coinage of silver, although favoring, with his party, international bimetallicism.

The western and southern Democrats were strongly for free silver, that is, national bimetallicism. President Cleveland issued an appeal to the sound-money Democrats to prevent the party from getting into the control of the silver forces, but it was a forlorn hope.¹³ At the Democratic convention silver men had a large majority from the start.¹⁴ On the third day a free-silver platform was adopted and a minority report favoring international bimetallicism was rejected. This platform declared that silver was the original monetary unit, that it had been demonetized in 1873 without the knowledge or approval of the American people, that this had caused falling prices and depressions; it opposed monometallicism as a British and anti-American policy; it demanded the free and unlimited coinage of both gold and silver at the ratio of 16 to 1, the standard silver dollars to be full legal tender; it favored legislation forbidding the demonetization of any kind of legal tender by private contract; and it opposed the Treasury policy of redeeming in gold government obligations which specified only "coin." The platform was drawn up with great care, and was unambiguous.

Following the adoption of the platform, speeches were made by several delegates, and in particular by William Jennings Bryan, a 36-year-old delegate from Nebraska. He had served two terms in Congress, where he had made an impassioned speech for free silver during the debate on the repeal of the Sherman Act. He had failed to be elected to the Senate in 1894, when Republicans were victorious everywhere except in the South. He had done a great deal of speak-

¹¹ *Ibid.*, Vol. 14, July, 1896, pp. 3-4.

¹² *Ibid.*, p. 10.

¹³ *Ibid.*

¹⁴ *Ibid.*, Vol. 14, Aug., 1896, pp. 135-142.

ing on the silver question, and when he rose to his feet at Chicago, he utilized in his extemporaneous address many of the arguments and phrases that had been successful elsewhere. In one of the most famous oratorical effusions in American history, before a sympathetic and enthusiastic audience of 15,000 people, the "boy orator of the Platte" made an electrifying appeal for the interests of the common people, he attacked the gold standard as the oppressive instrument of capital, he argued that Americans were able to decide monetary affairs for themselves without co-operation from England, and he concluded with the following peroration:

If they dare to come out and in the open defend the gold standard as a good thing, we shall fight them to the uttermost, having behind us the producing masses of the nation and the world. Having behind us the commercial interests and the laboring interests and all the toiling masses, we shall answer their demands for a gold standard by saying to them, you shall not press down upon the brow of labor this crown of thorns. You shall not crucify mankind upon a cross of gold.¹⁵

This speech took the audience of delegates and visitors off its feet, and there was wild enthusiasm. Bryan probably could have been nominated by acclamation then and there, but preferred to let the usual order continue. On the following day when balloting began, Bland led at first, but by the fifth ballot Bryan was nominated with a wide margin above the requisite two-thirds.¹⁶

Democrats who favored a gold standard did not bolt the convention, but in September they met and nominated Senator John Palmer of Illinois, not with any hope of electing him, but for the purpose of keeping together a nucleus of a Gold Democratic party.¹⁷ They had the support of Cleveland and his cabinet.

The Populist convention was divided on whether to support the Democratic candidate or choose its own. Western Populists were ready to side with the Democrats, but delegates from the South, where the Republican party was negligible, so that Democrats and Populists had previously been lined up against each other, opposed this plan. Finally, the convention nominated Bryan for President, with Thomas Watson of Georgia for Vice-President, in place of Arthur Sewall of Maine, the Democratic candidate.¹⁸ This necessitated negotiations with the Democratic party in each state as to a combination choice of electors, so that Populist votes might still count for Bryan.

¹⁵ *Ibid.*, pp. 174-176.

¹⁶ *Ibid.*, p. 149.

¹⁷ *Ibid.*, Vol. 14, Sept., 1896, pp. 259-260; Oct., 1896, pp. 394-396.

¹⁸ *Ibid.*, Vol. 14, Sept., 1896, pp. 265-266.

4. *The Campaign of 1896*

Thus, the issue was divided sharply on the monetary question, and party lines were weakened. The campaign of 1896 was one of the most hotly contested which the country ever has seen. The East was expected to go strongly for McKinley, but the labor vote was uncertain, and Bryan devoted a great deal of attention to it. He came into the enemy's country to make his acceptance speech at Madison Square Garden in New York City. Although fundamentally the interests of labor and of farmers were different, he tried for the support of both. One cartoon showed him as a double-faced orator, on the one side telling western farmers that prices would advance under free silver, that the purchasing power of the current dollar was too great; and on the other side telling eastern workingmen that prices would not advance under free silver, that the country was strong enough to make a silver dollar under free coinage worth as much as a gold dollar.¹⁹

The eastern press largely ridiculed the silver cause. On the other hand, the South and the western silver states were almost certain to go for Bryan. The uncertain territory was the Middle West, and both parties concentrated their efforts on it. It was more a campaign of education than one of vituperative political speeches. The Republican National Committee distributed some 250,000,000 copies of nearly 300 different pamphlets and documents, in addition to posters and cartoons, beside providing copy and plate matter for newspapers.²⁰ The Democrats and Populists also distributed much literature, although the way had been prepared for them for two years by the circulation of *Coin's Financial School* and similar pamphlets.

The two candidates adopted different policies. Bryan covered the East and Middle West most thoroughly, traveling 13,000 miles and making 400 speeches in 29 states, addressing several million voters, in addition to those who read the newspaper reports.²¹ McKinley, on the other hand, stayed at home and from his front porch at Canton, Ohio addressed large delegations representing particular trades or interests.²² His speeches likewise reached the country through the newspapers. Much work was done for both sides by lesser orators and by personal workers. The question of free silver was discussed wherever men met together.

In November, McKinley was elected by a popular plurality of

¹⁹ *Ibid.*, Vol. 14, Nov., 1896, pp. 535; reprinted from the *New York Press*.

²⁰ *Ibid.*, pp. 554-557.

²¹ For a map of Bryan's travels, see *ibid.*, p. 514.

²² *Ibid.*, p. 519.

over a million votes. All states east of the Mississippi and north of Tennessee (except Virginia), with the addition of North Dakota, Oregon, Minnesota, Iowa, and California, voted for him.²³

5. *The Decline of the Silver Problem*

The Republican platform had declared for international bimetallism. In December, 1896 Senator Edward O. Wolcott of Colorado, who favored bimetallism but was too loyal a Republican to bolt with his friend Senator Teller, went to England with McKinley's endorsement to sound out British official opinion informally. The Fifty-fourth Congress, in its closing sessions, authorized the appointment of a commission for the promotion of an international agreement for bimetallism. In April, 1897 President McKinley appointed Senator Wolcott, with ex-Vice President Adlai E. Stevenson, a Silver Democrat from Illinois, and General Charles J. Paine of Massachusetts, a supporter of international bimetallism.²⁴ They visited England and carried on negotiations with British and French officials. At one time, expectations of success were aroused by an offer of the Bank of England to exercise its statutory right to hold not over 20 per cent of the reserve in its issue department in silver. The British Government, however, announced that it could not consider the reopening of the Indian mints to the free coinage of silver, and did not favor an international conference.²⁵ Although the French authorities were interested in the establishing of international bimetallism at 15.5 to 1, nothing came of the negotiations.

The silver question soon began to drop out of the limelight. The Spanish-American War in 1898 brought a temporary boom which dimmed the memory of the "hard times" of the earlier 1890's. More important was the increasing gold production. Actually, world production of gold had begun to increase in 1887 (see Chart 1-A, page 9). A few economists and publicists had begun to call attention to this fact during the early 1890's and had predicted that the trend would continue, because of the development of South African mines. They had argued that this would be reflected in a rising price level, and that in this way some of the evils for which free silver was proposed as a remedy would be alleviated. These predictions to a large

²³ *Ibid.*, Vol. 14, Dec., 1896, pp. 643-646.

²⁴ *Ibid.*, Vol. 15, May, 1897, pp. 516-517. For a rather full account of the work of the commission, see Dawson, *Life and Character of Edward Oliver Wolcott*, Vol. I, pp. 651-695, Vol. II, pp. 670-693.

²⁵ *American Review of Reviews*, Vol. 16, Nov., 1897, pp. 528-529; Dec., 1897, pp. 654-655.

extent had been ignored in the heat of partisan discussion between 1893 and 1896.

By the end of the century, however, these forecasts were coming true. The production of gold in 1899 was nearly three times the annual average in the 1880's, and promised to increase still more, in spite of a temporary setback caused by the South African War. The price level was beginning to show a slight upward trend. There was a general feeling of prosperity. In the 1900 campaign Bryan insisted on including a 16-to-1 plank in the Democratic platform, but this was not the "paramount issue," and indeed alienated some who would have supported him in his anti-imperialistic program.²⁶ McKinley was re-elected on the "full dinner pail" slogan. By 1904, the Democratic party had receded so far from its old position as to nominate Alton B. Parker, a strong Gold Democrat, and to tell him, when he expressed fear that his views might not be satisfactory, that the monetary question was not considered an issue in the campaign.²⁷

Meanwhile, on March 14, 1900, Congress had passed the Gold Standard Act, which declared that:

... the dollar, consisting of 25.8 grains of gold nine-tenths fine ... shall be the standard unit of value, and all forms of money issued or coined by the United States shall be maintained at a parity of value with this standard, and it shall be the duty of the Secretary of the Treasury to maintain such parity ...

That nothing contained in this Act shall be construed to affect the legal tender quality as now provided by law of the silver dollar, or of any other money coined or issued by the United States.²⁸

The act concluded with pious lip service to an outmoded idol:

... that the provisions of this Act are not intended to preclude the accomplishment of international bimetallism whenever conditions shall make it expedient and practical to secure the same by concurrent action of the leading nations of the world, and at a ratio which shall insure permanence of relative value between gold and silver.²⁹

Thus ended the struggles of a generation over the complicated and controversial subject of the monetary standard. In the ensuing years gold production increased greatly, and at the same time the development of bank credit made it possible for a given amount of gold to support a larger volume of currency and credit than before. There were two decades of rising prices and general prosperity, broken only by minor depressions. Except for the embargo on the ex-

²⁶ *Ibid.*, Vol. 22, Aug., 1900, pp. 131-141.

²⁷ *Ibid.*, Vol. 30, Aug., 1904, pp. 131-136.

²⁸ *Laws of the United States* . . . , p. 610.

²⁹ *Ibid.*, p. 614.

port of gold during the World War, the United States remained on the gold standard down to 1933. It was not until after 1929 that falling prices and severe depression again brought silver and other monetary problems to the fore in this country.

CHAPTER IX

SILVER AND INDIA BEFORE 1892¹

The Rains may serve,
Rupees may rise—three pence will give you Fame—
It's rash to hope for sixpence. . . If they rise
Get guns, more guns, and lift the salt-tax.

RUDYARD KIPLING, *One Viceroy Resigns*²

1. *Factors Affecting Silver in India*

India, often called the "sink of the precious metals," long has been one of the two largest absorbers of silver, both for monetary purposes and for the arts. She has not been partial to silver, but has taken also all the gold that she could lay hands on, so that it has been said that "men dig up gold in Africa in order to bury it in India." (In recent years it has been dug up in India to be buried in Kentucky.) Naturally, however, silver has been more within the reach of the great masses of the Indian population. An understanding of the currency history of India is necessary for an intelligent appraisal of the forces acting on silver today.

There are certain fundamental factors which have important bearings on the position of silver in India. These are:

(1) The extensive use of gold and silver ornaments by the women and of gold and silver paraphernalia in the temples and courts, and the existence of some hoards of coin and bullion.

(2) The vital importance of the monsoon rains to Indian agriculture and commerce, and the great variability of the rainfall from year to year.

(3) The fact that, unless the monsoon is very poor, India usually has a large export balance of merchandise trade.

(4) The considerable amount of "Home charges" which the Government of India has to meet in London for supplies, debt services, pensions, and other expenses.

¹ This chapter and the following one are based to a large extent upon the reports of the various committees which have examined the Indian currency problem. These reports are listed in full in the Bibliography, but in the footnotes are cited by the name of the chairman only.

² Reprinted by permission of the late Rudyard Kipling.

2. *Ornaments, Paraphernalia, and Hoards*³

By Hindu law and custom a woman cannot own real estate or any form of property other than jewelry and ornaments. During the lifetime of her husband these are free from attachment by his creditors. On his death, his property goes to the male heirs, but the widow can retain these personal possessions. Therefore, there is great incentive for a man to give ornaments to his wife, because they are the only things that he can give her. When a woman marries she receives gifts of jewelry and ornaments both from her own family and from that of the groom; later, if her husband prospers, she receives more from him. While the very poorest classes may have clay or brass ornaments, and the wealthy, gold and precious stones, the great masses of the people use silver. This use of ornaments persists throughout all strata of society. Even a well-to-do professional man with an educated wife must provide for her future in the same way, unless he can be sure that his male relatives would treat her with a consideration beyond that required by law. Among Mohammedans, the widow theoretically has more property rights than among the Hindus, but actually she is equally at the mercy of the male relatives who manage the estate.

The result has been that India has absorbed the precious metals to an extent far greater than necessary for strictly monetary uses. The gold and silver so used have practically disappeared from the world's monetary stocks. Much is said about Indian hoards, but the use of the word "hoards" is misleading. There undoubtedly are large hoards of gold and silver, both coin and bullion, held by rajahs and wealthy individuals, and there are small supplies of coin held by peasants because of a lack of banking facilities. The ornaments owned by the women of all classes, however, are in large part comparable to

³ This discussion of ornaments and hoards has been written after a study of material in the various committee reports referred to in footnote 1. Some of the statements in them are contradictory, but an attempt has been made in the text to present a balanced picture. References follow, the letter Q. standing for question number in the minutes of evidence taken:

Select Committee, *Report*, p. xxxvi; *Minutes of Evidence*, Q. 1045-55.

Herschell, *Minutes of Evidence*, Q. 1077-82, 3020-3129, pp. 193, 271, 304-305, 307-308.

Fowler, *Minutes of Evidence*, Q. 156-180, 695-697, 910-918, 1204-12, 3608-10, 4225-31, 5765-74, 8444, 9204-16, 9752, 9798-9810, 10391-95, 10692-98, 10841-58, 10881.

Chamberlain, *Minutes of Evidence*, Q. 5786, 6490-91, 7895-97, 8937-42, 11300-06, 11425; *Appendix*, pp. 624 ff., 670-675.

Babington Smith, *Report*, p. 28; *Appendix*, pp. 78, 113, 122.

Hilton Young, *Minutes of Evidence*, Q. 523-529, 905-907, 1421-23, 2798-2809, 4544-45, 5425-26, 6506-07, 7928, 7950-62, 8293-94, 8317-25, 9212-16, 13473-80, 13523-31.

the jewelry, table plate, and other luxuries owned in Western countries.

To some extent, ornaments partake of the nature of a savings deposit, without interest, held for a rainy day (or rather, in India, for a dry day). In time of famine, when all other resources are exhausted, the wife may have to come to the assistance of the family by pawning her ornaments. Again, for personal needs beyond the living accommodations and food to which she is entitled in the family, a widow may dispose of an ornament from time to time to get ready cash, but she will save as many as possible to pass on to her daughters. Thus, the quantity of gold and silver that comes on the market in the form of discarded ornaments is normally very small compared with the total inflow of fresh metal. In the 20 years preceding 1893 the ornaments presented at the mint for coinage averaged less than 5 per cent of the total silver coinage; in famine years, the amount was much greater, but in normal years it was negligible.⁴ In more recent times, when the mints have not been open to the free coinage of silver, the quantity of ornaments reaching the Bombay bullion market has averaged perhaps 25 per cent of the total silver passing through that market, ranging from 10 per cent in good years to 80 per cent in bad times. The proportion of distress gold, prior to 1931, was somewhat less.⁵

The price also is a factor in the movement of the precious metals. Some silver ornaments were attracted to the market during the World War when silver was high. Again, the increased rupee price of gold, since India accompanied England off the gold standard in 1931, has drawn a large amount of the yellow metal out of the country.

In addition to the ornaments of the women, considerable quantities of gold and silver are used in the implements and paraphernalia of temples and of rajahs' courts. Moreover, well-to-do Hindus use cups and table ware of silver because by their religious customs it requires less ceremonial cleansing than earthenware.

The use of the precious metals for ornaments and paraphernalia can hardly be called hoarding. There are some true hoards, in the form of coins or bullion: small quantities held by the poor and reputedly some very large quantities held by certain rajahs. So far as silver is concerned it is probable that hoards of silver bullion have become relatively less important in the period since 1893.

It should also be noted that not inconsiderable quantities of the precious metals are used in the arts for making gold and silver thread

⁴ Herschell, *Minutes of Evidence*, p. 308, statement by F. C. Harrison.

⁵ Bliss, *The Bombay Bullion Market*, pp. 54, 61.

and gold leaf, and in other ways in which the metal is practically lost beyond recovery.

3. The Monsoon

The southwest monsoon is a moisture-laden wind which blows over the Indian Ocean bringing rain to India from June to September. Fundamentally it is caused by the inrush of moist oceanic air to replace the air over continental India which becomes heated in the summer and rises. The monsoon leaves its rain sparingly on the low coastal plains, but as it strikes the mountainous region of the Deccan more water condenses, while the great Ganges valley receives a heavy rainfall, especially at the Bengal end. Thus the bulk of the rainfall throughout India comes in the four months of the southwest monsoon. Some regions always get an ample supply. In other places much depends on the character of the monsoon: a good monsoon means large harvests and prosperity; a poor monsoon means famine.

Since India is predominantly an agricultural country, dependent upon the fruit of the soil for her export trade in jute, cotton, oilseeds, tea, and other agricultural products, as well as for her own subsistence, her prosperity is entirely bound up with the harvests. Therefore, as long as the demand for her products remains constant, her export trade is influenced greatly by the monsoon. While government revenue is not derived from direct taxes on agriculture, it is affected by the state of trade, especially as regards customs duties and railway revenue; moreover the land tax, normally fixed, has to be reduced in years of poor harvests. Thus, the government budget, adopted in March for the fiscal year beginning April 1, must simply make a conservative guess at certain items of revenue which are dependent to a large extent upon the character of the monsoon of the following summer. The monsoon, therefore, is inextricably related to the economic condition of India, government finance, and the price of silver. A good monsoon means a prosperous India, a treasury surplus, which may be used to reduce debt, and a large favorable balance of trade, part of which goes to bring more silver and gold into the country. A poor monsoon means famine in some districts and less prosperity everywhere, a treasury deficit, which may require borrowing, a decreased balance of trade, and, therefore, a lessened demand for the import of gold and silver. As a result, the prospects of the monsoon in June and its actual character in the subsequent months were important factors in the price of silver, at least before the complications brought about by the World War.

4. *Favorable Balance of Trade*

Under ordinary circumstances India can produce far more of agricultural products than she consumes. She exports the surplus, for which there is usually a demand abroad. In return she takes some imported merchandise, chiefly manufactured goods, among which cotton textiles have predominated until recent years.

Usually exports greatly exceed imports. The amount of the excess varies according to the character of the monsoon, but since 1851 there have been only two years in which merchandise imports have exceeded merchandise exports. These years, 1920-21 and 1921-22, reflected postwar adjustments.

The annual excess of merchandise exports is balanced in part by the import of gold and silver, and in part by the "Home charges" described below.

5. *Home Charges*

The Government of India consists of the Viceroy or Governor General and his Council in India. They are under the Secretary of State for India and his Council in London, who in turn are responsible to the British Parliament. Parliament, however, has no financial responsibility for India; all of her expenditures must be met from her own revenue, or her own borrowings. This revenue, with trifling exceptions, is raised in India in rupees. Although the larger part of the expenditure is in India in rupees, about 30 per cent of it must be spent in London in sterling. This is called the "Home charges" and includes service of sterling debt, purchase of supplies and equipment, pensions to retired officials, and military expenses. The Home charges have risen from £6,000,000 in the 1860's to £10,000,000 in the 1870's, £16,000,000 in the 1890's and about £30,000,000 at present. They sometimes have been called "tribute" by ill-informed critics of British imperial policy; they are not in any sense tribute, however, but are due rather to the incidental fact that some of the legitimate expenditures of the country are payable in England rather than in India. This economic fact, that the Government of India must remit annually a considerable sum to England, involves certain aspects of the Indian monetary system.

Government remittances for Home charges play an important part in Indian finance. Until recent years they were controlled entirely at the London end by the Secretary of State for India in Council, who was responsible for managing the Home end of Indian

finance. Drafts, called Council bills, drawn on the Government of India and payable in rupees in Bombay, Calcutta, or Madras, were offered for sale weekly in London. Each Wednesday announcement was made that bids would be received for a certain amount of rupees, to be allotted to those offering the highest price in sterling. Between Wednesdays further amounts often were sold, at a higher rate. The Secretary of State regulated the weekly offers of Council bills according to his need for funds, so that in the course of a year they amounted practically to the total of Home charges, except as far as balances were increased or diminished, or capital transfers were undertaken. Telegraphic transfers were also sold, at a slightly higher rate than the bills. Bills and transfers were bought by the London offices of the Indian exchange banks, the transaction being equivalent to the sale of drafts on them by their Indian offices; for them it was fundamentally a receipt of rupees in India against payment of equivalent sterling in London.

6. *The History of Indian Currency*⁶

Prior to the nineteenth century there was no uniform monetary standard in India. Both gold and silver were used in various parts of the country, while many districts were in a state of barter economy. The unit was the rupee, which was divided into 16 annas and the anna into 12 pies. Rupees of various weights were in circulation. In 1835 the East India Company established a rupee of 1 tola (180 grains) of silver, $\frac{1}{2}$ fine, containing 165 grains of fine silver, as legal tender in the territory under its control. Indian princes in some cases continued to coin their own rupees, but these coins gradually were superseded by the standard rupee, which has remained of the same weight and fineness ever since. Gold mohurs, of the same weight and fineness as the rupee, were accepted for a time as equivalent to 15 rupees, that is, at a gold-silver ratio of 15 to 1. In 1852, when gold was tending to depreciate, because of increased production, the Government demonetized gold, leaving silver the sole legal tender. In 1864 sovereigns and half sovereigns were made receivable for government dues, but not legal tender, at 10 rupees to the sovereign.

With the above exceptions, however, India was on a straight silver standard during the greater part of the century. Silver was accepted for free coinage at the mint with a small seigniorage charge of 2 per cent. Thus the holder of ornaments, if she desired, always

⁶ This section is based on Fowler, *Report*, para. 4-10.

could obtain rupees for them at nearly full value. Actually, of course, this was done through a succession of middlemen, each of whom made some profit. On the other hand, there was no loss in melting up rupees to make ornaments, since the cost of silver was practically the same whether it was in the form of rupees or of bars. Most of the imported silver was coined at the mints and passed out into circulation; many of the coins eventually were melted up to make ornaments. The peasant preferred rupees for this purpose, because the Government guaranteed their fineness at $\frac{1}{12}$, whereas he would have had to take the word of the silversmith as to the fineness of silver in other forms. Of course, the price of silver, in terms of silver rupee currency, remained practically constant; expressed in rupees per 100 tolas of fine silver, when 1 rupee was 1 tola, $\frac{1}{12}$ fine, the parity price was $12/11 \times 100$ or Rs. 109-1-5. The price of gold, in terms of silver rupee currency, fluctuated inversely with the gold price of silver in London, but neither varied greatly up to 1873.

A competent authority⁷ estimated that there were about 5,100,000,000 rupees' worth of silver in India in 1892, of which about 1,700,000,000 rupees were in active circulation, 400,000,000 rupees were in hoards of coin, and 3,000,000,000 rupees were held in the form of bullion, obsolete coins, and ornaments.⁸ By weight, 5,100,000,000 rupees, at 165 grains of fine silver per rupee, represented about 1,750,000,000 fine ounces, or approximately one-quarter of the world's production of silver from 1493 to 1892.

In addition to actual rupee coins, there were in circulation about 250,000,000 rupees of currency notes. The Government held assets in the Paper Currency Reserve to the extent of 100 per cent of the notes outstanding. Of this reserve, 80,000,000 rupees could be in government securities, but the balance had to be in silver rupee coin. Note circulation had increased gradually up to this time, but the mass of the people still preferred hard money. There was also a large volume of subsidiary silver and copper coins in circulation.

⁷ F. C. Harrison in Herschell, *Minutes of Evidence*, pp. 307-308.

⁸ In this book, ordinary English notation is used in expressing quantities. For those who wish to refer to the literature on Indian currency listed in the bibliography, the following notes are important:

In Indian decimal notation, two places are pointed off at a time instead of three, after thousands have been reached. Thus, 5,100,000,000 would be written 5,10,00,00,000. The denominations above the thousand are the lakh, which equals 100,000, and the crore, which equals 100 lakhs, or 10,000,000. The above expression would be read "510 crores."

In some of the older literature the sign Rx. will be found, meaning 10 rupees. Thus Rx. 5,000,000 = Rs. 5,00,00,000 = 5 crores. This notation was especially common before the depreciation of silver, for then Rx. 1 = £1 approximately, and was so taken in government accounts.

7. *Effects of the Fall in the Price of Silver*

When silver began to fall in price about 1873, the gold value of the rupee necessarily fell with it. Since the rupee contained 165 grains of fine silver, and the standard ounce contained $0.925 \times 480 = 444$ grains, the value of the silver in the rupee was equal to $165/444$ (or approximately $\frac{5}{13}$) times the London price of silver. Thus, before 1873, with silver at about 60 pence per ounce, the value of the silver in the rupee was about $22\frac{1}{2}$ pence. India's favorable balance of trade, however, tended to make silver more valuable in India than in London. As a result the actual exchange rate usually was above the bullion value of the rupee; 2 shillings per rupee was considered a normal level. The course of Indian exchange from 1873 to 1893 may be estimated from the course of silver prices in Chart 2, page 11 by taking $2\frac{1}{2}$ pence in the price of silver as roughly equivalent to 1 penny in the exchange rate. When silver reached its low point in 1876, the exchange rate fell as low as $18\frac{1}{2}$ pence per rupee or nearly 25 per cent below the 2-shilling normal. This was exceptional, but for the next ten years the rate was from 10 per cent to 20 per cent below 2 shillings, and thereafter was even lower, except for a temporary rise induced by the Sherman Silver Purchase Act passed by the United States Congress in 1890.

To the mass of the people in India the fall in exchange did not make very much difference in the earlier years. Internal prices did not rise greatly, and imported goods, the price of which did rise, were not used to any great extent by the peasants. There was still free interconvertibility between rupees and silver ornaments. Gold became more expensive in terms of rupees, but this affected only the wealthier classes.

To the Government of India, however, a 25-per-cent depreciation in the gold value of the rupee meant that Home charges, of, say, £15,000,000, which had cost 150,000,000 rupees at the 2-shilling rate, would now, at 18 pence, cost 200,000,000 rupees. To the resident Englishman in government service or in trade who received his salary in rupees and desired to send part of it to England for the support of his family or to prepare for retirement, it meant that 100 rupees saved in India would bring only £7 10s. instead of £10 as before. To the import merchant, it meant that a commodity which formerly had cost him 2 shillings or 1 rupee to import now cost him 2 shillings or Rs. 1-5-4, and that he would have to raise his retail price, risking a drop in demand, or reduce his margin of profit. The exporter benefited, however, because a commodity which had cost 1 rupee or 2

shillings now cost 1 rupee or 18 pence; this gave him a chance to stimulate demand in the English market by lowering the retail price while still keeping a better margin of profit than before.

In March, 1876, when silver and exchange had depreciated only about 10 per cent, the House of Commons considered the matter serious enough to appoint "a Select Committee . . . to consider and report upon the causes of the Depreciation of the Price of Silver, and the effects of such Depreciation upon the Exchange between India and England."⁹ This committee, under the distinguished chairmanship of George J. Goschen, held nine sessions, and examined fourteen witnesses. In its report it discussed the causes of the fall of silver, referred to in Chapter V, but did not recommend any action for India.

In 1886 a Royal Commission was appointed to

. . . investigate the causes of the said recent changes in the relative values of the precious metals and especially to inquire whether the said changes are due—

- (1.) To the depreciation of silver; or
- (2.) To the appreciation of gold; or
- (3.) To both these causes;¹⁰

to study the effects upon India and the United Kingdom, and to suggest any remedies. This commission, under the chairmanship of Baron Herschell, heard a large number of witnesses, and finally reported in 1888. They considered the problem as of the greatest complexity. They agreed that the fall of silver was due to a variety of causes, including appreciation of gold and demonetization of silver. They could not agree upon the relative importance of these two causes, or upon remedies. All admitted serious effects upon Indian finance. Six of the twelve commissioners opposed bimetallism as impracticable, and proposed the issuance of silver coin notes for 10 and 20 shillings in England and negotiations with other countries for increased use of silver coins. The other six commissioners felt that the situation demanded an international bimetallic agreement, which they believed would be workable.¹¹

During the whole period from 1873 to 1893, the Government of India and such European residents as were affected adversely by the continued decline of silver were losing more and more, except in so far as their loss was offset by the declining world price level in terms of gold currencies. In the case of the Government, for example, the falling price level balanced, to some extent, the loss on remittances

⁹ *Report from the Select Committee on the Depreciation of Silver*, p. ii.

¹⁰ *First Report of the Royal Commission Appointed to Inquire into the Recent Changes in the Relative Values of the Precious Metals*, p. iii.

¹¹ *Final Report of the Royal Commission . . .*

for purchase of stores, but did not offset that on remittances for debt service or pensions, which were fixed in terms of sterling. The Government of India was represented at the international monetary conferences, and was anxious to obtain some settlement of the silver question. The British Government, however, which held firmly to the gold standard, was one of the chief factors in preventing these conferences from accomplishing anything.

CHAPTER X

INDIAN CURRENCY REFORMS, 1892-1914¹

He that loveth silver shall not be satisfied with silver; nor he that loveth abundance with increase: this also is vanity.

ECCLESIASTES 5:10

1. *The Herschell Committee, 1892-1893*

Although the British Government had not been interested in co-operating in the movement for international bimetallism, it appreciated the critical situation in India. In 1892, when it became evident that the coming international monetary conference at Brussels would accomplish little, the Secretary of State for India appointed a committee, under the chairmanship of Lord Herschell, to consider the question of Indian currency. This committee was appointed on October 21, 1892 and reported on May 31, 1893, thus overlapping the Brussels conference, with which it had two members in common. One of the chief matters before it was a proposal of the Government of India, dated June 21, 1892, that, if the Brussels conference failed, the Indian mints should be closed to the free coinage of silver, and a gold standard introduced.

The committee, sitting in London, heard 28 witnesses, all Europeans, except for one Indian; they included government officials, bankers, merchants, and planters. There was no unanimity among the witnesses, partly because of the complexity of the problem, and partly because their interests were affected differently by the fall of silver. Government officials were mostly in favor of the gold standard, because the Government was losing on the remittances for Home charges, and this loss had to be met by increasing taxation, which already had reached the desirable limit. Their personal interest in higher exchange² was evidenced by over 1700 memorials from individual officials, recounting their losses on personal remittances to England.³

Merchants were divided. Importers of cotton piece goods to In-

¹ This chapter has been based chiefly on the *Reports* of the Herschell, Fowler, and Chamberlain committees.

² Exchange rates in India are quoted in terms of shillings and pence per rupee.

³ Herschell, *Minutes of Evidence*, pp. 155-159.

dia found it difficult to sell them at increasing prices in rupees, and favored stabilizing the rupee. Exporters of Indian products, however, were profiting by the fall in silver, as long as sterling prices in England and rupee prices in India did not adjust themselves immediately to it. The tea planters in particular urged the retention of the silver standard; they were paying the same wages in rupees as before and were selling their product at about the same price in sterling, so that there was a widening margin between cost and selling price as the rupee went down. No one, however, when pressed, could say just how far the currency could continue to depreciate, in gold value, and still be to his advantage. Bankers tended to favor the silver standard, because they profited by the volume of business which was stimulated by a slowly depreciating currency.

One objection to stopping free coinage was that if the rupee were given an exchange value higher than its bullion value there would be a danger that counterfeit coins containing the full weight of silver would be manufactured. Another objection was that the value of silver ornaments held by the masses would be depreciated if the rupee were divorced from silver.

The committee discussed the evidence in its report under date of May 31, 1893. It agreed that there had been some benefits from the fall of silver, but that a further fall, which seemed likely in view of the failure of the Brussels Conference and the probable repeal of the Sherman act, would increase the ill effects. It did not deem it expedient to increase taxation or decrease expenditure in order to balance further loss by exchange on Home charges. After considering and refuting various objections to the government proposal, the committee recommended closing the mints to the free coinage of silver. There remained the question of what the exchange rate should be. The Government of India favored 1s. 6d., but as the current rate was only about 1s. 2d. the committee thought that too great a rise would bring the evils of deflation which accompany an appreciating currency. The committee finally recommended that the Government coin and issue rupees, on demand, in exchange for gold at the rate of 15 rupees to the sovereign, or 1s. 4d. per rupee. This was equivalent to a coinage ratio of 21.90 to 1 and to a bullion parity of 94.3 cents (or 43.1 pence) per ounce.

This report was communicated at once to the Governor General. His Government approved it, asked and received permission from London to act without delay, and, on June 26, 1893, closed the mints to the free coinage of silver. Thus, India went off the silver standard, to which she has never returned.

2. The Period 1893-1898

For the next few years, India was on neither a silver nor a gold standard. The standard was the rupee, the exchange value of which, although somewhat above its bullion value, did not reach the 1s. 4d. rate. It was expected that, with gradually increasing trade and with only a fixed amount of rupees in existence, the gold value of the rupee would rise gradually, in accordance with the quantity theory of money. This process took more time than had been anticipated; apparently there were large supplies of inactive rupees in hoards, which gradually came out and increased the effective circulation. In fact, the exchange value of the rupee fell for a year and a half, dropping as low as 1s. $\frac{1}{2}$ d. In 1895, however, it began to rise and by 1898 had reached 1s. 4d. Meanwhile, of course, no one had presented gold for rupees at the 1s. 4d. rate, since rupees could be obtained more cheaply in the exchange market.

When the rupee had reached 1s. 4d., the next question was how to keep it there. It could not go appreciably higher, since the Government was obligated to give 15 rupees for a sovereign. There was no legal or economic force, however, to keep it from dropping below 1s. 4d. again, for the Government was not required to give a sovereign for 15 rupees. The Government thought it very important to prevent any fall of the exchange rate, which not only would mean loss in remitting for Home charges, but also would create distrust among the commercial community. Since the rise in exchange apparently had been brought about by "starving the currency," it was argued that a real contraction of the currency should clinch the matter. In March, 1898, therefore, the Government of India proposed to the Secretary of State that the Government be prepared to borrow up to £20,000,000 in gold for a fund to which could be charged the loss incurred in buying up rupees, melting them, and selling the bullion.⁴ Since the rupee at 1s. 4d. had a bullion parity of approximately 43 pence per ounce, and the current price of silver was in the neighborhood of 26 or 27 pence per ounce, there would be a loss of about 37 $\frac{1}{2}$ per cent in this process. The fund of £20,000,000 or 300,000,000 rupees thus would be sufficient to absorb the loss on the melting of 800,000,000 rupees. The Government argued that the mere announcement of this plan probably would keep the rupee up to 1s. 4d., and that certainly contraction of the currency to the extent of 800,000,000 rupees would do so. Gold would not be made legal tender in India until after the exchange value of the rupee was established at 16d.

⁴ Fowler, *Report*, para. 42-43.

3. The Fowler Committee, 1898-1899

On April 29, 1898 the Secretary of State for India appointed a committee under the chairmanship of Sir Henry Fowler to consider these proposals and the whole question of Indian currency. This committee held 43 sessions in London, asked 13,000 questions of 49 witnesses, examined a large quantity of documentary material, and finally presented its report on July 7, 1899.

As in the case of the Herschell committee there was no unanimity in the ideas of the witnesses, who represented varying occupations and interests. As before, the evidence was largely from Europeans; only two Indians were heard, and a few other Indians were represented by written statements. Some witnesses who had opposed the closing of the mints in 1893 felt that the results had not been bad, and that it would not be well to reopen them. The fear of illicit coinage had not been realized, according to government officials. The charge that it was a great injustice to the Indian people to depreciate the rupee value of their silver ornaments did not seem to be borne out by a study of the vernacular press, which would have been sure to play up such a grievance if it had existed. In fact, the low price of silver apparently had stimulated the purchase of ornaments, since silver had continued to flow into India almost at the same rate as before the mints were closed. Trade had continued to expand in spite of the fears of exporters. The tea planters and some other exporters still argued for the advantages of a depreciating currency, but could not say just how far the depreciation should go. Other witnesses urged that the depreciation from the old 2s. rate to 1s. 4d. was quite enough, and should not be allowed to go further.

There was little support for the government plan of melting down rupees. There was at the time a considerable stringency in Indian money markets; rates of interest were high, and loans were difficult to procure on the best security. Rightly or wrongly many witnesses ascribed this to the discontinuance of rupee coinage, and were loath to see a further contraction.

The alternatives were a reversion to the silver standard or further steps toward a gold standard. Comparatively few witnesses favored the former. Two important plans for a gold standard were presented to the committee.⁵ The first was that of Lesley Probyn, a retired official with twenty-five years' experience in India, chiefly in finance. He suggested a gold standard without gold currency in circulation. Notes of 10,000 rupees would be issued in exchange for gold,

⁵ *Ibid.*, para. 48-54.

and these notes would be redeemable in rupees or in gold at the option of the holder, but with government option to give the gold in the form of bars instead of sovereigns. This plan was essentially what now is called the gold-bullion standard. It would allow the currency to expand with the needs of trade by the importation of gold, but would not introduce into circulation a mass of sovereigns which might be hoarded. It might be expected eventually to build up a sufficient reserve of gold so that India would be practically on a gold standard.

The other plan was presented by Alexander Martin Lindsay, deputy secretary and treasurer of the Bank of Bengal, with thirty-two years of financial experience in India. Lindsay originally had proposed his plan as far back as 1876, and in 1892 had published a pamphlet which was included in the material submitted to the Herschell committee, but was not considered seriously at the time. The Fowler committee, however, heard Lindsay at considerable length,⁶ and also questioned many of the other witnesses about his plan.

The Lindsay plan was for what is known now as the gold-exchange standard. Lindsay pointed out that there was no real need for a gold currency in India, but that there was a need for a fixed gold value of the rupee in foreign trade, and for some means by which the balance of payments could be adjusted as automatically as it was adjusted between gold-standard countries by the shipment of gold. He proposed therefore that, instead of offering to give rupees for sovereigns and sovereigns for rupees in India, the Government should stand ready to give rupees in India for sovereigns or checks in London, and to give sovereigns or checks in London for rupees in India. Such transactions would be made at rates respectively above and below the established par of 1s. 4d. by an amount sufficient to represent the expenses of shipping gold between India and London. The market exchange rate always would remain between the gold shipping points; when it reached either of these points, the banks would not actually ship gold, but would make exchange transactions through the Government. The Government already was providing rupees in India against sterling in London by the sale of Council bills, but there was no obligation to provide these to the full extent of demand, or at any fixed rate. There was no legal provision at all for the reverse operation of providing sterling in London against rupees in India.

The Lindsay plan involved the establishment of a special fund of £10,000,000, most of which would be kept in London, and the remainder in India in rupees. The fund would be kept, both physically and

⁶ Fowler, *Minutes of Evidence*, Q. 3275.

in the accounts, quite distinct and separate from the Government's cash balances in London and in India, and under no circumstances would it be available for government expenditures. When drafts were sold in London, gold would be received into the fund there, and rupees paid out from the fund in India. If the rupee portion of the fund were depleted, some of the gold would be used to purchase silver to be shipped to India and coined, and the fund would profit by the seigniorage. When drafts were sold in India, rupees would be received into the fund there, and gold paid out from the fund in London. If the gold portion of the fund were depleted, then it would be necessary either to borrow temporarily in London, or to melt some of the rupees in the fund, ship them to London, and sell them to replenish the gold part; this would involve some loss. It was expected, however, that under normal conditions, the £10,000,000 fund would be sufficient to provide for fluctuations in the balance of payments, and that with the gradual increase of India's trade the fund would grow with seigniorage profits and be still better able to meet any strain.

An essential feature of the Lindsay plan was the provision that the rupee part of the fund should be kept entirely separate from the internal currency system of India. Rupees paid into it for the purchase of drafts would be just as much out of the currency system as if they had been shipped out of the country; similarly rupees paid out from the fund in return for sterling received in London would provide new currency, just as if gold had been imported. In this way, the effect on the currency system would be exactly the same as the effect of exports or imports of gold in a gold-standard country, and would produce the same reactions on the price level which, under the classical theory of the gold standard, were supposed to bring about automatic adjustments of exchange rates and prices between countries.

Some of the witnesses before the Fowler committee approved the Lindsay plan or at least certain of its features. Most of the bankers and merchants, however, opposed it. There was a general feeling that it was too artificial and that it would lend itself to manipulation, in spite of the fact that when fully understood it clearly provided an automatic system so long as the fund was administered according to plan and not mixed with the government treasuries.

The committee in its final report rejected not only any idea of return to silver, but also the government plan for melting rupees, the Probyn gold-bullion plan, and the Lindsay gold-exchange plan. Instead, it recommended a gold standard with gold coin in circulation, making the sovereign legal tender and a current coin, and the estab-

lishment of a mint for the coinage of gold. On the other hand, the committee thought that the time was not ripe for limiting the legal-tender quality of rupees, which would make up the bulk of the circulation for some time to come. It did not go so far as to recommend making rupees redeemable in gold, but it did recommend that the Government should be ready to use gold to support exchange. Moreover, it recommended that the Government should coin no more rupees until the proportion of gold in the currency was found to exceed the requirements of the public; profits on coinage should be held in gold as a special reserve. It recommended continuing the 1s. 4d. rate as the official relation between the rupee and sterling. The report concluded:

In conclusion, we desire to record our opinion that the effective establishment of a gold standard is of paramount importance to the material interest of India. Not only will stability of exchange with the great commercial countries of the world tend to promote her existing trade, but also there is every reason to anticipate that, with the growth of confidence in a stable exchange, capital will be encouraged to flow freely into India for the further development of her great natural resources. For the speedy attainment of this object, it is eminently desirable that the Government of India, with whom it will rest to decide when successive steps should be taken, should husband the resources at their command, exercise a resolute economy, and restrict the growth of their gold obligations.⁷

4. *The Period 1899-1913*⁸

While the Fowler committee was sitting, exchange had held steady around 1s. 4d., and the public had begun to present sovereigns in exchange for rupees at the 15-rupee rate. The Government of India carried out the recommendations of the Fowler committee, passed an act making sovereigns and half sovereigns legal tender, and instructed government offices to facilitate the circulation of gold.

Gold, however, did not stay in circulation, but kept coming back into the government treasuries. The people apparently wanted rupees. No new rupees had been coined since 1893, and there began to be a serious shortage of them. In 1900, therefore, the Government resumed the coinage of rupees, using some of its accumulated gold for the purchase of silver bullion, and placing the seigniorage profit in a special Gold Standard Reserve. The Government favored keeping this fund in actual gold in India; that was the logical place for it, if a straight gold standard was desired. The Secretary of State, however, ordered that it be remitted to London and invested there, be-

⁷ Fowler, *Report*, para. 70.

⁸ This section is based on Chamberlain, *Report*, para. 15-43, and on material in the *Appendices* to that *Report*.

cause he thought it would be more useful in London for supporting the exchange rate. This, in effect, was a step toward the gold-exchange standard. From 1906 a part of the Gold Standard Reserve was kept in India in silver rupees as an emergency fund to avoid delay in shipping bullion from London and coining it in India.

During these years, the problem was not to keep exchange up to 1s. 4d., but rather to be able to supply the full amount of rupees needed. To avoid the shipment of gold to India by banks and its shipment back to London by the Government, the Secretary of State from 1905 made a standing offer to sell Council bills without limit at the rate of 1s. 4½d., which was the normal gold import point. Previously Council bills had been sold only to the extent of the Secretary of State's needs, but these unlimited sales were negotiated through the Paper Currency Reserve or the Gold Standard Reserve. From the proceeds in London silver bullion was purchased for shipment to India for coinage. Over 1,200,000,000 rupees, were minted from 1899 to 1907, and over £16,000,000 profit from seigniorage and interest was accumulated in the Gold Standard Reserve. The size attained by this fund caused the Secretary of State, in June, 1907, to apply over £1,000,000 of it to capital expenditure on government railways. Moreover, he directed that one-half of the annual increase until the fund reached £20,000,000 and thereafter all of the annual increase should be so applied. This was done against the protest of the Government of India, which argued that the reserve should be allowed to increase in order to protect the exchange rate in case of emergency.

The emergency feared by the Government was not slow in making its appearance. The monsoon of 1907 was a partial failure, thus disturbing the prosperity which India had been enjoying for several years. At the same time occurred the American financial crisis which had its repercussions throughout the world. The prospects were for a greatly decreased export balance; this caused a decreasing demand in London for remittances to India, and in fact a temporary reversal of the flow of exchange. There was thus a demand in India for exchange on London. The Government of India was under no legal or customary obligation to provide such remittances, nor was it obligated to give out sovereigns, which could be exported, in exchange for rupees. The system provided only for selling Council bills in London and for giving out rupees in exchange for sovereigns in India. It was a one-way scheme, which worked perfectly under normal conditions; but now there was need for operating it in reverse.

In November, 1907 the exchange banks requested the Government of India to sell them drafts on London at 15 rupees to the pound;

the Government, however, after consultation with the Secretary of State, refused. It also refused to give gold for export in excess of £10,000 to any one individual in one day. The banks urged that gold be given freely; they said that not over £1,000,000 would be needed, and that, if it were announced that gold were available, a much smaller amount would be taken. This, of course, was sound banking doctrine; if the Government had shown the courage that the wisest bankers have displayed in times of crisis, there would have been no trouble. As it was, the Government hesitated and exchanged cables back and forth with the Secretary of State, who finally, on November 28, approved inviting tenders in India for £250,000 telegraphic transfers on him in London at rates not over 1s. 3 $\frac{2}{3}$ d. per rupee; he intimated that further tenders would be invited from time to time. The mere mention of this to the bankers in India eased the situation. It was not necessary actually to offer transfers at this time, because the banks, reassured, were able to supply the needs of their customers for exchange on London.

In the spring of 1908, however, exchange remained weak in what was normally the busy season, and no Council bills could be sold in London. In March the Governor General warned the Secretary of State to keep his funds liquid, and secured his permission to offer up to £500,000 a week of bills on him. On March 26, 1908 such bills were sold for the first time. They were known as "Reverse Councils." In effect they were exactly what the Lindsay plan had recommended to be used when it was necessary to keep exchange up to 1s. 4d., ordinary Councils having the effect of keeping it down to 1s. 4d. Reverse Councils were sold until September, when conditions had improved greatly and the offer was withdrawn. A total of over £8,000,000 was sold; of course, no Council bills were sold during the period.

In 1909, when the exchange crisis was past and India again had a favorable balance of trade, the Government of India urged on the Secretary of State that measures be taken in preparation for future emergencies.⁹ It was pointed out that there had been a total drain of £15,000,000 in gold from the various reserves and balances, and that this had been the result of a single year of moderate famine, combined with the American crisis. A greater famine, or two consecutive years of famine, or a more serious world crisis would put a much greater strain on the system. It was urged that no more profits be diverted from the Gold Standard Reserve for other uses until it had reached at least £25,000,000 and that a good part of the fund be held in actual gold, instead of in securities which might be difficult to

⁹ Chamberlain, *Appendices*, Vol. I, pp. 162-209.

liquidate in an emergency. The first request was granted in 1909, but the second not until 1912. Meanwhile, India had been enjoying a period of exceptional prosperity, so that not only were the accumulated rupees reissued, but more coins had to be minted.

The Indian currency system in 1913 may be summarized as follows: The rupee was unlimited legal tender, and the sovereign was legal tender at 15 rupees. Currency notes circulated widely, the total issue amounting to nearly 700,000,000 rupees, with a reserve of about 15 per cent in silver rupees, 55 per cent in gold, partly in England and partly in India, and the balance in securities, the limit of the fiduciary portion having been increased to 140,000,000 rupees. The Secretary of State sold Council bills without limit at 1s. 4½ d., and at lower rates when the market necessitated it; the Government of India gave 15 rupees for a sovereign. These arrangements kept exchange from rising much above 1s. 4d. On the other hand, there was no statutory provision to keep exchange from falling. In normal years this was unnecessary, because the fact that India's export balance was more than enough to meet the Home charges created a demand for Council bills and kept the exchange rate up. In the actual crisis of 1907-08, the Government, after some hesitation, had supported exchange by selling Reverse Councils and giving gold for rupees, but it was not required to do so; what would happen in the next crisis would depend upon the wisdom and courage of those in control at the time. Nevertheless, with a growing Gold Standard Reserve, already over £22,000,000 and with a large part of it in liquid form, it was probable that the next crisis could be met more easily.

5. The Chamberlain Commission, 1913-1914

In 1913 a Royal Commission on Indian Finance and Currency was appointed under the chairmanship of Austen Chamberlain. This commission held 34 sessions in London from May 27 to November 14, at which it examined 33 witnesses. Its final report was dated February 24, 1914.

The abandonment of the silver standard had been accepted by all except an occasional die-hard bimetallist. This commission was more concerned with strengthening the existing gold-standard system so that it would meet the needs of the country and stand the strain of crises. Unlike the Fowler committee, which favored actual circulation of gold, the Chamberlain commission recommended that gold be allowed to circulate, but that the use of notes be encouraged. It made various recommendations as to the management of the Paper Cur-

rency Reserve, the Gold Standard Reserve, and government balances, all intended to facilitate the supply of currency when and where needed and to make the system more able to stand a strain. It recommended keeping the whole of the Gold Standard Reserve in London, with a good part of it in actual gold, and with no diversion of profits to other purposes. It recommended that the Government definitely undertake to sell Reverse Councils at 1s. 3 $\frac{3}{4}$ $\frac{1}{2}$ d. whenever called upon to do so, thus carrying out the principle of the gold-exchange standard. Many other recommendations about financial and fiscal matters were made, and in addition the commission urged that the advisability of establishing a central bank be studied.

Before anything had been done about putting into effect the recommendations of the Chamberlain commission, the World War intervened. This soon raised entirely new problems about Indian exchange and silver. These problems will be discussed in Chapters XIX and XX.

CHAPTER XI

SILVER AND CHINA

A generation ago missionaries living in the interior found it expedient to wear Chinese clothes and grow a queue in order not to be too conspicuous. One man cut off his queue and saved it when he went to England on furlough. Returning to China he resumed Chinese clothes in Shanghai, and pinned his queue to the lining of his Chinese skullcap. It came unfastened and fell off while he was in the Hongkong and Shanghai Bank. One of the clerks found it and hung it on the wall with a notice: "Deposits of one tael not accepted."

China Coast Yarns

1. *Chinese Money in Ancient Times*

China usually has stood next to India as a large consumer of silver in modern times, but the conditions surrounding its absorption of the white metal have differed considerably from those in India.

Although some silver probably has been found in China from ancient times,¹ the country never has produced any great quantity, and silver at first did not play much part in her monetary system. "Copper cash" (actually brass), small round coins with a square hole in the center, formed the bulk of the currency for over two thousand years, down to the beginning of the twentieth century. Silver has had a monetary status for about a thousand years, in a theoretical trimetallic standard of 1 unit (by weight) of gold equivalent to 10 units of silver or 1,000 units of copper.² Actually gold seldom has been used as a currency in China, although it has served as a convenient store of value, and in recent years as a medium of speculation. The 10-to-1 ratio was in effect in the early days of foreign trade, and during the first half of the eighteenth century it was profitable for the ships' officers and supercargoes of the English East India Company to take out silver to China, buy gold, and take it back to England where the ratio was around 15 to 1. As a result of such transactions the ratio in China rose to the world level by the middle of the century.³

¹ Edkins, *Chinese Currency*, p. 52.

² Morse, *Trade and Administration of China*, p. 143.

³ Leavens, "The Gold-Silver Ratio in the Early Foreign Relations of the Far East," pp. 323-325; this gives references to original sources in Morse, *Chronicles of the East India Company Trading to China*. See also index of the latter under "gold."

Silver, on the other hand, during the last few hundred years increased in importance as an element of the monetary system. It circulated side by side with copper, at varying ratios thereto. Nevertheless, the Government, which cast the brass cash, never, with two or three unimportant exceptions, minted any silver coins until the end of the nineteenth century. Silver circulated only as bullion by weight, or in the form of imported foreign coins. The unit of weight was the Chinese ounce or tael; the tael of silver of a prescribed fineness was used as a money of account. The weight and fineness of the currency tael varied in different places, and will be discussed later in this chapter.

2. The Importation of Silver into China

Barring the very small native production all China's silver has come from foreign trade. Before the sixteenth century a certain amount of silver reached the country in the course of the limited caravan and junk trade of the period.⁴ Then the Portuguese began commerce with China by sea; in 1557 they were allowed to settle at Macao, near Canton, where they carried on a very lucrative trade, although under considerable restriction by Chinese authorities.⁵ It was not until the latter part of the seventeenth century that the English were able to get into the China trade, but, after a few sporadic voyages, the English East India Company dispatched ships to Canton annually from 1699 onward.

This early trade was very largely one-sided. The West wanted silk and tea from China, but the Chinese wanted no merchandise from the West. They would, however, accept silver, and thus, except for a very limited quantity of merchandise, silver was the principal cargo carried to China by the Portuguese, the English, and the other nations which later joined in the trade.

As a result there was, during the seventeenth and eighteenth centuries, a steady flow of the white metal into China. This was largely in the form of "pieces of eight," later called Spanish dollars.⁶

3. The Development of the Foreign Trade of China

Eventually there arose a Chinese demand for one import, and as a result the trade became less one-sided. This import was opium. It

⁴ Edkins, p. 8.

⁵ Morse, *Chronicles* . . . , Vol. I, p. 2.

⁶ The word "dollar" first appeared in the East India Company's records in 1664. Morse, *Chronicles* . . . , Vol. I, p. 47, note 1.

is probable that the smoking of a mixture of opium and tobacco was introduced during the seventeenth century from Java to Formosa, and thence to China by returning emigrants; later opium was smoked alone.⁷ Portuguese traders carried on the early import of the drug, which was not large.⁸ English private merchants (that is, those not connected with the East India Company) also joined in the trade.

The position of the East India Company was rather peculiar. In Bengal the Company controlled the production of opium, and sold it to all comers, both for consumption in India and to private merchants who were exporting it to China. On the other hand, since the import of opium into China was prohibited by the Chinese Government, although permitted by Chinese officials in return for a suitable "squeeze," the Company, from 1733, shipped none for its own account and forbade its servants to take any to China.⁹ This policy was continued for the remaining hundred years during which the Company had the monopoly of trade from England to China, except for one rather unsuccessful venture at official smuggling in 1782.¹⁰ Nevertheless, the Company benefited by the traffic of others, because it profited on the sale of opium in India. Moreover, at times when it was difficult to find silver in London in sufficient quantity for the China trade, the Company was able to obtain silver in Canton from opium importers in exchange for its bills on Calcutta or London.¹¹ Thus, the opium trade relieved the drain of silver from Europe. Opium imported to China was not limited to the Company's Bengal opium, but also included Malwa opium, raised outside of its jurisdiction in India, and Turkish opium, much of which was imported by American ships when they engaged in the China trade after the American Revolution.

Meanwhile other merchandise, such as cotton from India, woollen goods from England, and furs from the American Northwest, gradually were finding a market in China, so that by the end of the eighteenth century the merchandise trade was becoming much more nearly balanced. As a result, the East India Company, which imported no opium, but conducted something of a banking business in Canton, sometimes found itself with a surplus of silver, which it had to ship to England. This gave rise to Chinese complaints that their money was being taken from their country.¹² On the whole, however, the

⁷ Morse, *Trade and Administration* . . . , pp. 335-337.

⁸ *Ibid.*, pp. 337-338.

⁹ Morse, *Chronicles* . . . , Vol. I, p. 215.

¹⁰ *Ibid.*, Vol. II, pp. 76-79.

¹¹ *Ibid.*, Vol. IV, pp. 94, 260.

¹² *Ibid.*, Vol. IV, pp. 60, 226-227, 330.

evidence seems to show that in the years down to 1833, when the Company's charter expired, its exportations of silver were more than balanced by importations of the white metal by other merchants.¹³

The monopoly of the East India Company was terminated in 1833, and thereafter trade at Canton was open to private English firms, as to those of other nations, but foreigners were not allowed to trade at other ports. Vigorous Chinese measures against opium smuggling, which had been connived at by former officials, led to a showdown on the whole status of foreign trade in China, and brought about in 1840 the First War with Great Britain.¹⁴ The Treaty of Nanking, which concluded the war in 1842, said nothing about opium but allowed British merchants to trade under more equitable regulations than in the past and opened up to them the ports of Shanghai, Foo-chow, Amoy, and Ningpo, in addition to Canton. It also ceded to Great Britain the island of Hong Kong, a barren rock, but with one of the world's best harbors. Other countries later made treaties with China and shared in all benefits under "most favored nation" clauses.

Statistics on the inflow of silver prior to 1889 are lacking, but it is probable that there was a considerable net inward movement, taking the period from 1834 to 1889 as a whole.¹⁵ This was especially true during the time of the Taiping Rebellion in the middle of the century, when western demand for China's produce continued, but when the Chinese, on account of disturbed conditions, bought less from the West and hoarded silver.¹⁶

4. *The Chinese Balance of Payments*

In the latter part of the nineteenth century, although opium became of less relative importance in the China trade, other imports increased, including cotton piece goods, cotton yarn, kerosene, and miscellaneous items, commonly spoken of as "muck and truck." By the end of the century, the merchandise trade, which had been about balanced between exports and imports, was beginning to show a large import balance.¹⁷ This unfavorable balance of merchandise trade has shown an upward trend, with fluctuations, down to the present time. It thus affords a strong contrast to the almost uninterruptedly favorable merchandise balance of India.

The unfavorable balance of merchandise trade has not been off-

¹³ Morse, *Trade and Administration* . . . , pp. 339-340.

¹⁴ Morse, *International Relations of the Chinese Empire*, Vol. I, pp. 170-254.

¹⁵ Remer, *The Foreign Trade of China*, pp. 27-28, 212-215.

¹⁶ Morse, *International Relations* . . . , Vol. I, pp. 467-468.

¹⁷ Remer, *The Foreign Trade of China*, p. 209.

set by exports of treasure. There usually has been recorded a small net export of gold, normally representing gold produced within China or brought in by travelers and returning emigrants. The movement of silver, in the 25 years prior to the World War for which customs figures are available, was sometimes inward and sometimes outward. The net outward movement of treasure always was small compared with the unfavorable merchandise balance, and often there was a net inward movement of treasure. After the war, there was a large net inward flow of silver, amounting to over 1,000,000,000 fine ounces in the 15 years from 1918 to 1932 inclusive, after which an outward movement began, as described in Chapter XXVIII, Sections 2 and 7.

The large unfavorable visible balance of trade has been offset by invisible exports, that is, transactions which, like exports, tend to bring money into the country. The most important of these have been remittances from Chinese abroad.¹⁸ Various estimates show from five to nine million Chinese abroad, chiefly in southeastern Asia and the East Indies. Many of these have gone as coolies on plantations and in mines; their earnings are not large but are managed with thrift. Other Chinese to a very large extent control the small retail business in that part of the world, and probably make satisfactory profits in dealing with the native population. Still others have gone into business enterprises on a larger scale and made fortunes in tin, rubber, and other tropical products, and in trade. In addition, there are Chinese in lesser numbers in America and other parts of the world. Many of these overseas Chinese remain abroad for years and some become rather thoroughly Westernized. In the great majority of cases, however, there is still close association with the homeland. The Chinese family system lays on them heavy obligations for the support of parents, wives, children, and other relatives left at home; these obligations increase with ability to pay, much like a progressive income tax. Thus, there is a continual homeward flow of remittances, supplemented by special transfers when a coolie or a millionaire returns home on a visit or to retire. In addition to family needs there have been transfers for other purposes. Sun Yat-sen secured considerable financial assistance for the Revolution of 1911 from overseas Chinese, and in recent years there have been gifts for educational and philanthropic purposes. Remer estimates the total remittances from Chinese abroad at \$150,000,000 Chinese currency annually during the period 1902-1913, \$200,000,000 annually during

¹⁸ See Remer, *ibid.*, pp. 215-221, and *Foreign Investments in China*, pp. 177-189, for the detailed estimates upon which this account is based.

the period 1914–1930, and an average of nearly \$300,000,000 annually for the years, 1928, 1929, and 1930.¹⁹

Invisible exports also include investment by foreigners in plants and inventories, and in Chinese securities. These have averaged from two-fifths to three-quarters as much as the overseas remittances. Finally, there are numerous minor items, including military and naval expenditures of foreign governments in China, missionary and philanthropic expenditures, expenditures of tourists and of diplomatic and consular offices. For the period 1928–1930 Remer estimates these minor items as aggregating even more than the new capital investment.²⁰

There are also invisible imports, consisting chiefly of the service of Chinese government debts and indemnities due to foreign nations and nationals, and some minor items. The invisible exports, however, far exceed the invisible imports, and so very largely explain the net import of merchandise and silver.

China, therefore, received silver from the West during several hundred years of intercourse; the amounts, although relatively small at first in comparison with world supplies, came to play an important part in Chinese economic life; after the World War they increased greatly and consumed a good part of the world's annual production. Kann estimated that there were about 2,200,000,000 silver dollars, or their equivalent in sycee, minor coins, and bars, in China at the end of 1930. At slightly over $\frac{3}{4}$ ounce of fine silver to the dollar, that would represent 1,700,000,000 fine ounces. He estimated silver used in the arts in China at 800,000,000 fine ounces, making a total of 2,500,000,000 fine ounces in China at the end of 1930.²¹

5. *Sycee and the Tael*

China coined no silver money until the end of the nineteenth century, and, except for foreign coins, silver circulated in the form of bullion. Such a system involved weighing and determining the fineness of the silver to the satisfaction of both parties in a transaction. It was complicated further by the variety of weights. The Chinese ounce or tael (Chinese name: *liang*) may be taken roughly as $1\frac{1}{8}$ ounces avoirdupois, but the various standard taels used in different cities or for different classes of transactions varied over a range of several per cent. The standard of fineness also varied. To one who

¹⁹ Remer, *Foreign Investments* . . . , pp. 188, 189, 214.

²⁰ *Ibid.*, tables on pp. 220–222.

²¹ Kann, "How much Silver is there in China?" pp. 410–420.

reads of some of the complicated transactions in various taels described by different writers it seems a hopelessly involved and absurd system.²² It undoubtedly was inconvenient. And yet, in a country where time and labor were cheap and money scarce, the trouble involved did not matter greatly, and the banks and cash shops probably enjoyed the complications as well as the profit which they brought to the expert.

The variety of local taels which existed in the nineteenth century gradually diminished, and in any case only three have been of national importance; the Shanghai tael, the Kuping or Treasury tael, and the Haikwan or Customs tael.

The Shanghai tael,²³ from its adoption in 1857 to its abolition in 1933, was the standard currency of China's most important port and the basis of her international trade for three-quarters of a century. In spite of apparent inconveniences it served its purpose well, and probably better than any government currency could have done during the same period.

The Shanghai tael never was coined, and only in rare instances have any other taels been coined. It was represented by silver ingots, called "shoes of sycee."²⁴ Sycee means literally "fine silk" and is sometimes explained as referring to the thread-like appearance of silver. The silver usually was cast in a boat-like shape, called a shoe from the Dutch word *schuyt* for "boat," or, as popularly explained, from its resemblance in size and shape to the footgear of a Chinese woman with small bound feet.²⁵ A shoe was about $5 \times 3 \times 3$ inches overall, and weighed approximately 50 taels or about 4 pounds avoirdupois. Just as in Western countries bank reserves were more conveniently kept in gold bars than in coins, so in China these shoes of sycee were well suited for bank reserves and large transactions.

The shoes were cast, usually from imported bar silver, but sometimes from melted and refined coin, by *loo-fangs* or smelting shops, the name of the shop being stamped in the metal. Then they were examined by a representative of the *Kung-ku-chu*, or Public Assay Office, an institution which was sponsored, not by the Government, but by the Chinese banks. He weighed each shoe and marked on it in ink the weight, which in the case of the shoe in the Frontispiece was 49.94 Chauping taels, the Chauping tael being the *weight* tael on which the Shanghai *currency* tael was based. He also tested the fine-

²² Kann, *The Currencies of China*, pp. 59-86, discusses taels; his Appendix II, pp. 467-510, gives extracts from other writers on the subject.

²³ This account is based on Kann, *The Currencies of China*, pp. 65-68, 74-78.

²⁴ See Frontispiece.

²⁵ Bratter, *Silver Market Dictionary*, pp. 146-147.

ness by rather primitive methods, noting the color, the smoothness, and the sound when struck. Such methods, of course, could not be as exact as scientific tests, but proved fairly close to the fact when checked by a thorough assay. Scientific accuracy, however, was not so important as some certification which would be accepted by all parties. As one writer put it, "It is the common understanding that the *Kung-ku's* appraisals shall be accepted, not necessarily as correct, but as authoritative."²⁶ The fineness was stated in terms of a premium above a standard²⁷ fineness of 0.935374. The *Kung-ku-chu* estimated this premium to the nearest tenth of one per cent. The shoe in the Frontispiece was marked 5.5%. Thus, it represented

Actual weight	49.94	Chauping	taels	
Plus premium, 5.5%	2.75	"	"	
= Equivalent weight of standard fineness	52.69	"	"	

This was not the end, however, for by an "old custom," called the Shanghai convention, of which the origin is obscure, 98 taels by weight of the standard fineness passed as 100 Shanghai currency taels. Thus, this particular shoe passed for $52.69/0.98 = 53.76$ Shanghai currency taels. Once the shoe was marked by the *Kung-ku-chu*, it was accepted by Chinese and foreign banks and merchants in Shanghai at the above fixed value, and might change hands many times without being reweighed.

The Shanghai currency tael, therefore, was based on three things; a certain standard of weight, a certain standard of fineness, and the Shanghai convention. The standard of weight was the Chauping weight tael of 565.65 grains; the standard of fineness was 0.935374; the convention factor was 0.98. Thus, we have:

$$\begin{aligned} & \text{Equivalent fine silver content of 1 Shanghai currency tael} \\ & = 565.65 \times 0.935374 \times 0.98 = 518.512 \text{ grains.} \end{aligned}$$

This figure, first definitely published in 1927 by Eduard Kann,²⁸ was accepted generally in Shanghai by the mercantile and banking community, which before that time would have found it difficult to

²⁶ Edward B. Drew, Commissioner of Customs at Ningpo, reporting in 1878 to Robert Hart, Inspector General of Customs, as quoted in Hanna *et al.*, *Gold Standard in International Trade*, p. 221.

²⁷ This rather strange "standard" apparently was derived as follows: the original standard was 11/12 or 0.916667, the same as that of the Indian rupee. By the Shanghai convention, 98 taels by weight were taken as 100 currency taels. Dividing 0.916667 by 0.98 gives 0.935374. Kann, *The Currencies of China*, pp. 75-76.

²⁸ Kann, "What is a Shanghai Tael?" pp. 769-772.

assign an exact fine-silver equivalent to the currency in which they daily made large transactions.

The above definition of the Shanghai tael as 518.512 grains of fine silver applied only to silver which had been cast into shoes of sycee by a smelting shop and certified by the *Kung-ku-chu*. The smelting shops naturally made a charge for their services. The charge, not stated as such, but implicit in the amount of currency taels returned by them for a certain weight of bar silver, amounted to about $\frac{2}{3}$ of 1 per cent.²⁹ This may be considered as comparable to seigniorage. Since the tael formed the basis of the currency, and since bar silver could be imported free of duty and converted into sycee at any smelting shop, it may be said that from 1857 to 1933 there existed in China the equivalent of free (though not gratuitous) coinage of silver. Just as the producer of gold could always dispose of it to the United States mint at \$20.67 per fine ounce, so the producer of silver could always ship it to China and get credit in taels, with which he could buy exchange on New York or London. Similarly, sycee could be shipped from China to New York or London, refined and melted into bar silver, and sold there. The costs of shipping and refining, and the loss of interest, restrained such movement to some extent, but, barring that, there was in China the same free interchangeability between silver bullion and silver currency that there was between gold bullion and gold currency under the gold standard in America and England.

Thus, the Shanghai tael was based firmly on silver. The actual shoes of sycee remained for the most part in bank vaults, and transactions were made with tael bank notes or checks drawn in taels. A certain amount of sycee was moved back and forth daily between banks in settlement of balances, for there was no clearing house in Shanghai until recent years, and shipments of sycee were made between Shanghai and other ports. Most wholesale-trade and foreign-exchange transactions were based on the tael currency, while retail trade usually was carried on in terms of silver dollars and minor coin. The everyday transactions of the masses were largely in brass cash, or in copper 10-cash and 20-cash pieces which began to supplant the old cash at about the beginning of this century. The value of these coins was not fixed definitely in terms of silver, but fluctuated, partly in sympathy with the market value of their copper content, and partly in accordance with the quantity in circulation. Paper money was issued by banks and cash shops in terms of taels, silver dollars, and copper cash. This paper money not infrequently depreciated, but the

²⁹ Kann, *The Currencies of China*, pp. 16-17, 31.

effects of such depreciation usually were confined to the limited area within which each issue circulated.

The Kuping tael, equivalent to 1.0960 Shanghai taels, was used for government transactions and accounts under the Empire, but was replaced by the dollar or *yuan* under the Republic. The Haikwan or Customs tael was created when the Customs Service was organized in 1858. It was taken as equivalent to 1.1140 Shanghai taels, and to appropriate values in the local currencies of other ports. It was purely a money of account. The Customs assessed duties in this unit, but payment was made in local currency at the fixed rate.

In April, 1933, as will be described in Chapter XXI, Section 9, the Government ordered that all taels be abolished, and that all subsequent transactions be in terms of silver dollars or *yuan*.

6. Foreign Silver Coins

The Spanish dollar was the principal form in which silver first entered China.³⁰ At first, it was accepted by the Chinese only by weight, but, as the coins became more familiar and were found to be of uniform weight and fineness, their convenience was recognized, and they came into use as a medium of exchange at Canton. A custom, peculiarly Chinese, grew up of "chopping" coins. That is, the holder of a dollar stamped his name on it with a metal stamp or chop, which bit deeply into the silver, making a character $\frac{1}{8}$ to $\frac{1}{4}$ inch square. This served the same purpose as the endorsement on a check: it guaranteed the genuineness of the coin, and gave subsequent holders recourse to the endorser. Dollars frequently were chopped many times, since each recipient would require the payer to chop them. This process naturally mutilated the design of the dollar, and gradually reduced the weight as bits of silver broke off. Some dollars were chopped so much that they were distorted into the shape of a bowl; the "spectacle" dollar also was found, where the whole center had been punched out. Nevertheless, a reasonable number of chops was a guarantee, like "two-name paper," and only chopped dollars were acceptable in many transactions.

After Mexico became independent of Spain in 1821, its silver production continued to be coined into dollars or pesos of the same weight and fineness but with a new image and superscription. These dollars began to flow into China instead of the old ones. Because of

³⁰ For an account of the Spanish dollar and other dollars which have circulated in the Far East, see A. Piatt Andrew, "The End of the Mexican Dollar," on which much of this section is based. See also illustration, page 4.

Chinese love for the accustomed and suspicion of change, they were not welcomed at first, but gradually became acceptable at Canton. In Shanghai, however, the Spanish dollar with the head of Carolus III (*sic*) remained the standard, and began to acquire a scarcity value which raised it above the Mexican dollar of equivalent silver content. Spanish dollars were imported from all sources where they could be found, but still were insufficient and in the years 1853 to 1856 attained a high premium over their bullion value. Finally in 1857, by general agreement in Shanghai, all accounts in Carolus dollars were converted into Shanghai taels at the rate of one dollar per tael, although the bullion content made the tael equivalent to about \$1.38.³¹ The Mexican dollar came into use in Shanghai and other ports as a medium of exchange for retail transactions, and was valued in taels in proportion to its bullion value. By the end of the nineteenth century it had become the principal dollar coin in circulation, and gave its name of "Mexican" or "Mex." to the dollar currency in general, a name which has persisted to the present day, after most of the Mexican dollars have been replaced by Chinese dollars, officially called *yuan*, and after these in turn have been replaced by bank notes.

During the last half of the nineteenth century there came into the country other foreign dollar coins which may be enumerated and described briefly. Various South and Central American countries continued to coin dollars or pesos similar to the Spanish dollar, and some of these reached China. The British colony of Hong Kong coined dollars from 1866 to 1868, but they were not popular and the experiment was abandoned. Japan issued about 165,000,000 silver yen from 1871 until she adopted the gold standard in 1897. About two-thirds of these were exported and competed with the Mexican dollar in China and southeastern Asia. The American trade dollar was coined from 1873 to 1878 to the extent of nearly 36,000,000 pieces. These were intended solely for the China trade, but some of them circulated at home. In 1887, after the fall of silver had made their silver content worth less than a dollar gold, a redemption law was passed, which explicitly excluded defaced and mutilated dollars. About 8,000,000 were redeemed, so it may be assumed that about 28,000,000 remained in China as chopped dollars, or already had been melted into sycee because their bullion content was slightly above that of the Mexican dollar. Beginning in 1885, the Government of French Indo-China issued a *piastre de commerce*, sometimes called the Saigon dollar. A British dollar, issued from Indian mints from 1895 on, circulated in Hong Kong and in parts of China. Spanish "Alfonsino" pesos, coined

³¹ Morse, *International Relations* . . . , Vol. I, pp. 469-471.

in Spain in 1897 for the Philippines, and the first American Philippine peso, coined from 1903 to 1906, also came to China, as did the first Straits Settlements dollar of 1903 to 1906.

These dollars all approximated the Spanish and Mexican dollar standard. This legally was 417.8 grains, 0.902 65/72 fine, containing 377.14 grains of pure silver, but practically was about 416.5 grains, 0.898 fine, containing 374 grains of pure silver.³² The other foreign dollars varied slightly from this. Thus the American trade dollar, the Japanese yen for a few years, and the *piastre de commerce* for the first ten years weighed 420 grains, 0.900 fine, and contained 378 grains of fine silver. While they passed for no more than a Mexican dollar in ordinary transactions, their extra weight caused them to be culled out and melted. Some of the other dollars were slightly under the Mexican in silver content, but nevertheless passed as a dollar. It was a very nice point in China just how much underweight a coin could be and still pass at its face value. Often it might be accepted in one market and rejected in another.

7. Chinese Silver Coins³³

Chinese provincial dollars had been coined at Foochow and Amoy in the 1830's and 1840's but never attained wide use. In 1889 Chang Chih-tung, the progressive Viceroy of the Liang Kwang, opened a mint at Canton with Imperial sanction. There were struck silver dollars, with a dragon design, and an inscription making them provincial rather than national coinage. In later years other provinces opened mints; the dragon design was continued, but each province marked the dollars with its own name. These coinages provided an opportunity, too good to be missed, for experimenting as to just how much under the Mexican standard a dollar could be, so that there was considerable variety in their silver content, with a range of several per cent.

Although most of these provincial dollars contained inscriptions in both English and Chinese, it is interesting to note that none of them used the word "dollar," nor any equivalent Chinese word. Instead, they were marked "7 mace and 2 candareens," that is, 0.72 of a tael. This had been the accepted relationship between the tael and the dollar from the earliest days of foreign trade; since taels varied in different places and the provincial dollars varied in silver content, it was only a conventional expression. The actual daily exchange rate between the tael and the dollar was determined by the cash shops and

³² Kann, *The Currencies of China*, p. 146.

³³ *Ibid.*, pp. 149-159, 177-183; Chang, "The Vanishing Mexican Dollar."

banks in accordance with relative supply and demand, as well as with the bullion content.

There gradually developed, at first in the ports and later spreading to the interior, a more extensive use of the dollar as a medium of exchange and a money of account. It occupied an increasingly important place in retail trade, and stood between the tael, in which large transactions were carried out, and the brass cash and copper 10-cash coins, which were the money of the masses.

At the same time many of the provincial mints issued 10-cent and 20-cent silver pieces, marked "7.2 candareens," and "1 mace and 4.4 candareens," respectively. These coins, like the subsidiary coins of the United States after 1853, contained less silver to the dollar than did the dollar coins. In the United States the law made such coins legal tender to a limited amount and redeemable in standard money, but there were no such provisions in China, and the provincial mints flooded the market with them. As a result they passed at a value proportional only to their silver content, or even less. A silver dollar, "big money," would exchange for \$1.10 to \$1.25, "small money."

The Imperial Government made some attempts to stop the provincial mints and establish a national currency, but nothing effective was done until 1910; a new national dollar was put into circulation about the time the first Revolution broke out in 1911. This was marked in English "One Dollar" and in Chinese "One Yuan" (the same character as that for the Japanese yen).

At this time, then, the dollar circulation in China consisted of Mexican dollars, which formed a large part of the currency of Shanghai, a scattering of other foreign dollars, and large numbers of Chinese provincial dollars. Each kind of dollar circulated in a more or less limited area, and was discounted elsewhere. In some ports there was a distinction between "clean" and "chopped" dollars. Clean dollars were those free from scratches or marks; chopped dollars included not only those actually chopped with a metal die, but also otherwise acceptable dollars showing even a slight scratch, and dollars, even if clean, of issues not regularly acceptable. In Shanghai, the more modern custom prevailed of chopping dollars with a rubber stamp, half an inch or an inch square; mutilated coins did not pass there at all, being confined to more remote districts. The writer, in Changsha, at about the time of the Revolution of 1911, collected over 40 varieties of foreign and Chinese dollars out of ordinary circulation, including all the foreign dollars mentioned above, and dollars from all Chinese provinces which had coined them. Most of these were chopped badly. The only dollar which passed as clean in Changsha at

the time was the Hupeh dollar, and that had to be absolutely without a scratch.

8. *Hong Kong Currency*³⁴

Hong Kong, although politically a British colony, is related so closely to China geographically and economically that its currency system should be considered here. In the early days of the colony an attempt was made to adopt the British gold standard, but that proved impracticable, and in 1863 the Mexican and equivalent silver dollars were made legal tender. The experiment of minting dollars in Hong Kong from 1866 to 1868 was unsuccessful; one reason assigned was the existence of a rumor among the Chinese that they would be liable to criminal prosecution if they chopped the coin bearing Queen Victoria's head.³⁵

Bank notes issued by branches of British Indian banks operating in Hong Kong and by the Hongkong and Shanghai Banking Corporation, organized there in 1864,³⁶ came into considerable acceptance in circulation during the 1860's and eventually largely replaced actual dollars. The issues were limited in amount by the charters granted to the various banks; they were secured by silver dollars, including Mexican dollars and British dollars coined in Bombay since 1895 for Far Eastern use, and by securities deposited with the Colonial Government. Notes were convertible freely into dollars, but dollars were not convertible into notes. On account of the limited amount of notes and the demand for them not only in Hong Kong itself but also in Canton and South China, the notes frequently were at a premium over the value of the silver dollars which they were supposed to represent. This premium in 1908 reached as high as 3½ per cent. A plan was proposed at that time by which the Government should undertake the management of a note issue, but this was not adopted. In later years, the premium was even greater.

9. *Summary*

The currency system of China, at the outbreak of the World War, if it could be called a system at all, was most complex, and made the country a paradise for the money changer. Leaving out entirely

³⁴ This section is based on the following, which should be consulted for further information; Eitel, *Europe in China: The History of Hongkong*; Kann, *The Currencies of China*, pp. 243-256; Kann, "The Mystery of the Hongkong Dollar."

³⁵ Eitel, *op. cit.*, p. 441.

³⁶ *Ibid.*, p. 386.

the question of foreign currency, the exchange of the different domestic currencies was a science in itself. The traveler found that the coins or bank notes of one city were taken only at a discount in the next. Even within a city there were one or more local taels; a variety of different dollars, with perhaps a distinction between clean and chopped; small silver coins, depreciated with respect to the big dollar; 10-cash copper coins; the small brass cash with a hole in the center, which still were current, although rapidly disappearing; and also paper money, expressed in taels, dollars, or cash. The little cash shop, often nothing more than a "hole in the wall," had a signboard with a dozen different quotations of daily-changing rates between the different currencies, and did a thriving business, making its small profit on each transaction, and usually taking advantage of any lack of experience or bargaining ability in its customers.

CHAPTER XII

BUSINESS IN CHINA UNDER THE SILVER STANDARD

Lawyer (in American Court in Shanghai): How old are you?

Lady witness (of uncertain age): Twenty-one.

Judge: Pardon me, is that gold or Mex.?

China Coast Yarns

The fall in the price of silver, beginning in 1873, considerably disturbed the trade between gold-standard and silver-standard countries. As a result, India abandoned the silver standard in 1893, and in the succeeding decade many other silver countries followed her example, as will be related in Chapter XIII. Although China, as has been pointed out in the preceding chapter, made much use of copper currency internally, she was practically on a silver standard as regards her foreign trade. She continued to use silver as the standard while other countries were discarding it, and so was subject to the influence of all the major and minor fluctuations in the value of the white metal for sixty years, a full "cycle of Cathay." These fluctuations have made foreign exchange in China a very important factor in the export and import trade.

1. *Exchange Parity*

Between New York and London, when both were on the gold standard, there was a fixed par of exchange, \$4.8665 per pound sterling, which represented the ratio between the quantities of gold in a sovereign and in a dollar. The cost of shipping a sovereign across the Atlantic, including interest, was in the neighborhood of 2½ cents. A New York bank, therefore, could not charge its customers more than $\$4.8665 + 0.025 = \4.8915 for cable transfers on London, because at a higher rate it would be cheaper for the customers to ship full-weight gold coin or bars. Similarly, it could not offer less than $\$4.8665 - 0.025 = \4.8415 for cable transfers on London, because at a lower rate it would be profitable for customers to import gold from London. Thus, \$4.8915 was the gold export point, and \$4.8415 was the gold import point. Between these two points a New York bank set its actual rates depending upon the relative supply of and demand for ster-

ling exchange among its own customers, and ultimately upon the supply and demand in the whole exchange market, as adjusted by inter-bank transactions. The figures given are purely for illustration, since the actual gold points varied from time to time with changes in expenses and interest rates, and it was often a point of discussion in the financial press as to just what the current points were. Roughly, however, it may be said that exchange between New York and London varied within about $\frac{1}{2}$ of 1 per cent each side of par or a total range of 1 per cent.

Between New York and Shanghai there could be no fixed par, because the currency of one place was gold, and that of the other was silver. There was, instead, a daily parity based on the day's price of silver. Since the Shanghai tael contained 518.512 grains of fine silver, and the ounce of silver, 0.999 fine, contained 479.520 grains of fine silver, the theoretical parity of the Shanghai tael was $518.512/479.520 = 1.0813$ times the price of silver in New York. That is, if silver cost 50 cents per ounce, 0.999 fine, in New York, the equivalent value of the Shanghai tael on that day would be 1.0813×50 or 54.065 cents. The cost of shipping silver between New York and Shanghai, including interest, was in the neighborhood of $2\frac{1}{2}$ per cent. Thus the actual exchange rates, New York on Shanghai, could vary between $2\frac{1}{2}$ per cent below and $2\frac{1}{2}$ per cent above the day's parity.¹

For Shanghai exchange on London the corresponding parity was computed as follows: Since the price of silver in London was quoted per ounce standard or sterling, that is, 0.925 fine, it represented the price of $0.925 \times 480 = 444$ grains of fine silver. The parity ratio, therefore, was $518.512/444 = 1.168$; that is, the exchange rate, Shanghai on London, tended to fluctuate around 1.168 times the price of silver in London. The writer made an extensive study of the fluctuations of the actual Shanghai-London exchange rate relative to the price of silver for the period 1909-27. This ratio showed fluctuations as high as 18 per cent during the war period and nearly 5 per cent in normal times.²

It will be evident that even if silver had a fixed price in terms of gold, Shanghai exchange, with a range of 5 per cent, would show much more fluctuation than exchange on a gold-standard basis across the Atlantic with a range of only 1 per cent. With the gold price of silver itself subject to fluctuations, which amounted even in uneventful years to 10 per cent and often to 20 per cent, 30 per cent, or even

¹ For discussion of the parity constant, especially between Shanghai and London, see Kann, *The Currencies of China*, pp. 16-19, 31-36; and Leavens, "The Ratio between the T. T. Rate and the Silver Price."

² Leavens, *op. cit.*

more, exchange transactions between Shanghai and the rest of the world were highly speculative.

2. *Exchange Futures*

The position of silver and foreign exchange rates in Shanghai may be compared to the position of wheat in the American market. The price of wheat is determined by world factors entirely out of the control of the individual producers and consumers. The producer may have a legitimate need of knowing in advance the price he will receive for his crop; the miller who contracts to sell flour at a certain price needs to contract to buy wheat at the corresponding price, so that he can rely on his manufacturing efficiency for profit, rather than on speculating in the price of wheat. At the same time, there are speculators who believe that they can predict the price of wheat, and who are willing to risk their capital in futures transactions. The Chicago Board of Trade provides a market where the transactions of the producer, the miller, and the speculator are brought together. Although there are well-known evils arising from this system, nevertheless, the provision of a futures market is practically a necessity so that the producer and the miller may be able to shift risks.

Similarly, in Shanghai, under the silver standard, there were importers who would need to buy exchange some months later and exporters who would have exchange to sell some months later. Both of them wished to be able to know the rate in advance, in order to avoid danger of fluctuations in exchange which might more than wipe out their merchandising profits. Since both parties dealt with banks, the banks had considerable calls for both buying and selling future exchange contracts, and so were able to provide a market for such business. There were also speculators who believed that they could predict the price of silver, and who would make future exchange contracts with the banks, expecting on the due date to offset a future purchase of exchange by a spot sale of the same amount, or vice versa.

The banks undertook such futures business at rates based on the current rate, but with a small premium. A bank did not need to speculate; it could balance its purchases and sales of exchange. This balance needed to be only in total amount, not in due dates, provided the bank had enough funds, both in Shanghai and abroad. For example, a bank could sell \$100,000 T. T. (telegraphic transfer) on New York, against a purchase of \$100,000 in three months' bills on New York, provided it had or could borrow \$100,000 in New York to meet the T. T. at once, since this fund would be replenished when the bills come

due, or earlier if they were discounted. On the other hand, a bank might, if it wished to speculate, take a position in exchange by overbuying or overselling, if it had strong reason to expect that the exchange rate would move in the direction which would make such a transaction profitable. A bank could, however, make a fair profit on the difference between buying and selling rates, without taking the risk of an overbought or oversold position.

Regardless of exchange risks, a bank took a credit risk in making any future contract, and had to scrutinize the credit of the customer and the nature of the transaction on which the contract was based. The risk of financing the movement of a staple commodity for a sound customer was small. That of making a contract with a shoe-string speculator was large. The bank had to use discrimination in making future exchange contracts just as it had to in making loans.

3. Exchange Fluctuations and the Import Trade

In the days of the East India Company, there was not the extreme gold-silver fluctuation to contend with, although the Company did have its problems of obtaining Spanish dollars, and later of acting as a banker in Canton. The margin of profit was so large, however, that exchange was a minor matter. When silver began to fall in the 1870's, China's foreign trade was still small, but the country was gradually being opened up, so that over the period down to the World War, during which the depreciation of silver might have been expected to check imports, the import trade actually grew fairly steadily. That is, the long trend of trade was more important than the trend of silver, although year-to-year fluctuations of silver prices showed some effects.³

This long-time growth of imports did not mean that exchange fluctuations were not important. The foreign import merchant, however, tried, with considerable success, to shift the risk of exchange to his Chinese customers. The foreign merchant ordered goods only to fill definite orders from Chinese dealers; he quoted to them a price in sterling or other gold currency sufficient to pay the landed cost of the goods and his profit. The contract was made in sterling, and the Chinese dealer could take his choice of making a forward exchange contract with a bank, thus determining at once how much a shipment would cost him in taels, or of waiting until the goods arrived. For example, suppose the merchant signed a contract with a Chinese dealer

³ Remer, "International Trade between Gold and Silver Countries: China, 1885-1913."

to import a shipment for \$1,000 U. S. currency, for delivery and payment in 4 months. If the current exchange rate was a little over 80 cents per tael, the bank probably would be willing to make a contract to sell the Chinese dealer \$1,000 four months thence at 80 cents flat; that is, for Tls. 1250. If the dealer accepted that, he knew just how much the goods were to cost him, and perhaps sold them in advance to retailers at a price which would allow him his profit. On the other hand, he might elect to wait and see what happened to exchange. If it went up, say, to 85 cents, he would have to pay only Tls. 1176 for the \$1000; on the other hand, if it went down, say, to 75 cents, he would have to pay Tls. 1333. The foreign merchant theoretically did not care how exchange went, since he was to get \$1,000 anyway.

As long as the foreign merchant could be sure that the Chinese dealer would meet his liabilities, there was little risk. Up to the latter part of the nineteenth century, there was not too much competition, the market was not overstocked, there was ample margin of profit for all concerned, and the system worked fairly satisfactorily. Losses or decreased profits due to exchange fluctuations could be absorbed by the Chinese dealers without difficulty, with the hope that they would have better luck next time.

As competition increased, both among foreign importers and among Chinese dealers, especially in staple commodities like cotton piece goods, the situation changed somewhat. Goods were imported, not only to fill orders received, but also speculatively in the hope of being able to sell them on arrival. Stocks accumulated in Shanghai. There were usually some dealers who had settled their exchange at a more favorable rate than others, and thus could undersell competitors. Competitors then would be forced to lower their price. The dealer who had settled at a rate that proved to be unfavorable, in the light of conditions when the cargo arrived, could not bear the loss. He was inclined to ask the foreign importer for a concession, and in some cases to go back on his contract. Thus, the foreign importer, although theoretically safe because contracting in gold, actually was taking a risk.

This was not a sudden change, but rather a gradual development, not important when exchange fluctuations were narrow, but unpleasantly evident at times of sudden and considerable changes in the price of silver. It also varied between different commodities, being worst in the case of raw materials and staple items like piece goods, where there was a broad market and much competition, and least in the case of specialized goods like machinery. The tendency toward repudiation of contracts was especially pronounced in the postwar depression

and in the depression of the 1930's. At those times the Shanghai papers spoke often of Chinese dealers who had gone "Ningpo more far," the pidgin-English phrase for leaving for parts unknown.

4. *Exchange Fluctuations and the Export Trade*

The foreign export merchant in China theoretically was also able to protect himself against exchange risks. He received an inquiry by cable from America or Europe for a quotation on some Chinese product, such as silk. He found the price he must pay in taels, added freight, insurance, and other charges, computed the gold-currency equivalent at the rate which the bank quoted for buying his draft, and cabled back a quotation in gold currency for the goods delivered in New York or London. He might get a cabled acceptance within a few hours, and meanwhile might have been protected by options on the silk, the cargo space, and the exchange. Thus, for any single transaction he was independent of the exchange rate.

Nevertheless, the exporter was fundamentally dependent on exchange because, if the exchange rate were too high, the resultant gold price of the goods would be too high for them to be sold abroad, and he would get no orders at all.

5. *The Theoretical Effects of High and Low Exchange*

Theoretically, when silver and exchange were high, imports into China were stimulated, because then a given amount of Chinese currency would buy more foreign currency or, in other words, the price, in silver currency, of imported commodities was lowered. On the other hand, when silver and exchange were low, imports were hindered because the price in silver currency of imported commodities was raised.

Similarly, when silver and exchange were high, exports were hindered, because either their silver price must be lowered or their gold price must be raised; and when silver and exchange were low, exports were stimulated, because their gold price could be lowered, while their silver price was unchanged or even raised.

The above theory assumed that all other factors were unchanged, which was seldom the case. Thus, in studying China's foreign trade from 1885 to 1913, Remer found that the theory was verified by the facts for a few years of falling silver in 1891-1894 and a few years of rising silver in 1903-1906; but that, for the whole period covered, imports increased greatly in spite of falling silver, because of the rapid

opening up of new areas to trade; and that exports did not increase as much as expected, because of the inability of the Chinese to take advantage of the opportunity.⁴

The test of the theory by the rise of silver during the World War and by the postwar decline of silver will be discussed in Chapters XXI and XXII.

⁴ *Ibid.*

CHAPTER XIII

THE CHANGE FROM SILVER TO GOLD STANDARDS IN ASIA AND LATIN AMERICA

I loved thee once; I'll love no more,—
Thine be the grief as is the blame;
Thou art not what thou wast before,
What reason I should be the same?

ROBERT AYRTON, *To an Inconstant*

The United States and most of Europe adopted the gold standard in the 1870's; India abandoned silver in 1893 and finally adopted a form of gold-exchange standard; China remained on the silver standard. At the same time, the problem naturally presented itself to the other silver-standard nations of Asia and of Latin America, and it is of interest to see how it was met by some of the more important countries.

1. *The Dutch East Indies*

The first Asiatic country to make the change from silver to gold was the Dutch East Indies. When the price of silver began to fall, Netherlands India was on a satisfactorily working silver standard, with the unit, the guilder (or florin), the same as that of the silver-standard mother country. After Holland suspended silver coinage and made the 10-guilder piece full legal tender in 1875, there was a period of two years when Netherlands India remained on silver, and suffered inconvenience due to the falling price of the white metal. Finally in 1877 the colony was placed on the same basis as the mother country. Actually, little gold circulated, the silver token coins being accepted by the Government and the public at their face value. The exchange rate with Holland was maintained between the points at which it would pay to ship silver coins between the two countries rather than gold. Management of the exchange was largely in the hands of the Java Bank. With a usually favorable trade balance, it was not difficult to maintain the gold, or perhaps more properly gold-exchange, standard.¹

¹ See Vissering, *On Chinese Currency*, Vol. I, pp. 113-134, for an account of the system.

2. *Japan*²

Before the Perry Expedition of 1853-54, Japan had been shut off almost completely from foreign nations. She had, at that time, a monetary system which included gold, silver, and copper coins. Practically the base was bimetallic, gold and copper, which circulated at a ratio about equivalent to that in the West. Silver coins were token money, artificially valued at a ratio to gold of about 5 to 1. This was fixed by law because the Government of the Shogun or Tycoon had a monopoly of silver mines, and so profited by keeping the white metal high in comparison with gold.

Townsend Harris, the American Consul General who was sent in 1856 to negotiate a treaty, apparently did not understand the token status of silver coins, and demanded that foreign silver coins be exchangeable with them weight for weight. He managed, after long insistence, to get this provision incorporated in the treaty.³ In November, 1857 he complacently recorded in his journal that after meeting his living expenses he could remit home about \$6,000 a year out of his salary of \$5,000 a year, and that he had made a profit of \$2,500 on the side by the purchase of gold.⁴ As a result of his efforts, when foreigners first were allowed to take up residence in Japan, they were able to exchange Mexican dollars for equal weights of Japanese silver, convert the latter to gold at 5 to 1, ship the gold to Shanghai, and exchange it for Mexican dollars again at 15 or 16 to 1, thus making a quick 200-per-cent profit. Fortunately for Japan, the supply of domestic silver coin was insufficient to permit this endless-chain process to be continued permanently, and within a year or two the Japanese ratio between gold and silver approximated the world one.⁵

Under the Meiji Emperor, who came into power when the Shogunate was overthrown in the Restoration of 1868, it was intended to adopt a silver standard, but on the advice of Mr. (later Marquis) Ito, a gold standard was adopted in 1871, with provision for the temporary coinage of a silver yen weighing 416 grains, 0.900 fine, which was to be legal tender in the treaty ports. From 1875 to 1878 the experiment was tried of making the yen 420 grains and marking it,

² This account of Japanese currency is based on Matsukata, *The Adoption of the Gold Standard in Japan*.

³ For an account of Harris's negotiations, see Cosenza, *The Complete Journal of Townsend Harris*, pp. 226, 233-234, 238, 241, 246, 264-265, 272-274, 281, 287-288, 310-313, 316, 322-327, 333-336, 343, 351, 359, 364, 372-374, 409, 512, 529, 571-572, 581. See also Sawada, "The Financial Difficulties of the Edo Bakufu," for a Japanese account of the situation.

⁴ *Ibid.*, p. 409.

⁵ Leavens, "The Gold-Silver Ratio in the Early Foreign Relations of the Far East," pp. 326-327.

in English, "Trade Dollar," but this did not accomplish the desired purpose of driving out the Mexican dollar.

The attempt to establish a gold standard was unsuccessful. A considerable amount of inconvertible paper money had been carried over from the Shogunate; the new Government was compelled to issue more to meet the expenses of civil war. Finally, in 1878, the Government made the silver yen and Japanese trade dollar legal tender throughout the country and equivalent to the gold yen. This in effect set up a theoretical bimetallism at a ratio of 16.17 to 1.

The next stage in currency reform was to deal with inconvertible paper and restore it to parity with silver. By a careful fiscal policy and wise management, this finally was accomplished when the Government resumed specie payments in silver on January 1, 1886; thereafter government paper money was replaced gradually by convertible notes issued by the Bank of Japan. From that time the country was on a *de facto* silver standard, since silver had depreciated so much that the Japanese 16.17-to-1 ratio became ineffective.

The country now was subject to all the influences of a falling (i.e., when the yen was quoted in terms of sterling or American dollars) exchange rate, that is, a depreciating currency. This led to rising prices, speculation, and increase of national expenditure; on the other hand, it stimulated agriculture, industry, and the export trade. A commission which studied the matter from 1893 to 1896 was divided as to whether the effects had been, on balance, beneficial or harmful to Japan. Seven members supported the silver standard, two favored bimetallism, and six wished to adopt the gold standard.

Count Matsukata, Minister of Finance, was an advocate of the gold standard, but he had been unable to find a practicable way of obtaining the necessary gold reserve with which to inaugurate it. When China, by the Treaty of Shimonoseki, April 17, 1895, agreed to pay Japan an indemnity of 200,000,000 Kuping taels, he saw his opportunity and succeeded in arranging that this should be paid in sterling in London instead of in actual silver.

Count Maksukata was succeeded in office by Viscount Watanabe, who was opposed to the gold standard, but who, in order to avoid disturbing the silver market, allowed most of the indemnity to remain temporarily in London. In September, 1896 Count Maksukata returned to office, and immediately instructed the Bank of Japan to use a new policy in transferring the indemnity money, buying chiefly gold and bills of exchange instead of silver. At the same time he succeeded in getting a new gold-standard coinage law promulgated on March 26, 1897.

The coinage law provided for a new gold yen unit of 0.75 grams of pure gold, which was approximately equal to the current bullion value of the silver yen. It also provided for subsidiary silver coins of 50, 20, and 10 sen, with a mint ratio of 28.75 to 1, or a bullion parity of 71.8 cents (or 32.8 pence) per ounce, which was at least 10 per cent above the current market price of silver. The law was to go into effect on October 1, 1897, from which date the old silver yen gradually would be redeemed in gold, but still would be legal tender, until prohibited after six months' notice; the coins still would be redeemable five years after that. Another law provided for the redemption of convertible notes in gold coin, and stated that not more than one-fourth of the reserve against these notes should be in silver coin. The mint at once began making new coins from the gold shipped from London, producing 49,000,000 yen before October 1, 1897 and 25,000,000 more in the next six months. At the same time it was decided to issue a total of 40,000,000 yen of silver subsidiary coins within the next three years, which would approximately double the amount of such coin in circulation and relieve a scarcity which was being felt.

There was some distrust of the plan on the part of the foreign banks, which notified their customers in July that they would reserve the right to pay in silver after October 1. To insure confidence, Count Matsukata immediately announced that on October 1 the Government would redeem in gold all the silver yen held by the Bank of Japan and the Yokohama Specie Bank, and would allow foreign banks to get their silver yen redeemed through the Bank of Japan. The Yokohama Specie Bank also announced that it would receive silver yen, but would pay out only gold and would redeem convertible notes in gold.

These measures dispelled doubt, and in September prospects of success were so good that the date for stopping circulation of silver yen was set for April 1, 1898. By June redemption was proceeding so satisfactorily that the five-year redemption period was abolished, and the final date for redemption was set at July 31, 1898.

There had been some uncertainty as to how many silver yen would be presented for redemption. A total of 165,000,000 had been coined since 1871, but about two-thirds of these had been exported. To redeem all of these exported coins would have been a heavy strain. Count Matsukata, however, had had a careful investigation made by Japanese consular officers throughout Asia. He came to the conclusion that a great many of these coins had been melted up into bullion, that most of those still circulating in China had been chopped and so were not redeemable, and that, although unutilated coin made up a good

part of the circulation in the Straits Settlements, it was not likely that more than 10,000,000 yen would come in from abroad for redemption, because they could not be spared from circulation. Moreover, the gold content of the new yen was such that there would not be much profit in presenting the silver coins unless silver should fall in price. His prediction turned out to be very close to the actual results, less than 11,000,000 yen being returned from abroad.

After the redemption, the Government was left with 75,000,000 yen of silver, partly in coin, partly in bullion against which the mint had issued receipts redeemable in silver. Of this, 27,000,000 yen were used in minting new subsidiary coins, 41,000,000 yen were sold in Hong Kong, Shanghai, and other ports, and 7,000,000 yen were shipped to Korea and Formosa, after being stamped with a symbol to make them irredeemable in Japan. The retired coins were disposed of entirely by the end of 1898. Great skill was shown in the sale of silver. Although the price of silver had fallen in the summer of 1897 in anticipation of the change, it recovered in the autumn and during 1898. Conditions in the Far East, together with the effect of the Spanish-American War, combined to strengthen the price of silver, so that this amount was disposed of with none of the ill effects resulting from the sale of German silver in the 1870's or of Indian silver in recent years. The average price obtained was a fraction of a penny above the London average for the same period. A total loss of about five and one-half million yen was sustained, but this was more than made up by seigniorage profit on the new subsidiary coins.

In this way, the change from a silver standard to a gold standard was accomplished successfully in little over a year from the passage of the law. It was facilitated by the gold provided from the Chinese indemnity, but this was used only as a loan to finance the currency operations and then reverted to the Government Treasury. There was, of course, a certain element of luck. If outside forces had tended to push the price of silver downward instead of upward, more silver yen from abroad would have flowed in for redemption and greater losses would have been realized on the sale of the bullion. It is always dangerous to be dependent on the uncertainties of the silver market, but the danger was reduced by Count Maksukata's careful planning and wise management, and by the expedition with which the plan was carried through.

The steady rise in the price of silver from 1903 to 1906 brought the white metal to a maximum of $71\frac{5}{8}$ cents (or $33\frac{1}{8}$ pence) per ounce in November, 1906, or slightly above the bullion parity of the subsidiary coins. In anticipation of a continued rise, a recoinage law was

passed in April, 1906, by which the fine-silver content of the subsidiary coins was reduced.⁶ The new silver content corresponded to a coinage ratio of 21.60 to 1, or to a bullion parity of 95.6 cents (or 43.7 pence) per ounce, which made the coins safe from any danger of the melting pot until the great rise of silver occurred during the World War.

3. Mexico ⁷

The Spanish dollar, minted chiefly in Mexico, and its successor, the Mexican dollar or peso, were a world currency for several hundred years. Before the expansion of silver production in the United States in the 1870's, Mexico was the largest producer of the white metal, and since then it has been a close competitor of the United States, sometimes producing more, and sometimes less. Silver, usually exported in the form of dollars until the end of the nineteenth century, made up a good part of the country's total exports. The fall in the price of silver, therefore, could not fail to show its effect.

Mexico for two hundred years had been theoretically on a bi-metallic standard with a coinage ratio of approximately 16.5 to 1, but practically little gold was coined, so that in effect it was on a silver standard. In 1903 it was estimated that there were in the country over 100,000,000 peso coins, a few million pesos in subsidiary coins, a very little gold, and bank notes bringing up the total circulation to about 200,000,000 pesos.

The fall in the price of silver which began in 1873 had mixed economic effects in Mexico. It increased the burden, in silver, of the foreign debts of Mexico, which amounted to over \$100,000,000 United States currency. This, in addition to the effect on customs duties, made it difficult to budget government income and expenditure. The export trade of the country was stimulated, as is always the tendency with a depreciating currency, but it was held by some that Mexico was having to give an increasing portion of her products in return for imports. Moreover, the falling price of silver discouraged the investment of foreign capital, which was needed for the development of the country.

Early in 1903 the Government of Mexico united with the Government of China in asking the United States to co-operate in seeking a remedy for the difficulties raised by the fluctuation in the relative

⁶ Kemmerer, "The Recent Rise in the Price of Silver and Some of its Monetary Consequences," pp. 262-263.

⁷ This account of Mexican currency is based chiefly on Kemmerer, *Modern Currency Reforms*, pp. 465-552.

value of gold and silver. These governments presented partly identical memoranda reciting the difficulties of trade between gold-standard and silver-standard countries, the important volume of that trade and its future potentialities, the difficulties of foreign investors, and the great desirability of finding some method of stabilizing the exchange between the two types of countries, while not making any material changes in the monetary system of the gold-standard countries.⁸

The American Congress, on March 3, 1903, gave President Theodore Roosevelt authority to co-operate in the study of this problem. Secretary of State John Hay appointed a Commission on International Exchange, consisting of Hugh H. Hanna, Charles A. Conant, and Jeremiah W. Jenks. They were instructed

... to confer with the executive departments of Mexico and China, and also with England, Germany, France, Russia, and such other European countries as time and opportunity will permit, for the purpose of formulating, if possible, some wise and feasible policy.

They were expressly

... not authorized to suggest any specific changes in the currency systems of the gold-standard countries, nor to suggest that any change whatever will be made in the present monetary standard of the United States.⁹

The Gold Standard Act of three years before had closed definitely the period when the United States was interested in discussing international bimetallism.

The commissioners, in company with a Mexican commission, visited Great Britain, France, Holland, Germany, and Russia, meeting there with commissions appointed by those governments and with representatives of the Chinese legations. The discussions concerned chiefly the problems of China, and there was general agreement as to the desirability of some form of gold-exchange standard for that country;¹⁰ this will be discussed in Chapter XIV, Section I.

Meanwhile, in February, 1903, the Mexican Department of Finance had appointed a large commission of bankers, economists, business men, mine owners, and others to study the monetary problem. The commission was divided into four subcommissions which reported to the general effect that, although there had been many advantages from the fall of silver, there had also been serious disadvantages, and that stabilization in the future was highly desirable.

A fifth subcommission then was appointed to make definite

⁸ Hanna et al., *Stability of International Exchange*, pp. 37-46.

⁹ *Ibid.*, pp. 46-47.

¹⁰ *Ibid.*, pp. 12-14.

recommendations for monetary reform.¹¹ In the final report¹² of the fifth subcommission there was general agreement on the desirability of a gold standard, on fixing the new unit at approximately 50 cents United States currency, on stopping the coinage of, and prohibiting the importation of, old dollars, and on exchanging those in circulation at par for new silver dollars, of changed design, but containing the same quantity of fine silver. The subcommission was divided, however, as to whether a gold reserve should be established to facilitate the transition and to support exchange. A minority favored establishing a reserve, but the majority felt that it was better simply to let the stopping of increase in the silver-dollar currency bring about a gradual appreciation in its value up to the gold parity, as had been done in India.

A decree of May 21, 1904 imposed a high import duty on Mexican silver pesos after January 1, 1905. In December, 1904 the Mexican Congress passed a law giving the Executive very broad powers for monetary reform, without specifying details to any extent except that the old dollar should be retained, and that it should be given a value equivalent to 0.75 grams of fine gold or 49.85 cents United States currency, the same as the Japanese gold yen.

President Diaz established a new monetary system by decree on March 25, 1905. This discontinued free coinage of silver, and did not provide for free coinage of gold, but additional silver money could be coined for those presenting gold. Old subsidiary coins were to be replaced by new ones containing 25 grams of silver, 0.800 fine, to the peso. The coinage ratio for the old peso worked out at 32.59 to 1, and the bullion parity was 63.4 cents (or 28.9 pence) per ounce. For the new subsidiary coins, the corresponding figures were a coinage ratio of 26.67 to 1, and a bullion parity of 77.4 cents (or 35.4 pence) per ounce. Although no provision was made for immediate support of exchange, a regular fund was provided for, to be started with a contribution from the Treasury and added to from profits on seigniorage and other monetary transactions. This fund was to be administered by a special Commission on Exchange and Money.

The price of silver, which had reached a low level at the beginning of 1903, had recovered by the end of 1904 to 61 $\frac{7}{8}$ cents (or 22 $\frac{8}{16}$ pence) per ounce, which was close to the 63.4 cents (or 28.9 pence) bullion parity of the old peso. The price fell off during the first half of 1905, but the peso remained practically at par, and in the latter part of the year silver rose sharply so that the peso was worth more

¹¹ Hanna *et al.*, *Gold Standard in International Trade*, pp. 336-338.

¹² *Ibid.*, pp. 390-422.

as bullion than as money, a condition which held good for two years.¹³ The Mexican commission of 1903 had foreseen the possibility of such a contingency, and had pointed out two alternatives: either to raise the legal parity, or else to demonetize silver and let it be replaced by gold coin. They strongly favored the latter.¹⁴

When this situation actually occurred, the Commission on Exchange and Money took control, and sold out not only silver pesos from the regulator fund but also the holdings of banks, giving the banks the benefit of any profit. By a centralized management of sales, disturbance to the sensitive world silver market was minimized, so that the exchange value of the peso rose only slightly above its gold par. The commission exported about 60,000,000 pesos. Private parties exported about the same amount until a 10-per-cent tax was imposed; this tax was remitted if the exporters presented equivalent gold for coinage. As a result of this exportation there was danger of a currency famine at home. The coinage of new gold coins as well as of subsidiary and minor coins was hastened, and gold certificates were issued against bullion deposited for coinage.

Thus, by a fortunate turn in the silver market, Mexico was enabled to replace her silver currency by gold, except for the necessary amount of subsidiary coins, which had a fine content low enough to protect them from exportation.

4. Straits Settlements¹⁵

The British Colony of the Straits Settlements, together with the Federated Malay States and Johore, was dependent upon foreign coin for most of its currency. Spanish dollars, rupees, and other coins had circulated in the early days of the Colony. In 1867 the Spanish, Mexican, Bolivian, Peruvian, and Hong Kong dollars were made legal tender, the American trade dollar and the Japanese yen being added to the list in 1874. The Colonial Government itself issued subsidiary coins, and also notes secured by a 100-per-cent reserve of coin and securities.¹⁶

The fall in the price of silver from 1873 to 1893, although it had many of the same effects as in India, did not greatly disturb the trade of the colony, which had been developing satisfactorily, and there was

¹³ For a chart illustrating these movements, see Kemmerer, *Modern Currency Reforms*, p. 535.

¹⁴ Hanna *et al.*, *Gold Standard in International Trade*, p. 417.

¹⁵ This account of Straits Settlements currency is based chiefly on Kemmerer, *Modern Currency Reforms*, pp. 389-463, and Anthonisz, *Currency Reform in the Straits Settlements*.

¹⁶ Straits Settlements Currency Committee, *Report*, pp. 4-6.

no general demand for currency reform. In 1893, however, after the report of the Herschell committee and the closing of the Indian mints, the Secretary of State for the Colonies appointed a committee, also under the chairmanship of Lord Herschell, to consider currency questions in the Eastern colonies.¹⁷ To assist in this investigation, the Governor of the Straits Settlements appointed a local committee to study the problem.¹⁸ The local committee was divided, some favoring a gold standard, but some European and all the "native" (apparently this meant Chinese) members favoring silver. Many in both groups desired the coinage of a special dollar coin for the Colony, although a majority of those who favored a gold standard believed that it might be more practicable to adopt the Indian rupee. The committee appointed by the Secretary of State published no report and took no position as to the standard, but recommended the issuance of a British dollar at the Bombay mint for circulation in the Straits Settlements and other colonies, including Hong Kong.¹⁹ As a result of this recommendation and of the fact that the Indian mints were idle, arrangements were made for the coinage of a British dollar at the Bombay mint.²⁰ This dollar was coined for anyone who presented silver bullion, at a seigniorage charge of 1 per cent. It weighed 416 grains, 0.900 fine. Only a few millions of these were coined in 1895 and 1896. At this time the British dollar, the Mexican dollar, the Hong Kong dollar of 1866-68, and the Japanese yen were legal tender.

When, however, in 1897 Japan started her currency reform, there was a tendency for silver yen to flow back to Japan. The banks in Singapore met this contingency by ordering more British dollars, so that the Bombay mint worked to capacity, producing \$20,000,000 to \$30,000,000 per year.²¹ The silver yen was demonetized in the Colony in 1898, but retained its value as bullion and could be converted into British dollars at a small loss.

The continued fall in the price of silver in 1896-97 caused rising prices and aroused fresh interest in currency reform. In 1897 the Singapore Chamber of Commerce, in view of the difficulties brought about by falling exchange, urged the adoption of a gold standard, with a 2-shilling dollar.²² The authorities did not favor this proposal. It was not until 1902 that any action was taken, when the Governor asked

¹⁷ *Ibid.*, p. 6.

¹⁸ The report of this committee is reprinted in Straits Settlements Currency Committee, *Minutes of Evidence and Appendices*, pp. 103-106.

¹⁹ Straits Settlements Currency Committee, *Report*, p. 6.

²⁰ Andrew, "The End of the Mexican Dollar."

²¹ *Ibid.*

²² Straits Settlements Currency Committee, *Report*, pp. 6-7; *Minutes of Evidence and Appendices*, pp. 107-110.

the Secretary of State for the Colonies to have the subject investigated by experts.²³ The Straits Settlements Currency Committee, under the chairmanship of Sir David Barbour, who had been finance member of the Government of India, and a member of the Fowler committee, was appointed in November, 1902. In March, 1903 this committee recommended serious consideration of the establishment of a gold standard. It suggested that this could be done by gradually introducing a new Straits dollar, equivalent to the British dollar, demonetizing old dollars when the supply of new coins was sufficient, prohibiting the import of old ones and the export of new ones, and then stopping further coinage until the exchange value of the new dollar should rise to whatever point was considered desirable. Thereafter the Government would issue new dollars only in exchange for gold at the fixed rate. Gold coins would not be legal tender but the Government would give dollars for sovereigns, and sovereigns or bills of exchange on London for dollars.²⁴

On June 25, 1903 an order of the King in Council gave authority for such a plan. No indication of the ultimate parity was given, but it generally was accepted that 2 shillings per dollar would be chosen. Recoinage was begun at once, of new dollars of the same weight and fineness as the British dollar. The free movement of coin was not interfered with until October. The old dollars were demonetized in August, 1904. By the end of 1904 recoinage was completed, about \$35,000,000 of the new dollars having been minted.

Meanwhile, the price of silver, which had reached an all-time low of 46 $\frac{5}{8}$ cents (or 21 $\frac{1}{8}$ pence) per ounce in 1902, had begun to rise and continued fairly steadily upward to a high point of 71 $\frac{5}{8}$ cents (or 33 $\frac{1}{8}$ pence) per ounce at the end of 1906. This rise has been discussed by Kemmerer, who ascribed it in part to the rise of all commodity prices which accompanied the rapid increase of gold supplies during that period, and in part to the large demand for silver for European coinage and for India.²⁵ During 1904 and the first half of 1905 the exchange value of the Straits dollar fluctuated fairly closely with the price of silver, with a tendency to be relatively higher in view of the expected parity of 2 shillings.²⁶ By the middle of 1905 the price of silver had risen so that the bullion content of the dollar was worth more than 2 shillings. Finally, in January, 1906, after several weeks of violent fluctuations in exchange, the Governor fixed a rate of \$60

²³ Straits Settlements Currency Committee, *Report*, p. 7.

²⁴ *Ibid.*, pp. 12-14.

²⁵ Kemmerer, "The Recent Rise . . ."

²⁶ For a chart illustrating these movements, see Kemmerer, *Modern Currency Reforms*, p. 408.

= £7. This in effect set up a theoretical gold-dollar unit equivalent to $\frac{7}{60}$ of a pound (or 28 pence = 2s. 4d.), that is, containing $\frac{7}{60} \times 113.0016 = 13.1835$ grains of fine gold. This made the coinage ratio of the Straits dollar 28.40 to 1, and the bullion parity 72.7 cents (or 33.2 pence) per ounce.

At the same time the Governor proclaimed that currency notes of the Colony might be issued in exchange for gold in Singapore at the 28-pence rate. These currency notes had been established in 1899; they were covered by a 100-per-cent reserve, of which at least half had to be in coin, while the remainder was invested in British or Colonial securities. The system was under the control of Currency Commissioners. The Governor now authorized the commissioners to invite and accept at their discretion tenders for the issuance of notes in Singapore against telegraphic transfer on London at rates which would cover the expenses involved in bringing out equivalent gold from London to Singapore. If the gold were used to acquire silver for coinage, the seigniorage profit was to be placed in a separate gold reserve fund. These measures assured that gold, in Singapore or London, should be convertible into Straits dollars at a fixed rate, allowing for charges, but did not make any provisions for the reverse conversion of dollars to gold or sterling. They thus fixed a maximum rate of exchange, but did not fix any minimum rate. It was hoped later to be able to offer to redeem notes in actual gold, but there was no intention of establishing a gold-exchange standard and being ready to sell transfers on London at a fixed rate.

Meanwhile, the uncertainty as to the rate to be fixed, and the rising silver market, had caused a great deal of speculation in exchange at Singapore. A few, who guessed right, made large profits, but there were many more who lost and there was a general demoralization. One bank made large profits by taking a position in exchange instead of sticking to the more conservative practice of balancing purchases and sales of exchange.

Kemmerer has criticized the monetary-reform plan because no rate was set in advance, as it had been in India when the mints were closed in 1893 and the 1s. 4d. rate was officially promulgated by offering to give 15 rupees for a sovereign.²⁷ On the other hand, this policy has been defended by J. O. Anthonisz, late Treasurer of Straits Settlements, on the ground that business men in the Straits were fully accustomed to a fluctuating silver currency, and that it would have been impossible to predict the course of the silver market, so that if a rate had been set in advance it might not have proved practicable. More-

²⁷ *Ibid.*, pp. 433-444.

over, he argued that the 2s. 4d. rate was a fair representative of the average rate for the preceding 10 or 15 years, and so was preferable to the level at which it would have been set if based on the low price of silver in 1902 and 1903.²⁸

The continued rise in the price of silver during 1906 made even the 2s. 4d. rate too low for a 416-grain silver dollar. In January there had been a margin of about 10 per cent between the bullion value of the dollar and its exchange value, but by October silver had risen to 70 $\frac{5}{8}$ cents (or 32 $\frac{5}{8}$ pence) per ounce or close to the bullion parity of 72.7 cents (or 33.2 pence) per ounce. If the price of silver should go a little higher, there was danger that the coins would disappear from circulation.

To remedy this situation it was possible either to raise the sterling value of the dollar, or to decrease its silver content. Since by this time the new dollar had come to be accepted as equivalent to 2s. 4d. gold, and since notes were very largely taking the place of dollars, and in turn were accepted as 2s. 4d. gold, it was considered undesirable to change that parity. After some uncertainty as to the weight of the new dollar, in February, 1907 it was reduced to 312 grains, 0.900 fine; 50-cent pieces, which had been of a lower silver content than the standard dollar, were made proportional to the new dollar. This was a 25-per-cent reduction in the silver content of the dollar, and so reduced the ratio by one-quarter to 21.30 to 1, and raised the bullion parity by one-third to 97.0 cents (or 44.3 pence) per ounce. Before the recoinage the exportation of the old dollars had been prohibited and British sovereigns had been made unlimited legal tender. Moreover, the old 50-cent pieces, remaining from a time prior to the currency reform, and having a bullion parity of 81.2 cents (or 37.1 pence) per ounce, had been made unlimited legal tender.

Actually the peak of the silver price was passed in November, 1906, and the white metal did not again attain such a high level until during the World War. The recoinage, however, put the Colony in a better position to meet the wartime rise. No difficulty was experienced in getting the lighter dollars accepted, because their gold parity was assured. In fact, notes became increasingly the currency of the Straits Settlements.

One effect of raising the dollar to 2s. 4d. was a depreciation, in terms of dollars, of the book value of the sterling securities in the Currency Reserve Fund. Securities of the value of £1000, purchased when exchange was at, say, 20 pence, represented \$12,000, whereas at 28 pence they represented only \$8,571. To help meet this depre-

²⁸ Anthonisz, *Currency Reform in the Straits Settlements*, pp. 36-46.

ciation, the Government authorized the use of all income from the securities, part of which formerly had gone into the Colonial Treasury, and also made contributions from the Treasury.

At the same time, when gold accumulated in the fund in Singapore, it was found not to be needed there, and was shipped to London for investment in securities, so that more income might be available for the fund. Later, in the autumn of 1906, when exchange was tending to depreciate below the fixed parity, the Government desired to support it, and therefore offered to sell exchange on London. By this action, the lacking element of a gold-exchange standard was provided, and the Government later expressed its intention of buying and selling exchange on London at rates $\frac{5}{16}$ pence above and below the 2s. 4d. parity. Thus, as in India, a *de facto* gold-exchange standard was eventually set up.

5. *Philippine Islands*²⁹

The currency of the Philippines, at the time of the American occupation in 1898, consisted of a variety of silver coins, which circulated at a value somewhat higher than their bullion value because of scarcity. No gold had circulated since the early 1880's, and the importation of foreign dollars had been prohibited since 1877. Subsidiary silver coins were minted at Manila, and in 1897 some 6,000,000 "Alfonsino" pesos were coined in Spain and imported. Although these were about 8 per cent lighter than Mexican dollars, they circulated at par with them. Some Mexican dollars were smuggled in, but the prohibition was sufficiently enforced so that Mexican dollars had a higher exchange value in the Islands than in neighboring Hong Kong and China.³⁰

During the American military occupation, a large amount of American currency was brought in to pay wages and other expenses. The exchange rate was then about 50 cents to the peso or Mexican dollar, and "2 to 1" came to be looked on as a kind of par, although actually there was no par. The three Manila banks, two British and one Spanish, arranged with the Military Government to remove the prohibition against import of Mexican dollars, and in return agreed to keep the exchange rate at not less than 2 to 1, that is, to keep the peso from rising above 50 cents. They succeeded in doing this for two years, until the autumn of 1900, when the Boxer Rebellion in China created a large demand for silver and raised the price. For a

²⁹ This account of Philippine currency is based chiefly on Kemmerer, *Modern Currency Reforms*, pp. 243-388.

³⁰ Kemmerer, *op. cit.*, pp. 251-253.

time thereafter the banks maintained the rate at 2 to 1 by an arrangement which amounted to selling to the public the Government's own local currency balances and replacing those balances with American currency. To keep the Mexican dollar from appreciating further in the Philippines, a tax of 10 per cent was imposed on the export of the coins.

At the end of 1900, however, conditions changed. The price of silver began to fall and continued downward for two years. The problem now was to keep up the value of the peso, that is, to keep the exchange rate from rising above 2 to 1. The Philippine Commission, which had succeeded the Military Government, did this at first by paying out American currency and taking in local currency, but after January 1, 1902, it gave up the attempt and raised³¹ its official rate to 2.10, thereafter adjusting it at frequent intervals until it reached a maximum of 2.66 at the beginning of 1903. The government rates were not adjusted as rapidly as the market rates, so that the public and the banks usually were able to profit by the discrepancy between the two.

As a result of these difficulties with fluctuating exchange rates, the need of monetary reform soon was recognized. Three main lines were possible. The first was the continuance of a silver standard, but with a new American coinage. This was favored by export merchants and bankers for the same reasons that these classes had favored it in India and elsewhere. A second plan was the introduction of American currency. This appealed to government accounting officers and many other Americans because of its convenience. On the other hand, it was objected to by some who had given it more study, since it would be difficult to get the population accustomed to such a change. The dollar was considered too large a unit for the Philippine standard of living. There might be danger of counterfeiting American silver coins which were highly overvalued at the current low price of silver, and it was feared that if gold currency were in circulation it might be drained to China. A third plan was for the use of silver coins which would be maintained at a value equivalent to 50 cents gold to the peso.

The third plan, suggested by the Philippine Commission in January, 1901, and worked out by Charles A. Conant, was presented to Congress in 1902, but no agreement was reached. A bill for subsidiary coinage was passed, but, on account of its shortcomings, never was

³¹ It should be noted that, with the rate quoted in terms of pesos to the American dollar, "raise" and "lower," etc., have a meaning exactly opposite to what they have in India, China, Japan, and other countries where quotations are in terms of American dollars per unit of local currency.

put into effect. Finally, the third plan was embodied in the Philippine Coinage Act of March 2, 1903.³² This provided for a theoretical gold peso of 12.9 grains, 0.900 fine, or exactly one-half of the American dollar. No gold pesos were to be coined, but silver pesos, weighing 416 grains, 0.900 fine, were to be coined for government account. Subsidiary coinage was to be of the same weight and fineness per peso. Gold coins of the United States, at the rate of one dollar for two pesos, were to be legal tender for all debts, public and private; the new pesos were likewise to be legal tender, unless otherwise specifically provided by contract; debts existing before December 31, 1903 might be paid in legal-tender currency existing at the time of the contract. The Government of the Philippines was to take such measures as it might deem proper to maintain the value of the silver peso equivalent to the gold peso. Old peso coins were to be received temporarily at rates to be fixed by the Governor. Silver certificates could be issued against the deposit of the new pesos. The act also authorized temporary borrowing to the extent of \$10,000,000 to set the system in operation.

The Government of the Philippines immediately set about putting the act into effect, borrowing money on certificates of indebtedness and purchasing silver for coinage. It appointed Edwin W. Kemmerer, who served from 1903 until 1906, as expert adviser in getting the system organized. In carrying out the new coinage the Government purchased altogether some 12,000,000 ounces of silver at an average price of about 55 cents per ounce; further coinage needs were met by recoinage old coins withdrawn from government treasuries or accepted at a discount during the transition period. Strong pressure was brought to bear by banks and other interested parties to have the old currency redeemed at par, but the Government accepted the old pesos only at an official rate of 1.15 old pesos per 1 new peso. The old pesos usually commanded a better rate in the open market.

The new money was not well received by the public, because it was not accepted by shopkeepers as any better than the old, so that it was more profitable to change the new for the old before making purchases. To hasten the transition, the Government limited the time during which the old currency would be received for dues, and during which it would be legal tender, prohibited the importation of any silver-standard currency, and imposed heavy taxes on any contracts made or bank accounts kept in the old currency.³³ The success of these measures may be seen from the following quotation from the report

³² Hanna *et al.*, *Stability of International Exchange*, pp. 394-405.

³³ Hanna *et al.*, *Gold Standard in International Trade*, pp. 307-312.

for 1904 of the Chief of the Bureau of Insular Affairs of the War Department, speaking of the fact that the new gold-standard currency had become generally accepted:

The various steps taken by the civil government to gain this result were met by violent opposition and predictions of inevitable disaster, made to the government officials both in Manila and Washington, but in every case, as soon as definite legislative action had been taken, the atmosphere cleared, and the business interests commended, by acquiescence and co-operation, the action of the Government.

The Philippine Currency Act was passed by Congress April 3, 1903. The first new Philippine peso was placed in circulation July 23, 1903.

Since that time the Government has eliminated thirty or forty millions of debased currency and has substituted for it a currency based upon the gold standard without serious jar or dislocation, all accomplished within seventeen months. In the minds of financiers and bankers, this accomplishment is considered a wonderful achievement, unique in the history of the world.³⁴

The Philippine Coinage Act had left the maintenance of parity with gold to the Philippine Government. To implement this general provision, the Philippine Commission on October 10, 1903 passed the Philippine Gold Standard Act.³⁵ This provided that all proceeds of the sale of certificates of indebtedness (of the \$10,000,000 authorized), all seigniorage profits, all profits on the sale of exchange, and all other receipts on account of currency operations should be placed in a special trust fund, to be known as the Gold Standard Fund. This fund was to be used only to meet the expenses of the currency system and the payment of interest and principal of the certificates of indebtedness.

To maintain the parity of exchange, the Insular Treasurer was authorized to sell drafts on depositories of the fund in the United States, and these depositories were authorized to sell drafts on him. Such sales were to be in amounts of not less than \$5,000 or 10,000 pesos, and were to be made at a premium of $\frac{3}{4}$ of 1 per cent for demand drafts or $1\frac{1}{8}$ per cent for telegraphic transfers. These rates might be increased or diminished temporarily by the Secretary of Finance. There were also provisions for exchanging American paper currency, gold coin, or gold bars, for Philippine coin in Manila at the 2-to-1 par, and vice versa, with a charge equivalent to transportation costs in the case of gold.

By the Gold Standard Act, the Philippine Islands were given a gold-exchange standard which had been planned carefully, instead of a system developed from force of circumstances as in India and the

³⁴ *Ibid.*, p. 297.

³⁵ Hanna et al., *Stability of International Exchange*, pp. 409-413.

Straits Settlements. It worked successfully on the whole, and in later years the profit on recoinage operations, after the repayment of all loans, built the fund up to 43 per cent of the circulation by 1911. Since this was considered more than was necessary, the Philippine Government quite properly set a limit of 35 per cent, additional gains to revert to the Government Treasury. The Government also authorized the deposit of part of the Gold Standard Fund in Manila banks, and the investment of not over half of it in loans to municipalities and provinces for public works, and in loans to the Manila Railroad Company. This measure went against the fundamental principle of the gold-exchange standard, that the domestic part of the fund should be kept entirely separate from the internal circulating currency, and thus left the system with some elements of weakness.³⁶

Meanwhile, as in the Straits Settlements, the rise of silver in 1906 had threatened to attract the new peso to the melting pot. The new peso had a coinage ratio of 32.25 to 1, or a bullion parity of 64.0 cents (or 29.2 pence) per ounce. That is, if silver reached 64.0 cents (or 29.2 pence) per ounce, theoretically it would be profitable to melt up the new pesos and sell them as bullion, provided the excess was enough to cover melting, refining, and shipping costs. Moreover, without melting, they could circulate in China side by side with the Mexican and other dollars.³⁷ Conant in 1901 had recommended a somewhat lighter peso,³⁸ but when the Philippine Coinage Act was passed in 1903, the price of silver was around 48 cents (or 22 pence) per ounce and had been going down steadily for two years, so that 64.0 cents (or 29.2 pence) per ounce seemed a safe bullion parity. The steady rise of silver, however, brought the price above this point in November, 1905, and to a maximum of 71½ cents (or 33½ pence) per ounce a year later.

To meet the situation, the export of pesos or of silver obtained from them was forbidden, but this regulation could not be enforced completely, and many coins were smuggled out and got into circulation in China. In June, 1906 Congress, on recommendation of the Philippine Government, approved making future issues of silver certificates payable in gold or silver, thus allowing actual gold to play more part in the system. At the same time the Philippine Govern-

³⁶ Luthringer, *The Gold Exchange Standard in the Philippines*, pp. 14-34, discusses this point very fully.

³⁷ For a chart illustrating the movements of the exchange value and the bullion value of the peso, see Kemmerer, *Modern Currency Reforms*, p. 353.

³⁸ Hanna, *et al.*, *Stability of International Exchange*, p. 396. The Commission plan of 1900, approved by Conant, recommended a peso of 25 grams (incorrectly printed "grains" in the reference), 0.835 fine, containing 322.14 grains of fine silver as compared with 374.4 grains in the coin adopted in 1903.

ment was authorized to change the weight and fineness of the coins.

As a result of this authorization, the peso was reduced from 416 grains, 0.900 fine, to 20 grams, or 308.648 grains, 0.800 fine. This made the coinage ratio 21.27 to 1, and the bullion parity 97.1 cents (or 44.3 pence) per ounce, which put the peso in a slightly safer position than the rupee and the Japanese silver coins. At the time it seemed reasonable to believe that silver hardly could rise above 94.3 cents (or 43.1 pence) per ounce, the bullion parity of the rupee, in view of the vast stores of rupees that might be thrown on the market. At the same time, it was decided to make the subsidiary coinage, which originally had a silver content proportional to that of the peso, still safer from the melting pot, so these coins were given the weight of 20 grams to the peso but a fineness of 0.750, which made their bullion parity \$1.036 (or 47.3 pence) per ounce.

Recoinage was begun early in 1907 and was practically completed by 1911. There was some difficulty at first in getting the lighter coin accepted as equivalent in value to the original, but wide publicity and the exchangeability of the new coins for silver certificates and minor coins soon made the population accustomed to them.

6. *Latin-American Countries*

In addition to Mexico, many countries of Central and South America abandoned silver or bimetallic standards for some form of gold standard. In many cases, however, the actual currency was depreciated paper and there was little hard money of any kind in circulation. The experience of a number of countries, taken in alphabetical order, is sketched briefly here for the period prior to the World War. For the effects of the war, see Chapter XVIII, Section 5.

The Argentine Republic, when silver began to fall, was on a regime of inconvertible and greatly depreciated paper, although a variety of foreign silver coins circulated in some places. In 1881 a new law attempted to set up bimetalism at the already out-of-date ratio of 15.5 to 1; this was not successful, although the country did attain a brief interlude in 1883-84 when paper was convertible to gold, only to be followed by a relapse to inconvertible paper again.³⁹

Bolivia was on a nominally bimetallic, but actually silver, standard after 1872, with consequent depreciation in exchange rates. In 1904 to 1908 steps were taken toward the adoption of a gold standard, and although this was not fully carried out, gold bank notes, and

³⁹ See Williams, *Argentine International Trade under Inconvertible Paper Money, 1880-1900*, pp. 31-35, for a brief account of Argentine currency.

subsidiary nickel coins became the currency of the country. By the beginning of the World War most of the silver currency had been exported at times when a rise in the price of bullion made it profitable, or had been redeemed and disposed of by the Government.⁴⁰

In Chile, under a nominal bimetallism, which before 1873 overvalued gold, internal conditions led to a suspension of specie payments in 1878, so that the country was not greatly affected by the fall of silver; in the 1890's it attempted to adopt the gold standard.⁴¹

Costa Rica, the most advanced of the Central American republics, took steps in 1896 to establish a gold standard, and by 1900 had succeeded. Unlike its neighbors it was able to get rid entirely of the miscellaneous foreign coins which had made up a large part of the circulation.⁴²

In Guatemala, where there was nominally bimetallism at a ratio of about 15.51 to 1, the fall of silver caused the exportation of gold coins and a circulation consisting of silver. In 1894 excessive note issues led to exportation of silver, followed by government issues of debased coins, and by increasingly great note issues, so that from 1897 silver was entirely out of circulation.⁴³

Honduras, which had suffered from debased metallic money during much of the nineteenth century, was on a fairly satisfactory silver basis after 1879, and made no attempt to shift to gold, although there were some inconveniences to foreign trade from fluctuations in the price of silver.⁴⁴

In Nicaragua, which had been on a silver standard, the Government began the issue of large amounts of paper money after 1894, or about the time when other silver countries were considering monetary reforms. The resulting depreciation divorced the currency from silver, and, when a reform law was finally passed in 1912, the silver question was dead, and a gold-exchange standard, with a unit equivalent to the American dollar, was adopted.⁴⁵ Although the exchange standard was suspended after about a year of operation, the exchange rates were in fact kept near par, except for a short period, by the operations of the National Bank.⁴⁶

Peru, after the experience of a quarter century of depreciating silver, adopted the gold standard in 1897, with the Peruvian pound

⁴⁰ McQueen, *Currency, Exchange and Banking in Bolivia*.

⁴¹ See Fetter, *Monetary Inflation in Chile*, for Chile's monetary history.

⁴² Young, *Central American Currency and Finance*, pp. 189-199.

⁴³ *Ibid.*, pp. 11-34.

⁴⁴ *Ibid.*, pp. 91-95.

⁴⁵ Harrison and Conant, *Report Presenting a Plan of Monetary Reform for Nicaragua*, *op. cit.*

⁴⁶ Young, *op. cit.*, pp. 145-188.

equivalent to the English pound, and 25-gram, 0.900-fine silver soles retained as fiduciary currency. She remained firmly on the gold standard until the World War.⁴⁷

In El Salvador there had been an unsuccessful attempt in 1892 to establish a gold standard, but the silver standard was continued down to the World War.⁴⁸

7. Summary

In addition to the countries whose change to some form of gold standard has been described above, nearly all the principal nations of the world changed their monetary system from a silver standard or bimetallism to some form of gold standard during the period from 1870 to 1914. At the beginning of the World War there remained on the silver standard only China, the adjoining British colony of Hong Kong, French Indo-China, and a few Asiatic and Latin-American countries of minor commercial importance.⁴⁹ Not all of the countries which adopted the gold standard were able to maintain it, but when financial or political conditions forced them off gold they used inconvertible paper currency and did not revert to silver.

It is of interest to compare the experiences of India and of the five principal countries described in this chapter in changing from a silver standard to some form of the gold standard. In all of them, except Netherlands India, the change was adopted only after many years of depreciating silver currency, which undeniably had stimulated certain branches of their industry and export trade. There was considerable opposition to a gold standard on the part of the interests which had profited by declining silver. On the other hand, the import trade had been affected unfavorably, and the governments were burdened by the increasing cost of meeting their gold obligations. This latter force operated especially in India with its heavy Home charges. The final change to gold standards probably represented a fair compromise between the different interests involved.

The methods of change were diverse. In India, by closing the mints and starving the currency, the exchange rate was stabilized finally after it had fluctuated for five years through a range of about 25 per cent. Efforts to establish a scientific gold-exchange standard on the Lindsay plan were rejected and it was only after the troubles of

⁴⁷ Dunn, *Peru, A Commercial and Industrial Handbook*, pp. 249-250; McQueen *Peruvian Public Finance*, pp. 92-100.

⁴⁸ Young, *op. cit.*, pp. 63-66.

⁴⁹ *Annual Report of the Director of the Mint . . . 1916*, pp. 216-218, gives an incomplete table of the then current monetary standards and units.

1907-08 that the principles of this plan were adopted, and then only by implication rather than by statute. Except in an occasional emergency, however, the lack of provision for Reverse Councils did not cause much trouble, because of the usually large favorable balance of trade which India enjoyed.

The Dutch East Indies were a colony much more closely linked with the mother country than with other nations, and this fact made the early adoption of the home currency a reasonable and effective plan.

In Japan the change had long been contemplated by Count Matsukata. His arrangements for receiving the Chinese indemnity in gold, and his careful study of the circulation of Japanese yen abroad paved the way for what was perhaps the most skillfully managed of any of the reforms. In this he was aided by the fact that he was not hampered by waste of time in negotiations between home and colonial authorities, and perhaps by the advantages of a stronger central power than under democratic British and American institutions.

Mexico, as one of the world's chief producers of silver, had a somewhat different aspect of the problem, but it was felt that the advantages of stabilization would aid even the silver industry. Mexico, like Japan, had a strong central government. Although at first adopting a gold standard with silver circulation, she seized the opportunity offered by the rise in the price of silver to go on a straight gold standard.

The Straits Settlements rather muddled through the problem, adopting the Indian method of starving the currency, but without the Indian announcement of the ultimate parity. This resulted in highly harmful speculation and disruption of ordinary business. Although the gold-exchange standard was suggested from the beginning, it was not adopted till the plan was well under way.

In the Philippines, there was some excuse for the mistakes made in the early years, for the American military and civil authorities were thrown into a situation entirely new to them, and much harder for them to comprehend than it would have been for British colonial officials, accustomed to the conditions of Far Eastern trade. Later, the authorities were wise enough to obtain expert assistance from Conant and Kemmerer, and the plan finally adopted was theoretically good, and was carried out with satisfactory success.

The different countries met in different ways the rising price of silver in 1903 to 1906. Mexico boldly adopted a gold currency. The Straits Settlements and the Philippines recoined their new silver currency, which had just come into general use, but found comparatively

little difficulty in getting a lighter coin accepted, for the way had been prepared by the first reforms. Japan reduced the weight of her subsidiary coins, but this gave little trouble since the standard silver yen already had been replaced by notes and subsidiary coins. In India, the rupee was well above the melting point, and nothing had to be done.

Thus, at the beginning of the World War, the gold standard in some form was operating satisfactorily in all of these countries, except Mexico, where civil war had interfered. The various silver coins were safe from melting unless the price of silver rose above 94 cents (or 43 pence) per ounce, which was 22 cents (or 10 pence) above the maximum reached in 1906, and about 33 cents (or 15 pence) above the average level of the preceding twenty years.

CHAPTER XIV

PROPOSALS FOR MONETARY REFORM IN CHINA

The boy stood on the burning deck,
Whence all but he had fled.

FELICIA DOROTHEA HEMANS, *Casabianca*

1. *The American Commission on International Exchange, 1903-1904*

The penetration of foreign trade and new ideas into China was slow, but by the end of the nineteenth century both were gathering headway. The Emperor Kuang Hsu was influenced by Chinese reformers who had learned from the West, but he was prevented from carrying out his ideas by the Empress Dowager's *coup d'etat* of 1898. Soon after that, antagonism to everything new and foreign flared up in the Boxer outbreak of 1900, but after the storm, as not infrequently happens in China, there was a reaction to a much more receptive attitude.

In January, 1903 the Chinese Government joined with the Mexican Government in presenting nearly identical notes and memoranda asking "the co-operation of the Government of the United States in representations to other leading powers in favor of international concert of action relative to the silver question."¹ A commission, consisting of Hugh H. Hanna, Charles A. Conant, and Jeremiah W. Jenks, was appointed, and in company with a Mexican commission visited the principal capitals of Europe and conferred with government and central bank representatives,² as related in Chapter XIII, Section 3.

The commission drew up a tentative plan for a gold-exchange standard for China, somewhat similar to the Philippine system, providing for a silver coin about the size of the Mexican dollar, to be coined at a ratio of about 32 to 1 with respect to a theoretical gold unit, and for government regulation of the exchange rate by the purchase and sale of exchange on the principal financial centers of the world.³ The system was to be under the management of a foreign controller of the currency. This plan was discussed with the various Europeans consulted, because it seemed highly desirable, in view of European interest in the Boxer indemnity and in other matters of

¹ Hanna, *et al.*, *Stability of International Exchange*, pp. 42-46.

² *Ibid.*, pp. 12-13.

³ *Ibid.*, pp. 51-53.

Chinese finance, that international approval should be secured for any reform of Chinese currency.⁴ General approval of the plan in principle was secured from Germany, France, the Netherlands, Mexico, the United States, Great Britain, and Russia; the last two countries preferred to begin with the unification of Chinese currency on a silver basis before attempting to establish a gold standard.⁵

The commission returned to the United States in September, 1903, and reported the progress which it had made. In 1904 Professor Jenks proceeded to China to report to the Imperial Government and give it any assistance necessary in carrying out the proposed plan. He spent some time traveling in China to get a first-hand view of monetary conditions, confer with officials, ascertain the public attitude towards the plan, and explain it more fully.⁶ Later, in Peking, he consulted with a commission which had been appointed by the Chinese Government. He found that these officials tended to favor the unification of the currency on a silver basis, with no plans for a gold standard. He finally succeeded in convincing them of the advantages of a gold standard, but, because of the lack of interest on the part of the chief official on the Chinese commission, negotiations were delayed, and no action had been taken when Professor Jenks had to leave Peking in August, 1904, on account of the expiration of the appointment under which he was acting.⁷

The Jenks plan was never carried out, nor were any of the other plans proposed at about the same time, such as Sir Robert Hart's plan of 1903 for a gold standard with a silver currency, the tael to be fixed at 2s. 6d.; the rather impractical and naïve proposal in 1903 of Hu Wei-te, Minister to Russia, for a silver-dollar currency on a gold basis; the plan of Viceroy Chang Chih-tung for a unified tael currency on a silver basis; the plan issued by the Board of Revenue in 1905 for a gold standard, later altered to a silver standard; or the plan for first unifying the silver coinage and then placing it upon a gold basis, proposed by Wang Ta-hsie, Minister to Great Britain, in 1907.⁸

While nothing was accomplished toward a thoroughgoing reform, a national dollar coin was provided for in 1910, and came into circulation in 1911 at the outbreak of the first Revolution.⁹ Since it bore the name of the Manchu dynasty (*Ta Ching*) it was not destined to be widely popular after the Revolution.

⁴ *Ibid.*, pp. 13-14.

⁵ *Ibid.*, pp. 32-35.

⁶ Hanna, *et al.*, *Gold Standard in International Trade*, p. 14.

⁷ *Ibid.*, pp. 15-21.

⁸ Kann, *The Currencies of China*, pp. 368-386.

⁹ *Ibid.*, pp. 153-159.

2. The Vissering Plan, 1912-1914

In the spring of 1911 the Chinese Government negotiated with a syndicate of American, British, French, and German banks for a £10,000,000 loan, of which 70 per cent was to be used for currency reform. By agreement between the Four-Power Syndicate and the Chinese Government, Dr. G. Vissering, president of the Java Bank, was appointed as monetary adviser.¹⁰ This appointment was made just before the outbreak of the Chinese Revolution in the autumn of 1911, but, in spite of the political disturbance, Dr. Vissering carried out an extensive study and issued a report in July, 1912, with a supplementary report on a central bank in 1914.¹¹

In Dr. Vissering's report he pointed out that monetary conditions had become worse since the beginning of the Revolution, and that

it might seem best to begin with such modifications of the currency as would offer for the time being the best chances of success and the best security for the Government, for everyday life, and for general business.¹²

Dr. Vissering discussed the comparative advantages of gold-coin, gold-exchange, and silver standards. He rejected a gold-coin standard as involving coins too valuable for the low scale of living in China. The gold-exchange standard would give stability of prices, but required strong and able management; it usually had been applied to colonies backed by strong home governments. The silver standard required no management, but left prices to fluctuate, and did not solve the problem of variations in the relative value of copper and silver coins.¹³

Dr. Vissering considered that the great geographical extent of China and the variety of conditions existing in different parts would make the immediate universal introduction of a gold-exchange standard impracticable.¹⁴ He recommended, instead, that the existing silver currency be allowed to remain in circulation, and even to be increased, if necessary, but that a gold-exchange standard be started alongside it.¹⁵ He pointed out that the Chinese were well accustomed to fluctuations between various forms of silver and copper money, and that the addition of another unit would not create any great difficulties. He recommended that a central bank should administer a theo-

¹⁰ *Ibid.*, pp. 386-391.

¹¹ Vissering, *On Chinese Currency*, Vols. I and II.

¹² *Ibid.*, Vol. I. p. 2.

¹³ *Ibid.*, pp. 15-18.

¹⁴ *Ibid.*, pp. 18-25.

¹⁵ *Ibid.*, pp. 28-43.

retical gold currency, on which bank accounts and bank notes could be based. Thus a merchant could deposit silver currency, receiving credit in gold units at the rate of the day; when he withdrew money from his account, he would receive silver at the new rate of the day. Dr. Vissering compared this to the practice of the Amsterdam Wisselbank, which had provided a stable bank currency in a period when many different metallic currencies were in circulation. The bank itself would have to balance its operations by having its gold assets match its gold liabilities, and its silver assets match its silver liabilities, and not run any risks by taking a position in exchange. It could accomplish this by adjusting its exchange and discount rates. It was claimed that such a bank currency would facilitate foreign-trade operations and would grow in importance in the ports. Gradually the system would spread throughout the country, and pave the way for a possible eventual complete adoption.¹⁶

In regard to the unit, Dr. Vissering considered the Mexican dollar and the tael both too large for China's convenience, and proposed a unit of one-third of the then current value of the tael, or about 25 cents in American money.¹⁷ This eventually could be represented by a silver coin, when the Government was strong enough, on a coinage ratio of about 21 to 1, with subsidiary coins of 0.10, 0.01 and 0.005 units. Seigniorage would be kept as a special fund.¹⁸ He suggested that Amsterdam might be selected as a neutral center for the administration of the gold reserve, under one or more Hollanders with Chinese associates, and insisted that the central bank must be absolutely independent of the Government and of other banks.¹⁹

The outbreak of the World War and the continuance of civil war in China prevented any action on Dr. Vissering's plan. What has been proposed since and what has been accomplished in improving Chinese currency will be discussed in Chapters XXI, XXVIII, and XXIX.

¹⁶ *Ibid.*, pp. 43-56.

¹⁷ *Ibid.*, pp. 60-70.

¹⁸ *Ibid.*, p. 95.

¹⁹ *Ibid.*, pp. 104-106.

CHAPTER XV

THE WARTIME RISE IN THE PRICE OF SILVER, 1915-1920

For he sometimes shoots up taller than an India-rubber ball,
And he sometimes gets so little that there's none of him at all.

ROBERT LOUIS STEVENSON, *My Shadow*

The World War brought about an unprecedented rise in the price of silver, which was followed, in the postwar depression, by a slump to former levels. These movements had their origins in many countries, and their effects were world-wide. This chapter and the following one will discuss the main features of the rise and fall respectively. Particular forces and results in different parts of the world will be described in more detail in later chapters.

1. *Silver at the Beginning of the War*

The silver question had been settled for most countries by the end of the nineteenth century or soon after. All attempts to promote international bimetallism had failed, and by 1914 only China and a few minor countries remained on a silver standard. Silver, however, continued to be used almost universally for subsidiary coins. Some countries also had large stocks of silver coins of full legal tender, such as the American standard silver dollar (legal tender except where otherwise stipulated in the contract), and the French five-franc piece; since, however, these stocks were not being increased, they became relatively less important. The Indian rupee was of full legal tender and was being coined as needed; since it was stabilized at a fixed gold value and had a bullion parity well above the current market price of silver, it was in effect comparable to the subsidiary silver coinage of other countries. Fluctuations in the price of the white metal no longer were of political significance. It is true that the rise of silver in 1906 caused some difficulties to the countries which were changing to the gold standard, but it did not affect the rest of the world.

When the European War began in the summer of 1914, silver shared in the general slump which was felt by most commodities not immediately needed for military purposes. The price dropped in August to 52 cents per ounce, 0.999 fine, in New York (or 23 $\frac{7}{8}$ pence per ounce, 0.925 fine, in London) from a level of about 58 cents (or 26

pence) per ounce during the first half of the year. At this time Senator Smoot of Utah presented to Congress a bill which would authorize the Secretary of the Treasury to purchase within six months 25,000,000 ounces of silver produced within the United States, to anticipate needs for subsidiary coinage.¹ Since purchases had averaged only about 4,000,000 ounces a year for the previous 5 years, this was rather a large order. The bill was passed by the Senate after the Committee on Finance had reduced the quantity to 15,000,000 ounces, but it failed to pass the House. The editor of the *Commercial and Financial Chronicle* denounced the bill as seeking unjustified aid to a particular industry, when prospects in all industries were uncertain, and when the Treasury was in poor condition because of the reduction in imports and consequent loss of revenue.² This reasoning certainly was justified at the time, and yet, in view of later developments, the passage of the bill would have saved the Government a considerable sum.

2. *The Rise in the Price of Silver*

The price of silver remained low for more than a year, reaching a minimum of 46½ cents per ounce in New York in September, 1915 (or 22½ pence per ounce in London, in November, 1914). Then it began to rise, reaching a high of 77½ cents (or 37½ pence) per ounce in May, 1916, dropping back in the summer, and rising again nearly to the same peak by the end of the year. This was higher than silver ever had been since the closing of the Indian mints in 1893. In the spring of 1917 a sharp rise began which brought the price to a new peak of \$1.08½ (or 55 pence) per ounce in September, after which it dropped to about 85 cents (or 43 pence) per ounce at the end of the year. After the Pittman act was passed in April, 1918, as described in Chapter XVII, joint action of the British and American Governments kept the price pegged around \$1.00 per ounce in New York, and the equivalent in London, until May, 1919. When the peg was removed, the price shot up, reaching a final peak of \$1.37½ per ounce in New York in November, 1919 (or 89½ pence in London in February, 1920). The course of the silver price may be seen in detail in Chart 2 (page 11).

3. *Causes of the Rise*

The great rise in the price of silver from 1915 to 1920 was partly in sympathy with the general wartime rise of all commodity prices.

¹ *Commercial and Financial Chronicle*, Vol. 99, Aug. 29, 1914, pp. 564, 584.

² *Ibid.*

In the last two years of the period the London price also reflected the depreciation of the pound. There were, however, in addition, some very important special forces which acted on silver alone.³

The supply of silver was reduced considerably. The annual production immediately before the war had been about 225,000,000 fine ounces, of which 75,000,000 came from Mexico. From 1914 to 1917 inclusive, Mexican production was reduced, because of civil war, to about 30,000,000 fine ounces per year; in addition, there were restrictions on the export of the white metal from Mexico.

Coincident with a decreased supply was an increased demand. In addition to the normal private importation of silver into India for ornaments, the Government, in the two years ending March 31, 1914, had coined rupees extensively for the first time since 1908, and for this purpose had imported about 84,000,000 fine ounces. China had been importing silver on balance for five years ending with 1913. European coinage also had taken considerable quantities of silver. There was no surplus on hand at the beginning of the war.

The war itself created a very large demand for silver subsidiary coinage in almost all countries, belligerent and neutral alike. This began to appear in 1915 when the first slump had been succeeded by widespread industrial activity and employment. More men and women were working than ever before, wages were rising, and money was circulating in the hands of people who were accustomed to use ready cash rather than bank accounts. As a result the supply of circulating money, including silver, minor coins, and in some countries paper notes of small denominations, had to be increased greatly. Another factor was that with rising prices for the goods and services for everyday life, a larger amount of pocket money per person was needed even by those who always had had pocket money to spend.

This need of more currency began to make itself felt in the United States in 1916 and continued through 1920, as may be seen from Table 3.

The report of the Director of the Mint for the fiscal year ending June 30, 1921, stated:

The large demand of recent years has been met only by operating the mints for long periods of time on 24-hour and 16-hour schedules, and as a result of installing improved machinery and appliances designed for quantity production.⁴

A similar situation existed in Europe. In spite of the greatly increased production of subsidiary coinage, the supply could not keep up with

³ *Ibid.* Vol. 102, May 20, 1916, pp. 1846-47, gives an early contemporary discussion of the causes of the rise in the price of silver.

⁴ *Annual Report of the Director of the Mint . . . 1921*, p. 8.

TABLE 3
 UNITED STATES COINAGE OF SUBSIDIARY SILVER, 1913-1921

Calendar Years	Millions of Dollars
1913	3
1914	6
1915	4
1916	9
1917	29
1918	25
1919	11
1920	25
1921	1

SOURCE: Annual Report of the Director of the Mint, any year.

the demand for circulation and for hoarding; the newspapers had frequent stories of shortage of currency both in the United States and in other countries.⁵

In addition to the coinage needs of countries of the West, there was a very large demand for coinage in India. That country had even larger favorable trade balances than usual; the importation of silver and gold, except on government account, was prohibited, and as a result people hoarded rupees or melted them to make ornaments. In addition, large war expenditures were financed from India, including operations with Indian troops in Mesopotamia, Persia, and East Africa, which brought the rupee into use in a wider area.⁶ The Indian Government made large purchases of silver in the open market and also obtained 200,000,000 ounces of silver from American silver dollars under the Pittman Act, as described in Chapter XVII.

Chinese demand for silver did not make itself felt as soon as that of India, because Chinese trade at first was not so greatly stimulated by the war. During the four years from 1914 to 1917, China exported silver on balance to a total of nearly 100,000,000 fine ounces, part of which went to supply the needs of India. By 1918, however, China's trade was increasing, more currency was needed, and her demand was so insistent, that she absorbed in the three years from 1918 to 1920 about 200,000,000 ounces of silver. The Chinese demand was perhaps the most important factor in the rise of silver after the peg was removed in May, 1919.⁷

⁵ *Commercial and Financial Chronicle*, Vol. 103, Dec. 23, 1916, p. 2286; Vol. 105, Nov. 24, 1917, p. 2041; Dec. 22, 1917, p. 2405; Dec. 29, 1917, p. 2496; Vol. 106, May 25, 1918, p. 2165; June 15, 1918, p. 2493.

⁶ Babington Smith, *Report*, para. 13.

⁷ *Annual Report of the Director of the Mint . . . 1919*, pp. 155-157, quoting from Sharps & Wilkins.

4. Effects of the Rise

The effects of the rising price of silver on India and China will be discussed in Chapters XIX and XXI respectively. In many other countries it eventually tended to make the silver coins worth more as bullion than as money. The way in which a rising price of silver would pass the bullion parity of one country after another may be seen in the "thermometer scale" of Chart 3 (page 16). As a result there were many changes in the use of silver for coinage in many countries, as will be discussed in Chapter XVIII.

CHAPTER XVI

THE POSTWAR DECLINE IN THE PRICE OF SILVER, 1920-1933

Perhaps it was right to dissemble your love,
But — why did you kick me downstairs?

J. P. KEMBLE, *The Panel*

1. *The Movement of the Price of Silver, 1920-1933*

The maximum quotation for silver in New York, \$1.37½ per ounce, 0.999 fine, was reached in November, 1919, although actual sales were transacted in San Francisco at even higher figures.¹ The New York price remained near this level for three months. The London price, because of the continued depreciation of the pound, reached its maximum of 89½ pence per ounce, 0.925 fine, on February 12, 1920.

Soon after this the price of silver began to decline, and fell rapidly from March to June, often several cents a day, getting down to 80 cents per ounce in the latter month, and, after a slight reaction in the summer, ending the year around 70 cents per ounce. In 1921, the price fell as low as 52½ cents per ounce, but improved. From the autumn of 1921 to the summer of 1926, the price ranged between 62 and 74 cents per ounce; this narrow range represented rather more stability than the white metal had shown in the two decades before the World War. The price in London showed a little more variability in the earlier years, because of the depreciation of sterling, but after the return of England to the gold standard in 1925 the London price and the New York price were related closely, as before the war.

From August to October, 1926, the price of silver broke sharply, but then apparently settled on a new level, fluctuating most of the time for the next three years between 53 cents and 60 cents per ounce in New York (or about 24 to 27 pence per ounce in London).

In 1929 the price again began to decline and went down steadily through 1930, reaching an all-time low of 25¼ cents per ounce in New York (or 12 pence per ounce in London) in February, 1931. During 1931 and 1932 the price seemed to have stabilized at a new low level,

¹ *Annual Report of the Director of the Mint . . . 1920*, p. 8. Tables published in subsequent *Reports* show \$1.38¼ as the high in New York in 1919 and \$1.37½ in 1920, but the records of Handy & Harman show \$1.37½ and \$1.37 respectively.

fluctuating between 25 cents and 32 cents per ounce in New York, except for one brief rise in November, 1931. The price in London remained under 15 pence per ounce until England went off the gold standard in September, 1931, after which it reflected the depreciation of sterling. A final all-time low, of $24\frac{1}{2}$ cents per ounce, was reached in New York in December, 1932; this corresponded to a value ratio between gold and silver of 85 to 1.

From March, 1933 to January, 1934 the price of silver was rising fairly steadily in terms of depreciating American dollars, but in relation to gold the value ratio remained in the neighborhood of 80 to 1. A real, but temporary, rise in relation to gold occurred in 1934 and 1935 as a result of American silver policy, and will be discussed in Chapters XXVI and XXVII.

2. Causes of the Decline

As is evident from the above outline and from Chart 2 (page 11) which shows monthly prices, there were three distinct breaks in the price of silver: in 1920, in 1926, and in 1929-1930, separated by periods of fairly level price.

The first break, beginning in February, 1920, anticipated the ending of the postwar boom. This ending came a little later in the spring in America, but the demand for the products of India and China already was slackening; hence their ability to absorb silver on a large scale was lessened. Silver, a sensitive commodity, led the break in commodity prices, but cannot be said to have caused it.

The fairly level price from 1921 to 1926 was maintained by the balance of supply and demand. Chart 5 shows the supply and consumption of silver from 1920 to 1938 as estimated by Handy & Harman. The detailed data for supply, other than production, are given in Appendix I, Table C, and the detailed data for consumption are given in Appendix V, Table I.

On the supply side, production, which had fallen to about 160,000,000 ounces in 1920 and 1921, rose by 1923 to about 250,000,000 ounces and maintained that level through 1930. In the years from 1921 to 1926 there were also moderate and decreasing supplies of demonetized silver, resulting from European recoinages.

On the side of demand, a slightly increasing quantity was used in the arts. American coinage under the Pittman Act, as described in Chapter XVII, absorbed American silver until the middle of 1923, and in 1924 considerable European coinage demand set in. India and China, after a decrease in 1921, again took between them around

150,000,000 ounces a year. The Indian consumption was for ornaments; the Government purchased practically no silver, since the large wartime coinage had left an ample supply of currency in India. Silver imported into China went directly into the monetary system.

In 1926, at about the time that European supplies of demonetized silver seemed to be exhausted, there appeared the report of the Royal Commission on Indian Currency and Finance (Chapter XX, Section 2) which looked toward the sale of demonetized rupee silver to the extent of at least 200,000,000 ounces over the next ten years. This announcement precipitated a drop in price of about 10 per cent, which apparently represented the market's appraisal of the effect of those expected sales.

Sales by the Indian Government were small in 1927, but beginning in 1928 they were in the neighborhood of 30,000,000 ounces per year. At about the same time the supply of demonetized silver from other countries revived, so that the total annual supply of silver on the market during the years 1928 to 1930 was over 300,000,000 ounces per year. Meanwhile the coinage demand in Western countries declined. India and China together took over 200,000,000 ounces in each of those years; in the two latter years they were able to do this only at a falling price of silver. The Kemmerer proposal for a gold-exchange standard in China (Chapter XXI, Section 7) was announced early in 1930 but had been anticipated in 1929. This accelerated the decline in price, as did the adoption of a gold-exchange standard by Indo-China in 1930. By 1931 the world depression had cut down the export trade of India and China; this was reflected in a decrease of their imports in general and of their import of silver in particular, which was cut in half. In 1932 it was cut in half again, to about 50,000,000 ounces for the two countries, and in 1933 India's net absorption was down to 10,000,000 ounces, while China exported 15,000,000 ounces.

3. Speculative Stocks of Silver

With the two best customers for silver thus out of the market, it is not strange that the price of silver remained low down to 1934. In fact, it is surprising that it did not fall lower. The explanation perhaps may be seen in the large "Unaccounted" consumption shown in 1933. There is something of an unaccounted area each year, since statistical information is not adequate to estimate the destination of every ounce of silver. For 1933, however, the unaccounted item ran

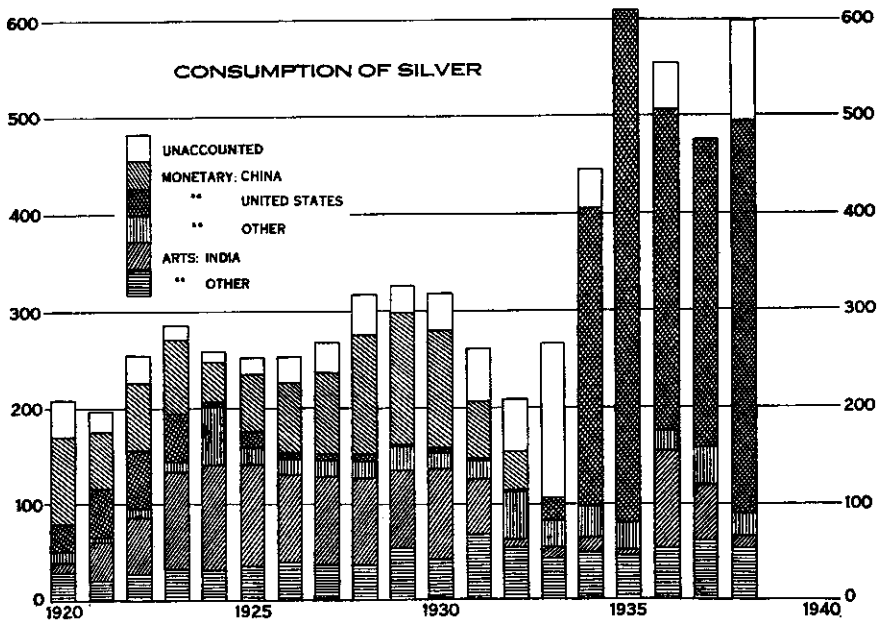
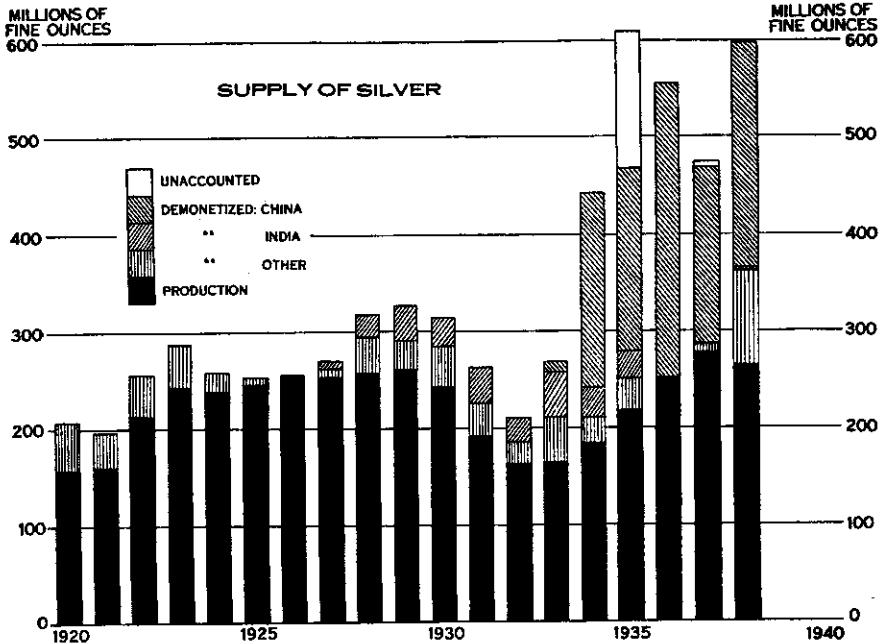


CHART 5.—SUPPLY AND CONSUMPTION OF SILVER, 1920-1938

to over 160,000,000 ounces. This amount, and perhaps some unaccounted for in 1931 and 1932, represented silver which was being held by speculators for a rise. In normal times, little silver was held in either the New York or the London market. The white metal always could be disposed of at a price, for it could be sent to China, where it was primary money, and exchange on New York or London could be purchased with it there. In 1932, however, there began an accumulation of silver by speculators in the hope of American government action which would increase the price. When America went off the gold standard in the spring of 1933, there was a desire to invest in commodities that would serve as a protection against inflation, and silver was chosen by many for this purpose. This choice was stimulated by the increasing agitation for inflation in general and for silver legislation in particular.

By early 1934, over 100,000,000 ounces of silver were stored in licensed depositories of the New York Commodity Exchange.² Since this figure represented chiefly silver held by persons operating on the exchange, and did not include silver hoarded by others in safe deposit vaults or elsewhere, it was not indicative of total silver holdings. The total held in New York was estimated as high as 200,000,000 ounces.³ Holdings in London and elsewhere perhaps brought the total world supply of speculatively held silver to 250,000,000 or 300,000,000 ounces.

If it had not been for these speculative purchases, the price of silver probably would have declined in terms of gold in 1933; that is, it would not have risen as much as it did in terms of paper dollars. These holdings, amounting to more than a year's normal world production, were a potentially bearish factor in the silver market at the beginning of 1934.

² *Commercial and Financial Chronicle*, Vol. 138, Feb. 10, 1934, p. 971.

³ Ladd, "What about our Silver Hoarders?"

CHAPTER XVII

THE PITTMAN ACT OF 1918

Take my silver . . .
Old Hymn.

1. *The Need for Silver in India*

In the autumn of 1917 (see Chapter XIX, Section 3) the Government of India was having great difficulty in securing enough silver to provide for rupee circulation and for an adequate reserve behind the paper currency. Unless more silver could be procured, there was danger of uprisings in India which would handicap seriously British participation in the World War.

The British Government, therefore, on behalf of the Government of India, began negotiations with the United States Government to arrange for the control of American silver production, and for the rationing of the product between the British and American Governments at a fixed price.¹ Conferences were held with American silver producers, and after investigation of costs a general agreement was reached that \$1.00 per fine ounce would be a fair price. This was above the current market, but would allow for production from some mines that could not operate at a lower price on the basis of current costs.

2. *The Passage of The Pittman Act*

The quantity of silver that could be allotted to India from new American production, however, was quite inadequate for her needs, and it was urgent that more silver be procured. It was suggested that some of the 500,000,000 silver dollars lying in the Treasury as a reserve against silver certificates in circulation might be spared to meet the Indian emergency. The Treasury Department and the Federal Reserve Board drew up a bill.² Senator Key Pittman of Nevada and

¹ *Commercial and Financial Chronicle*, Vol. 105, Nov. 17, 1917, p. 1938; Dec. 29, 1917, p. 2496.

² For the Treasury Department's history of the bill, see letter of Seymour Parker Gilbert, Under Secretary of the Treasury, to Senator Pittman, Aug. 25, 1923, in *Commercial and Financial Chronicle*, Sept. 29, 1923, Vol. 117, pp. 1419-21; for Senator Pittman's own account, see *ibid.*, Vol. 115, Sept. 9, 1922, pp. 1156-57.

other members of Congress from silver states were consulted. Although India's need provided an excellent opportunity to get rid permanently of these dollars which formed an anomalous element of our currency system, such a plan naturally would not have been acceptable to the silver states, which had some justification for feeling that they had a vested interest in the perpetuation of the silver element of our currency. To secure their support, provision was made for the replacement of the dollars by purchase of silver when it should be available again. The price of \$1.00 per fine ounce, already settled for domestic production, was agreed upon for the sale and the repurchase. As it happened, this was almost exactly what the silver in the coins had cost.³

The bill, after being presented to the Banking and Currency Committee of each House, was given to Senator Pittman to be introduced in the Senate, and generally has been called by his name, although he was not the author of it. It was brought before the Senate on April 9, 1918. In view of the delicate situation in India, which rapidly was becoming acute, publicity was not desired; senators were informed privately of the reasons for the bill, and it was passed with little debate. The original plan provided for melting and selling not more than 150,000,000 silver dollars;⁴ the bill as presented increased this figure to 250,000,000;⁵ it was finally amended to 350,000,000.⁶ Another very important amendment, proposed from the floor by Senator A. B. Fall of New Mexico, provided that the silver to be repurchased should be "the product of mines situated in the United States and of reduction works so located."⁷ The bill was passed by the Senate on April 18, by the House, without change, on April 22, and was signed by President Wilson on April 23, 1918.

The Pittman act provided that the sale of bullion should be at a price of not less than \$1.00 per fine ounce, and that the repurchase should be at the fixed price of \$1.00 per fine ounce, delivered at the mints. It also provided that, if necessary, silver derived from the dollars might be allocated to the purpose of making subsidiary coins, such allocations being regarded as sales, to be balanced by repurchases. The loss of seigniorage, that is 29.29+ cents per fine ounce of silver, representing the difference between the coined value and the sale price as bullion, was to be made up by an appropriation from the

³ *Annual Report of the Director of the Mint . . . 1894*, p. 17, shows average cost to have been \$1.0093 per fine ounce.

⁴ *Commercial and Financial Chronicle*, Vol. 106, p. 338, Jan. 26, 1918.

⁵ *Ibid.*, Vol. 106, Apr. 13, 1918, pp. 1513-15.

⁶ *Ibid.*, Vol. 106, Apr. 27, 1918, pp. 1739-40, gives the full text of the act.

⁷ *Ibid.*, Vol. 117, Sept. 29, 1923, p. 1421.

Treasury. This loss, of course, would be recaptured from the seigniorage realized when new dollars should be coined from purchased silver, so that in the end the Government would suffer no loss. Provision was made also to replace the silver certificates in circulation, which would have to be called in to release the dollars, by Federal Reserve bank notes, which would be backed chiefly by government securities, and would require only 5 per cent gold reserve.

3. Sales under the Pittman Act

Immediately on the passage of the act, the mints began melting up dollars from the free stock in the Treasury, that is, those not backing silver certificates,⁸ while the Federal Reserve banks and their member banks began the replacement in circulation of silver certificates by newly-issued Federal Reserve bank notes.⁹ The silver actually was sold at \$1.01½ per fine ounce, the 1½ cents being to allow for the expenses of melting and of recoining.¹⁰ The Government, carrying out the earlier arrangements with American silver producers, kept the price of other silver pegged at the same figure in the New York market; the London price was pegged at the equivalent.

A total of 259,121,554 silver dollars were melted and sold to the British Government for the Indian Government, realizing 200,032,325.64 fine ounces.¹¹ The bullion was shipped to India as fast as it was ready, and the operation was completed in May, 1919. In addition, 11,111,168 silver dollars were allocated to subsidiary coinage, producing 8,589,730.13 fine ounces.¹²

4. Purchases under the Pittman Act

Toward the end of 1919, and at later times, Representative Louis T. McFadden of Pennsylvania tried to have the purchase clause of the act repealed, but did not succeed.¹³ In May, 1920 the price of silver dropped below \$1.00 per ounce. The Director of the Mint immediately began the purchase of silver bullion at the stipulated price of \$1.00 per fine ounce,¹⁴ under regulations which assured that the silver pur-

⁸ *Ibid.*, Vol. 106, May 4, 1918, p. 1846.

⁹ *Ibid.*, Vol. 106, May 25, 1918, p. 2167.

¹⁰ *Ibid.*, Vol. 107, Aug. 17, 1918, p. 646.

¹¹ *Annual Report of the Director of the Mint . . . 1919*, p. 102.

¹² *Annual Report of the Secretary of the Treasury . . . 1923*, pp. 73-77.

¹³ *Commercial and Financial Chronicle*, Vol. 109, Dec. 20, 1919, p. 2313-14; Vol. 110, Jan. 17, 1920, pp. 207-208; Vol. 112, Feb. 26, 1921, pp. 790-791.

¹⁴ *Annual Report of the Director of the Mint . . . 1920*, p. 8.

chased represented actual American production.¹⁵ Thereafter, as long as purchases were under way, the New York official price for American silver was 99+ cents per ounce, 0.999 fine. This was the basis for settlement between smelters and miners; the difference of a fraction of a cent from the government price of \$1.00 represented transportation from smelter to mint and the adjustment between the government basis of 1.000 fine and the New York basis of 0.999 fine.¹⁶ At the same time, another price was quoted for foreign silver; this usually was well below \$1.00, and was under 70 cents per ounce for the greater part of the period during which purchases were made.

Purchases under the act continued for about three years. Coinage of dollars did not begin until February, 1921, because the mints still had been extremely busy during 1920 in the manufacture of subsidiary and minor coins.¹⁷ The coinage was carried on as rapidly as possible in order to convert the dead stock of bullion into dollars which could be used as reserve for silver certificates, and so allow the retirement of the Federal Reserve bank notes and the government securities behind them.¹⁸

Announcement was made from time to time of the progress of purchases. In August, 1922 it was expected that silver purchases would continue nearly to the end of 1923.¹⁹ Since American producers would receive no more bonus after purchases were completed, they saw the necessity of action to perpetuate the benefits which their industry had been receiving. An attempt was made to have a congressional commission appointed to study the question of silver, but this was defeated in the House; the Senate, however, on March 3, 1923 provided for a Commission of Gold and Silver Inquiry, to study the production and use of both metals.²⁰ The members appointed to this commission were Senators Tasker L. Oddie and Key Pittman of Nevada, Thomas Sterling of South Dakota, Frank R. Gooding of Idaho, and Thomas J. Walsh of Montana.

5. *Disputes between Silver Producers and the Treasury*

Soon after the appointment of the commission the Director of the Mint announced that silver purchases under the act would be

¹⁵ *Commercial and Financial Chronicle*, Vol. 110, June 19, 1920, pp. 2530-31.

¹⁶ *Ibid.*

¹⁷ *Ibid.*, Vol. 112, Feb. 26, 1921, p. 790; *Annual Report of the Director of the Mint . . . 1921*, p. 8.

¹⁸ *Annual Report of the Director of the Mint . . . 1922*, p. 7; *ibid.*, 1923, p. 7.

¹⁹ *Commercial and Financial Chronicle*, Vol. 115, Aug. 26, 1922, p. 917.

²⁰ *Ibid.*, Vol. 116, Mar. 17, 1923, pp.1122-23; Commission of Gold and Silver Inquiry, *Serial 4*, pp. 1-3.

completed by July 1, 1923.²¹ As this was considerably sooner than had been expected from previous announcements, strong protest arose from silver producers.²² The reason that the time of completion was advanced in comparison with expectations was threefold. In the first place, the rate of production had increased.²³ In the second place, the Treasury had accepted offers of a total of 12,000,000 ounces from smelting companies for future delivery of silver already in process. Since different methods of smelting required different lengths of time, it was considered equitable to do this in order that American silver might be purchased up to the end in the order of its actual extraction from the earth. In this way no miner would be penalized because his ore had to go through a long smelting process.²⁴ In the third place, the Secretary of the Treasury had revoked allocations of Pittman-act silver originally made for the production of subsidiary coinage, but not needed for that purpose.²⁵

There ensued a lengthy correspondence between Senator Pittman, on behalf of the silver interests, and S. Parker Gilbert, Jr., Under Secretary of the Treasury.²⁶ The revocation of allocations for subsidiary coinage was the principal point at issue. In the opinion of the Comptroller General, the Treasury had authority to revoke the allocations. Senator Pittman claimed that it had not the authority, and moreover that the actual silver obtained from melted dollars had been coined into subsidiary silver and had been replaced by miscellaneous silver from mint stocks. The Treasury maintained its position, and suggested that the matter could be taken to the courts if the silver producers so desired. They did not so desire; Senator Pittman instead succeeded in getting the Senate to pass, on May 29, 1924, a bill calling for the purchase of 14,589,730.13 ounces at \$1.00 per ounce, to make up for the Treasury's revocations; this bill, however, was not acted on by the House.²⁷ Another attempt to pass such legislation in 1926 was strongly opposed by Secretary Mellon, and it met with no success.²⁸

²¹ *Commercial and Financial Chronicle*, Vol. 116, Apr. 7, 1923, p. 1484.

²² *Ibid.*, Vol. 116, Apr. 14, 1923, p. 1603.

²³ *Ibid.*, Vol. 116, June 30, 1923, pp. 2941-42. United States production in 1920, 1921, and 1922 had been about 55,000,000 ounces per year; in 1923 it rose to 73,000,000 ounces; Merrill, *Summarized Data of Silver Production*, p. 18.

²⁴ *Commercial and Financial Chronicle*, Vol. 116, Apr. 28, p. 1857.

²⁵ *Ibid.*, Vol. 116, Apr. 14, 1923, p. 1603. See also *Annual Report of the Secretary of the Treasury . . . 1923*, p. 73-77, for full account.

²⁶ *Commercial and Financial Chronicle*, Vol. 116, May 12, 1923, p. 2073-74; June 9, 1923, pp. 2589-90; June 30, 1923, pp. 2941-42; Vol. 117, Sept. 19, 1923, pp. 1419-21. See also remarks of Senator Pittman in Commission of Gold and Silver Inquiry, *Serial 4*, pp. 12-17.

²⁷ *Commercial and Financial Chronicle*, Vol. 118, June 21, 1924, p. 3033-34.

²⁸ *Ibid.*, Vol. 122, Mar. 13, 1926, pp. 1400-01.

Another point of dispute between Senator Pittman and the Treasury was based on the fact that smelters paid miners on the basis of 95 per cent of the estimated metal content of the ore. This was in effect a 5-per-cent charge for smelting but Senator Pittman argued that it meant that only 95 per cent of the estimated quantity of metal was realized from the ore and that therefore only 95 per cent of the Treasury's purchases from the smelters really represented American silver, the rest being foreign silver; accordingly he demanded that the Treasury should purchase 5 per cent of 200,000,000 ounces or an additional 10,000,000 ounces. This argument was disposed of in one of Mr. Gilbert's letters.²⁹

6. *Appraisal of the Pittman Act*

The Pittman act must be judged as a war measure, and not as a monetary one. It adequately fulfilled its purpose of aiding one of our allies in a very serious emergency. This alone would have justified it, even if it had cost the country money. As it was, it cost nothing, for the seigniorage lost by melting was to be gained by recoinage. It would have been desirable to get rid of the silver dollars permanently, accepting the loss of 29.29+ cents per ounce as balancing the original seigniorage realized when the coins were minted, during the period from 1878 to 1904, but it would not have been practical politics to propose such a plan, for it would have alienated the support of the silver-state senators and prevented or at least delayed the passage of the bill.

As far as American silver producers were concerned, the Pittman act was, of course, a very profitable measure. It enabled them, in effect, to make a short sale of several years' postwar production at a high wartime price, while the Government loaned them, free of charge, the ready metal with which to make immediate delivery. Nevertheless, as the act served its war purpose, and did not cost the country a cent, the benefit to the silver producers hardly can be grudged them. There is much more to be said in defense of the Pittman act than of many other war measures, and of many other silver bills, proposed or enacted.

²⁹ *Ibid.*, Vol. 117, Sept. 29, 1923, pp. 1419-21.

CHAPTER XVIII

DECREASED USE OF SILVER IN COINAGE

It is not now as it hath been of yore.

WILLIAM WORDSWORTH,

Ode on the Intimations of Immortality

1. *The Price of Silver and Bullion Parities*

The price of silver, as early as September, 1917, rose above the bullion parities of the silver coins of many countries which had adopted the gold standard around 1900. The post-Armistice rise, combined in some cases with currency depreciation, threatened subsidiary coins of the white metal throughout the world. As a result, silver coins disappeared from circulation in many countries, and in others such disappearance was prevented only by government action of various kinds. Even when the price of silver returned to normal levels, the memory of its 1920 peak was influential in determining the bullion parity of silver coins provided for under monetary reforms.

This chapter will discuss the action taken in different countries to protect silver coins from the melting pot, and the changes in bullion parities which are shown by the difference between the two sides of Chart 3 (page 16). The particular case of India will be discussed in the two following chapters.

2. *United States*

The price of silver in New York reached the bullion parity of the silver dollar, that is, \$1.29+ per ounce, 0.999 fine, in November, 1919, and remained above it for two or three months; the maximum of \$1.37½ cents in November was still under the bullion parity of subsidiary silver coins, that is, \$1.38+ per ounce.

Under the operation of the Pittman act, described in Chapter XVII, about half of the 500,000,000 silver dollars in the Treasury had been melted and sold to India, at \$1.00 per fine ounce, plus 1½ cents to cover expenses. Most of the remainder were represented by silver certificates in circulation. There was no law against melting American coins, and apparently it would have been profitable for the public to secure silver certificates, demand silver dollars in redemption of

them, melt up the dollars, and sell the bullion.¹ It does not appear from contemporary literature that this was done to any extent. It would have taken a certain amount of time and expense, and there would have been loss in the case of worn dollars; moreover, if it had been attempted on any large scale, special legislation might have been enacted to prohibit it; in any case, silver bullion could be exported only by government license.

The Treasury, however, undertook such an operation on its own account. It considered undesirable any further increase in the price of silver that might threaten dollars and subsidiary coins more seriously. No steps were taken toward reducing the silver content of the coins, but arrangements were made between the Treasury and the Federal Reserve Board to release silver dollars that were free in the Treasury, that is, not held as reserve against certificates. These dollars were turned over to American banks with branches in the Orient, to be sold there at a commission, the profit above coin value going to the Government. It was expected that this operation would keep the price of silver and the Chinese exchange from rising further. Under this plan a total of about 29,000,000 silver dollars was thus disposed of between November, 1919 and May, 1920.² This action was entirely separate from the operation of the Pittman Act; these coins were sold, not at \$1.00 per ounce, with a loss of seigniorage, but around \$1.35 per ounce, with a profit of about 6 cents per ounce. They were not replaced from new purchases, and thus represented a permanent decrease in the country's stock of silver dollars.

Members of the Commission of Gold and Silver Inquiry later protested against sales of silver. Senator Charles S. Thomas of Colorado made a lengthy investigation of the matter and argued that these sales should be treated as under the Pittman act, and that the Treasury should be required to repurchase equivalent American silver.³ No action, however, was taken. It would seem that the Treasury was perfectly within its rights in disposing of the silver dollars at a profit; and that it acted wisely, thus forestalling private profits on similar operations and perhaps preventing a rise of silver which would have threatened even the subsidiary currency.

The possibility that the price of silver might rise above the \$1.38+ bullion parity of subsidiary coins led to the introduction of a bill in the House of Representatives to reduce the weight of these coins

¹ *Commercial and Financial Chronicle*, Vol. 109, Nov. 8, 1919, p. 1746; Nov. 29, 1919, pp. 2030-31.

² *Ibid.*, Vol. 109, Dec. 13, 1919, p. 2215; *Annual Report of the Director of the Mint, 1920*, pp. 8-9.

³ Commission of Gold and Silver Inquiry, *Serial 7*, pp. 28-37.

to 300 grains to the dollar, making the bullion parity \$1.776 per ounce, 0.999 fine. Government officials did not believe that this was necessary, and no action was taken on the bill. Silver for subsidiary coinage was obtained by melting dollars under the provisions of the Pittman act.⁴

3. *Philippine Islands*

The silver peso of the Philippine Islands had a bullion parity of 97.1 cents (or 44.3 pence) per ounce, and the subsidiary coinage a bullion parity of \$1.036 (or 47.3 pence) per ounce. These coins, therefore, were endangered when the price of silver reached \$1.08½ (or 55 pence) per ounce in September, 1917. The situation in Manila at that time may be illustrated by the following extracts from the daily papers:

Where is the silver change of coin of the realm gone to? This is the question now asked in all quarters of Manila, but apparently an answer is not yet forthcoming. That silver coin is fast disappearing from circulation, every resident of Manila has been made to feel recently. Stores on the Escolta and everywhere are finding it difficult to make change, while in the markets, vendors and stall holders will not change a bill even at the expense of losing a purchase. A two-peso bill may not be changed for the asking, and even an offer of purchase will not induce a Chino storekeeper to change the smallest paper money.

. . . At Clarke's refreshment emporium the management had to accept two chits from customers on account of its inability to make change. Cigar stands and establishments where the Manila public are wont to congregate, found themselves yesterday in the same predicament, while yesterday the Malabon Ciné had to close for the night at nine o'clock for the same reason.

Certain Chinese are out buying all the silver change they can lay hands on. It was stated yesterday in certain quarters that offers of seven centavos over the peso were being offered by certain silver manipulators.⁵

Sunday, the effect of the hoarding of the subsidiary coins and the peso, began to be apparent on the street car lines. Meralco conductors reported from all parts of the city, particularly those districts where the cockpit crowds were to be found, an unusual amount of paper currency presented for fares. So great was this condition on some lines that the conductors ran out of change completely.⁶

The difficulty was felt chiefly in the case of subsidiary coins, although they had a higher bullion parity than the peso, because the peso was to a large extent represented in circulation by silver certificates of 2, 5, and 10 pesos. To relieve the small-change situation, the Government arranged for the National Bank of the Philippines and

⁴ *Commercial and Financial Chronicle*, Vol. 109, Dec. 13, 1919, p. 2216.

⁵ *Manila Daily Bulletin*, Sept. 18, 1917.

⁶ *Manila Times*, Sept. 18, 1917.

the Bank of the Philippine Islands to issue bank notes in denominations of 1 peso, and 50, 20, and 10 centavos.⁷ This action, together with strict precautions against the clandestine export of silver coins, and a recession in the silver price to nearer the bullion parity, restored normal conditions in October.⁸

The danger to the coins continued when silver was pegged around \$1.00 an ounce, and increased when it rose above that level in 1919, but it was believed by the authorities that the efficient customs secret service prevented the export of silver coins in any quantity.⁹ Recoinage with a lower silver content was contemplated in early 1920,¹⁰ but the subsequent fall in the price of silver removed the necessity, and no action was ever taken.

The workings of the gold-exchange standard in the Philippines were upset during the postwar period, partly because of decreased exports after the war boom, and partly because the Currency Reserve Fund, which had been constituted in 1917 by the amalgamation of the Gold Standard Reserve Fund and the Silver Certificate Fund, was tied up in investments and in a deposit in the badly-managed Philippine National Bank.¹¹ As a result, the Government in 1920 had to raise its price for exchange on New York to 11 per cent premium for telegraphic transfers,¹² and toward the end of 1921 had to suspend sales entirely for about a year.¹³ Conditions improved in 1922, the Currency Reserve Fund was replaced by a Gold Standard Fund and a Treasury Certificate Fund, and the gold-exchange standard again was put into operation on practically the same basis as in 1903.¹⁴ After the United States went off gold in 1933, the peso was maintained at 50 cents currency instead of 50 cents gold. In June, 1934 Congress passed an act granting the Philippine Government an appropriation of some \$23,000,000, representing that Government's share of the profit on the devaluation of the dollar, as based on its bank balances held in the United States on January 31, 1934.¹⁵ There was opposition to this act at the time and subsequent attempts have been made to repeal it.

⁷ *Annual Report of the Governor General of the Philippine Islands, 1917*, pp. 103-104.

⁸ *Ibid.*

⁹ *Ibid.*, 1919, p. 108.

¹⁰ *Ibid.*, pp. 17, 108.

¹¹ *Ibid.*, 1920, pp. 78-81.

¹² *Ibid.*, p. 6.

¹³ *Ibid.*, 1922, p. 111.

¹⁴ *Ibid.*, pp. 111-112.

¹⁵ Luthringer, *The Gold-Exchange Standard in the Philippines*, pp. 249-252. This book should be consulted for a complete account of the wartime and postwar working of the system.

4. Straits Settlements

In the Straits Settlements, as in the Philippines, the rise of silver in the summer of 1917 brought currency troubles. The bullion parity of the dollar and the half dollar was 97.0 cents (or 44.3 pence) per ounce, and that of the subsidiary coins was \$1.083 (or 49.4 pence) per ounce. The price of silver passed the dollar parity before the end of August, 1917, and early in September passed the subsidiary-coin parity. The silver dollar had been replaced in circulation to a considerable extent by currency notes, which were acceptable to all classes of the population. Since the notes were redeemable in silver dollars, however, there was danger that there would be a demand for the coins, which had become worth more as bullion than their 2s. 4d. par. Accordingly the Legislative Council on September 7 rushed through an ordinance, which gave the Government authority by proclamation to defer redemption of currency notes. A proclamation was issued putting this suspension of specie payments into effect, and was renewed from time to time until December 6, 1920.¹⁶ There was some objection in the Legislative Council to this step, it being suggested that a reduction of the silver content, as in 1907, would be preferable. This was considered impracticable at the time, because the Indian mints, on which the Straits Settlements depended, were working to capacity on their own coinage. The suspension of specie payments did not affect the maintenance of the 2s. 4d. par, and there was no loss of public confidence in the note issue.

The effect on the subsidiary currency of the rise in the price of silver was more troublesome. There was not only a large population of Chinese, as in the Philippines, but also many Indians. Both classes took every opportunity to make small exchange profits. When silver passed the subsidiary-coin parity, they began to hoard the coins. By the beginning of September the sudden shortage of small silver was noticeable and was causing inconvenience to the public.¹⁷ The banks at first tried to supply all demands, but stocks of the coins were inadequate to meet the call from hoarders. On September 12 the Government appointed a commission to inquire into the causes and suggest remedies.¹⁸ On September 26 the Government issued regulations which forbade all persons to keep on hand more than their reasonable

¹⁶ Straits Settlements, Treasurer, *Report on the Working of the Currency Department, 1923-24*, pp. 9-10; *Straits Times*, Sept. 8, 1917, p. 10.

¹⁷ *Straits Times*, Sept. 4, 1917, p. 8; Sept. 5, 1917, p. 8; Sept. 10, 1917, pp. 8, 10.

¹⁸ *Ibid.*, Sept. 13, 1917, p. 6; Straits Settlements, Treasurer, *Report, 1923-24*, p. 11.

needs of subsidiary currency, under penalty of imprisonment for not over six months, or fine of not over \$850, or both.¹⁹ At the same time, the Governor, acting under authority conferred in 1903, prohibited the exportation of coins abroad and their exportation to other parts of Malaya except under license.²⁰ On October 1 the Legislative Council passed a bill authorizing the issue of 5-cent, 10-cent, and 25-cent notes, legal tender up to \$2.00.²¹ Locally-printed 10-cent notes (later succeeded by more elaborate ones printed in England) were issued before the middle of October and were helpful in meeting the needs of the public.²² At the same time some Chinese hoarders were prosecuted and given exemplary punishment.²³ Meanwhile the price of silver receded to below the subsidiary-coin parity, so that it was only during September and October that the small-change question was acute.

The Government recognized, however, that the small notes were only an emergency solution. The Subsidiary Coinage Commission recommended retaining the 0.800 fineness of the coins, but reducing them to about two-thirds of their former weight, making a bullion parity of about 75 pence per ounce.²⁴ The Government considered establishing its own mint, and sent officials to Bangkok to study mint experience there.²⁵ It was found not to be practicable to reduce the weight of the coins,²⁶ or to establish a mint.

The Government decided, therefore, to retain the original size and weight of the subsidiary coins, but to reduce the fineness from 0.600 to 0.400, giving a bullion parity of \$1.624 (or 74.2 pence) per ounce. The first of these new coins were placed in circulation in April, 1918, and by the end of 1919 a total of over \$3,000,000 had been coined and two-thirds of it placed in circulation. For a few months, from November, 1919 to April, 1920, the price of silver was above the new bullion parity of 74.2 pence per ounce, and plans were made to reduce the content of the 10-cent piece still further, but this was not actually done.²⁷ Incidentally, in view of the unsatisfactory nature of coins of such low fineness, the 0.600 fineness, was resumed in 1926, and the printing of fractional notes was discontinued.²⁸

¹⁹ *Straits Times*, Sept. 27, 1917, p. 8.

²⁰ *Ibid.*

²¹ *Ibid.*, Oct. 2, 1917, p. 7; Straits Settlements, Treasurer, *Report . . . 1923-24*, p. 3.

²² Straits Settlements, Treasurer, *Report . . . 1923-24*, p. 3; *Straits Times*, Oct. 8, 1917, p. 8; Oct. 15, 1917, p. 8.

²³ *Straits Times*, Oct. 12, 1917, p. 8; Oct. 31, 1917, p. 8.

²⁴ Straits Settlements, Treasurer, *Report . . . 1923-24*, p. 11.

²⁵ *Straits Times*, Oct. 24, 1917, p. 11.

²⁶ Straits Settlements, Treasurer, *Report . . . 1923-24*, p. 11.

²⁷ *Ibid.*, pp. 11-12.

²⁸ *Ibid.*, 1925-26, p. 9.

The matter of silver dollars had been taken care of temporarily by the suspension of specie payments. For a more permanent remedy, the weight was reduced from 312 grains to 260 grains and the fineness from 0.900 to 0.500, giving a bullion parity of \$2.094 (or 95.6 pence) per ounce. These new coins were issued first when specie payments were resumed in December, 1920.²⁹ The 312-grain dollars continued to be legal tender, and there were over \$2,500,000 of them nominally in circulation as late as 1937,³⁰ although presumably a considerable part of this amount was melted up clandestinely during the years 1917-1920.

Thus, because of the widespread circulation of notes instead of silver dollars and the prompt action taken to protect the subsidiary coinage, the Straits Settlements passed through the wartime rise in the price of silver without any serious difficulties. Incidentally, the par of 2s. 4d. was maintained throughout the war and postwar years, and the currency remained linked to sterling at that rate when England went off the gold standard in 1931.

In 1933, as a result of the desire of the Federated and Unfederated Malay States, users of Straits Settlements currency, to share in the profits accruing from investments and seigniorage, the Secretary of State for the Colonies appointed Sir Basil Blackett, formerly Finance Member of the Government of India, as a "Commissioner to enquire into the question of Malayan Currency." His report, dated January 8, 1934, recommended a system by which the various governments should share, in proportion to their estimated currency consumption, in the liability for the note issue. The governments also would share in any profits over and above what were needed to meet expenses and to maintain an adequate reserve.³¹ These recommendations were not adopted.

5. *Wartime Adjustments in Asia and Latin America*

In Japan the subsidiary silver coins had a bullion parity of 95.6 cents (or 43.7 pence) per ounce. In September, 1917 the rise in the price of silver to \$1.08½ (or 55 pence) per ounce made it profitable to melt up these coins, and a shortage of small coins was experienced.³² On May 1, 1918 the fine silver content was reduced, giving the coins a bullion parity of \$1.434 (65.5 pence) per ounce.³³ In 1922, a further

²⁹ *Ibid.*, 1923-24, p. 10.

³⁰ *Ibid.*, 1936-37, p. 18.

³¹ *Report of Commissioner . . . to enquire into . . . Malayan Currency.*

³² *Commercial and Financial Chronicle*, Vol. 105, Dec. 22, 1917, p. 2405.

³³ *Annual Report of the Director of the Mint . . . 1919*, p. 260.

reduction of weight and fineness made the bullion parity \$2.173 (or 99.2 pence) per ounce.³⁴

In Mexico the monetary situation had been unsettled by civil wars even before the rise in the price of silver, and hard money had been replaced to a large extent by paper. By a decree of November 13, 1918, to meet the situation caused by "the rise in the price of silver and the consequent sale and hoarding of silver coins by the people," new silver coins were authorized, with a bullion parity of \$1.068 (or 48.8 pence) per ounce.³⁵ These replaced the earlier coins which had had a bullion parity of 77.4 cents (or 35.4 pence) per ounce. On October 27, 1919 the bullion parity was changed to \$1.291 (or 58.94 pence) per ounce.³⁶ The subsequent rise in the price of silver made this insufficient and silver coins continued to be exported through 1920. Thereafter conditions were changed. The Mexican Government, in need of funds, took advantage of the seigniorage profit to coin silver pesos at the rate of over 30,000,000 a year, and as a result silver coins went to a discount of a few per cent as compared with gold.³⁷ During the world depression this discount increased greatly. Finally in 1934 the value of the peso was stabilized at 3.60 pesos to the new American gold dollar, or about 28 cents per peso, which was still considerably above the bullion value except for a few weeks in the spring of 1935, as described in Chapter XXVII, Section 2.

In Siam which had adopted a gold standard some years before the World War, a succession of steps was taken: (1) On July 2, 1919, the fineness of subsidiary coins was reduced. (2) On September 4, 1919, the theoretical gold unit was raised in value. (3) On October 4, 1919, the Minister of Finance was authorized to fix the exchange rate with sterling at such a point as might be necessary to protect the silver coinage. (4) On January 16, 1920, the fineness of the silver coins was reduced again. (5) On August 19, 1920, when the emergency was past, the fineness of silver coins was restored to the level of the first cut.³⁸

Similar reductions of silver content were made in other countries of Asia, for example, in 1919 in Ceylon³⁹ and the Dutch East Indies,⁴⁰ and in 1920 in French Indo-China.⁴¹

³⁴ *Japan Yearbook, 1923*, p. 467.

³⁵ *Annual Report of the Director of the Mint . . . 1919*, p. 163.

³⁶ *Ibid.*, 1920, p. 167; Bratter, *Monetary Use of Silver in 1933*, p. 81.

³⁷ McQueen, *Foreign Exchange in Latin America*, pp. 7-9.

³⁸ *Annual Report of the Director of the Mint, 1920*, p. 266; 1921, p. 245.

³⁹ *Ibid.*, 1921, p. 189.

⁴⁰ *Ibid.*, 1922, p. 210.

⁴¹ *Ibid.*, p. 204.

Many Latin-American countries experienced similar difficulties. In Chile the paper currency depreciated sufficiently in 1921 to make the silver coins worth more as bullion than as money, even at the current price of the white metal, and, as a result, the Government coined new 1-peso pieces of 0.500 fineness, containing only 4.5 grams of fine silver to the peso, as compared with 22.5 grains fine which had been the original standard of most Latin American countries.⁴²

In Costa Rica the World War and inflationist administration caused a depreciation of paper currency, and this combined with the high price of silver made the silver fiduciary coins worth much more than their face value in paper. Silver coins were hoarded or clandestinely exported. The Government made a large profit by replacing silver certificates, which had a 100-per-cent reserve in coin 0.900 fine, by silver notes, with a 40-per-cent reserve in new coin (or old coin at its bullion equivalent) only 0.500 fine. In 1923, when a 50-per-cent depreciation of the paper money was accepted as the *de facto* condition, the Government restamped and later recoinced all silver coins at double their face values.⁴³

In Honduras the advance in the price of silver during the war led to considerable exportation of the white metal, and to making American money legal tender at the rate of 2 pesos to the dollar. After silver fell in price in 1920, old silver coins returned to circulation from hoards, and became the chief medium of exchange in the interior, while American money formed the circulation on the north coast, where foreign trade predominated. Thus the country had two standards in different regions.⁴⁴

In Peru the wartime rise in the price of silver drove out the fiduciary silver currency and necessitated the issue of paper money in denominations as low as 5 centavos. In 1921 new silver coins only 0.500 fine were issued replacing those of 0.900 fine.⁴⁵

El Salvador, one of the few remaining silver-standard countries, had declared a moratorium on specie payments on August 11, 1914, when conditions were upset by the outbreak of the World War. The banks had ample silver reserves amounting to over 50 per cent of their note issues, but these reserves were sealed by the Government during the moratorium. Although silver was at a premium over the bank notes, this was offset to some extent by the high gold price of silver, so that exchange was not greatly disturbed. In September, 1919 it was decided to adopt a gold standard. Banks and individuals were

⁴² McQueen, *Chilean Currency and Exchange in 1921*, p. 3.

⁴³ Young, *Central American Currency and Finance*, pp. 200-217.

⁴⁴ *Ibid.*, pp. 103-118.

⁴⁵ Dunn, *Peru*, p. 251.

allowed to export their silver, on guaranteeing to import American gold in its place. Most of these transactions were carried through within the next six months, when the price of silver was at its highest. The reserves of pesos weighing 25 grams, 0.900 fine, were replaced by 50 cents' worth of U. S. gold to the colon, which was to be exchangeable at par for the old peso. Since the value of the silver content of the peso probably averaged at least 75 cents gold during that period, there was a good profit, which in the case of the bank reserves was divided between the banks and the Government. The country thus successfully acquired a substantial gold reserve and adopted the gold standard with little difficulty. Later, when silver dropped in price, some of the old silver coins, which had been demonetized, came out of hoards and got back into circulation. When the Government tried to stop this, it caused some popular excitement for a time, but the situation soon quieted down.⁴⁶

In Venezuela silver coins of reduced content were coined on the basis of a law of 1918.⁴⁷

6. *Recoinage Laws in Western Countries*

In many of the countries mentioned above, the price of silver had risen above the bullion parity of the coins even before the Armistice. In countries with coinage ratios in the neighborhood of the old 16 to 1, the coins were not threatened until the price of silver began its rapid rise in the latter half of 1919 and reached its peak in February, 1920. As mentioned above even the American dollar was endangered. Because of the depreciation of many European currencies below their former gold values, the corresponding silver coins became worth much more as bullion than as money.

Only three countries, however, reduced the content of their silver coins while silver was still high. In the Netherlands the fineness of the larger silver coins was reduced from 0.945 to 0.720 in November, 1919.⁴⁸ Canada changed the fineness of her silver coins from 0.925 to 0.800 in January, 1920.⁴⁹

The most important change, both in amount of reduction and in volume of currency effected, was in Great Britain. The bullion parity of British silver coins had been \$1.445 (or 66.0 pence) per ounce. The price of silver passed 66 pence per ounce in October, 1919, and remained above that point for about four months, during which time

⁴⁶ Young, *op. cit.*, 63-90.

⁴⁷ McQueen, *Foreign Exchange in Latin America*, p. 22.

⁴⁸ Bratter, *The Silver Market*, p. 61.

⁴⁹ *Annual Report of the Director of the Mint*, 1920, p. 165.

it was profitable to melt up silver coins. The British Government placed an embargo on the export of silver,⁵⁰ and, in March, 1920, passed a law providing for the recoinage of silver coins on a basis of 0.500 fine instead of 0.925 fine;⁵¹ this raised the bullion parity to \$2.674 (or 122.1 pence) per ounce, or considerably above the highest price (89½ pence) reached in February, 1920.

The rapid fall of silver in the spring of 1920 made this recoinage unnecessary, but the law was not repealed. The new coins were issued first to the public on December 13, 1920. Their composition was 500 parts silver, 400 parts copper, and 100 parts nickel. Their yellowish color made them unpopular.⁵² The recoinage was continued for several years, and the extra silver realized was sold on the market.

Before the war France had a large stock of silver 5-franc pieces in circulation and in bank reserves, as a legacy from bimetallism, and in addition a large stock of smaller silver coins in circulation. In 1919, the price of silver rose above the bullion parity. Silver coins largely disappeared from circulation; laws were passed forbidding their melting and exportation.⁵³ Brass, cardboard, and paper token money was issued by shops and by Chambers of Commerce, but the Government made no attempt to issue paper money under 5 francs.

After the price of silver fell in 1920, the depreciation of French currency still kept the bullion value of silver coins higher than their face value. Silver thus remained out of circulation, and to coin more on the old basis was impossible. Bronze-aluminum coins of 2 francs, 1 franc, and ½ franc were issued to an extent greater than the prewar circulation of silver.⁵⁴ It was estimated that 2,000,000,000 francs in gold and silver coins were being hoarded. Legally these could not be melted or exported; a gradual flow of them, however, kept coming to light as estates were settled, and the administrators perforce had to turn them in to the Bank of France at par. It was not until September, 1926 that the Government finally undertook to draw out these hoards by buying coins at a premium, when 5.70 francs paper were offered for 1 franc gold, and 2.40 francs paper for 1 franc silver.⁵⁵ This brought out a large quantity of coins; after two or three weeks the price of gold coins was lowered, and the purchase of silver coins was stopped, because of the falling market price for silver.⁵⁶

In 1928 the franc was stabilized at 0.0655 grams of gold, 0.900

⁵⁰ *Commercial and Financial Chronicle*, Vol. 109, Nov. 15, 1919, p. 1840.

⁵¹ Bratter, *The Silver Market*, p. 61.

⁵² *Annual Report of the Director of the Mint, 1921*, p. 194.

⁵³ *Commercial and Financial Chronicle*, Vol. 109, Nov. 8, 1919, p. 1742.

⁵⁴ *Ibid.*, Vol. 116, March 10, 1923, p. 1019.

⁵⁵ *Ibid.*, Vol. 123, Oct. 2, 1926, p. 1703.

⁵⁶ *Ibid.*, Vol. 123, Oct. 16, 1926, p. 1946.

fine, and provision was made for silver 10-franc and 20-franc coins, weighing 1 gram to the franc, 0.680 fine.⁵⁷ This made the coinage ratio 11.54 to 1, which corresponded to a bullion parity of \$1.790 (or 81.8 pence) per ounce, and thus left an ample margin of safety.

7. *The Monetary Status of Silver in 1923 and After*

In 1923, a comprehensive study of the monetary use of silver was made by Dr. Leland Rex Robinson of the Department of Commerce. The introduction to this contained the following summary:

The final results of this analysis, reduced to a few words, may be stated as follows:

1. The use of silver for reserve purposes has declined since 1914 in most countries, both absolutely and in proportion to gold and other forms of cover for note issues.

2. Numerous forces have operated to reduce the relative importance of silver as a circulating medium.

3. In many countries there has been a reduction in the fineness or content of silver coins.

4. No movements appear to be in progress to justify an assumption that silver will soon regain its prewar relative position as reserve for note issues or as a circulating medium.⁵⁸

When this report was issued, reduction in silver content had not been made by any European countries except Great Britain and Holland. In the ensuing years, however, as conditions in Europe became more stable, one country after another reorganized its currency system, and, in almost every case, less use was made of silver than before the World War. Higher denominations of silver coin were replaced by notes. Subsidiary silver coins were replaced to some extent by coins of aluminum, nickel, or copper. When silver was used for subsidiary coins, the fineness instead of being in the neighborhood of 0.800 or 0.900 as before the war was in most cases reduced to somewhere between 0.500 and 0.750. The coinage ratios, instead of being in the neighborhood of 16 to 1, were reduced in some cases as low as 7 to 1, which made the bullion parities, in all but a few cases, range from about \$1.30 to as high as \$2.96 per ounce in the case of German coins (or from 59 pence to 135 pence). As many as 33 countries reduced the silver content of their coins between 1919 and 1933, and 6 countries abandoned the use of silver entirely.⁵⁹ The changes in coin-

⁵⁷ *Annual Report of the Director of the Mint . . . 1929*, pp. 156-157.

⁵⁸ Robinson, *Changes in the Monetary Use of Silver since 1914*, p. ii.

⁵⁹ Bratter, *The Monetary Use of Silver in 1933*, p. 6.

age ratios and bullion parities in some of the countries may be seen in Chart 3, page 16, and Appendix IV.

This replacement of silver by baser metals or by coins of lesser fine content was in part a measure of economy, and in part a protection against any future rise in the price of silver, although such a rise did not seem probable. It was recognized that a certain amount of subsidiary coinage was needed for hand-to-hand circulation. Provided it was not issued to excess, and provided the government was always ready to redeem it in standard money, there was no particular need that it should have an intrinsic value comparable to its face value. The baser coin was well fitted for its purpose, and there was no need of going to the expense of making the coins contain nearly their face value in silver.

8. The Monetary Use of Silver in 1933

In 1933 the Department of Commerce published a book with the above title by H. M. Bratter, giving up-to-date information about silver currency. This pointed out that silver was no longer a standard of value except in China, Hong Kong, and one or two unimportant countries, and that there was little inclination anywhere to use silver as a medium of exchange except for subsidiary coins. In India and the United States rupees and silver dollars, respectively, were unlimited legal tender, and the same was true of some silver coins in certain other countries. In most countries, however, the silver coinage consisted only of subsidiary coins of limited legal tender. The total issue of such subsidiary coins usually was limited either by law or by the practical necessity of adjusting the amount to actual needs and keeping it at par with standard money. Many countries had not minted the full amount of silver coins which they were allowed by law, and so were theoretically potential purchasers of silver for coinage. Whether or not they would increase their silver coinage would depend on a variety of factors.

The above publication listed the stock of silver coins in all countries, as far as known, expressed in local currency. In order to arrive at an estimate of the total monetary stock of silver in the world, the local currency figures there given have been multiplied by the fine content of the silver coins per currency unit and by the par value of the currency unit to compute the number of fine ounces of silver and the equivalent monetary value in United States dollars of 23.22 grains fine gold, which were current at the beginning of 1933. The detailed results by countries are given in Appendix VI, which also

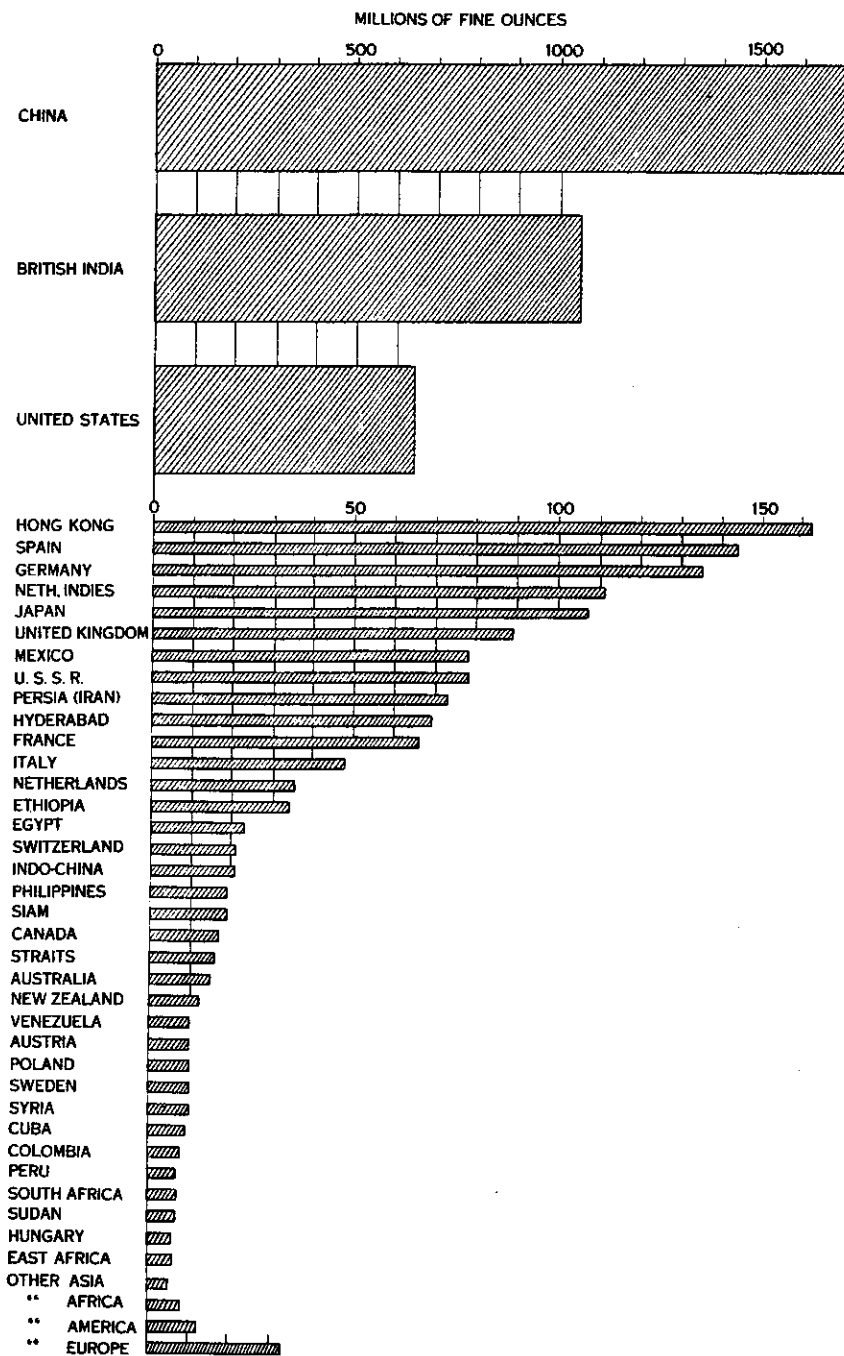


CHART 6.—DISTRIBUTION OF THE WORLD'S MONETARY SILVER IN 1933

shows monetary gold and nonmonetary supplies of both metals. As explained there, they cannot be considered entirely accurate, but should give a roughly correct picture of the distribution of the world's precious metals. The summarized distribution of monetary silver is as follows:

TABLE 4
DISTRIBUTION OF THE WORLD'S MONETARY SILVER, 1933

(1)	Quantity of silver in coins	Monetary value of silver coins at par of exchange	Average bullion parity per ounce	Average coinage ratio
	Millions of fine ounces	Millions of 23.22-grain gold dollars		
(1)	(2)	(3)	(4)	(5)
United States	640 oz.	\$ 847	\$1.32	15.7
North America (except U.S.)	95	128	1.35	15.3
South and Central America	46	60	1.30	15.9
Europe	685	1,385	2.02	10.2
British India	1,050	1,117	1.06	19.5
Asia (except India, China)	377	577	1.53	13.5
Africa and Australia	78	138	1.77	11.7
Total, Gold Standard Countries	2,971	4,252	\$1.43†	14.4†
China, Hong Kong, Ethiopia, Persia	1,969	492*		
GRAND TOTAL	4,940 oz.	\$4,744		

*The silver in the four silver-standard countries is taken arbitrarily at 25 cents per ounce, the approximate price at the beginning of 1933.

†Average.

SOURCES

(2) and (3) from Appendix VI.

(4) = (3)/(2).

(5) = 2065.1/(4).

The distribution of monetary silver at the beginning of 1933 is shown in detail in Chart 6.⁶⁰

⁶⁰ A similar chart was first published in the writer's paper, "The Distribution of the World's Silver."

CHAPTER XIX

THE EFFECT OF THE WORLD WAR ON THE INDIAN CURRENCY SYSTEM ¹

“How puzzling all these changes are! I'm never sure what I'm going to be, from one minute to another!”

LEWIS CARROLL, *Alice's Adventures in Wonderland*

1. *The Increased Demand for Currency*

The outbreak of the World War at first disrupted trade in India as elsewhere and the immediate effect was a lack of confidence in the currency and a demand for rupee coins in place of notes and for gold. There was no statutory provision for redeeming notes except in silver rupees, but it had been customary to give gold when desired. In the first four days of August, 1914 the Government paid out nearly £2,000,000 of gold against notes, but then suspended payments, and cashed notes only in rupees. Legitimate needs of the public for remittances were met by the sale of nearly £9,000,000 of Reverse Councils between August, 1914 and January, 1915. Confidence soon was restored; by the latter date exports were increasing and imports decreasing, the demand for Council bills revived, and exchange was strong.²

Exchange conditions were normal through 1915 and 1916. By the end of the latter year, however, the amount of silver coin in the Paper Currency Reserve had fallen to about 140,000,000 rupees as compared with 340,000,000 at the outbreak of the war; this represented only 17 per cent of the note issue outstanding, and the drop had occurred in spite of record purchases of silver and coinage of rupees, as described below. For this reason it did not seem wise to continue unlimited sales of Council bills in London, the encashment of which would still further reduce rupee reserves in India. From December 20, 1916, therefore, sales were limited, the limit being fixed from time to time in accordance with available resources of coin in India, and varying between 3,000,000 and 12,000,000 rupees per week. From January 3, 1917 the rate was fixed at 1s. 4½d. for telegraphic

¹ This chapter is based on the general account given in the Babington Smith Report, paras. 6-30, and on material in the *Appendices and Minutes of Evidence* accompanying that Report.

² Babington Smith, Report, paras. 9-10.

transfers. The amount available each week was rationed to banks and firms on an approved list. Purchasers in turn were required to retail exchange to their customers at fixed rates, and to restrict the use of their funds to financing the export from India of products needed for the war.³

In addition to the demand for rupee circulation within India, which by this time was stimulated by rising prices and increasing exports, thus bringing more income into the hands of the cultivator, there was a large demand for rupee coin in Mesopotamia, Persia, and East Africa. India was the base for operations in these countries, where the payment of Indian troops and other military expenditures were effected with rupee coin and notes. Thus there was an unprecedented demand for more silver rupees, beginning early in 1916.⁴

To meet this demand the Government of India began to make large purchases of silver for coinage. At first it was comparatively easy to acquire silver and in 1916-17 government purchases amounted to 115,000,000 fine ounces. As the world price of silver rose and as the demand for silver for ornaments revived with increasing prosperity, it became necessary to take further measures to restrict silver, and gold as well, to currency uses. From June 29, 1917 the Government prohibited the use of gold and silver coin for other than currency purposes, such as the manufacture of ornaments; from September 3 it prohibited the import and export of silver bullion on private account except under license.⁵ Government purchases during the war and immediate postwar period are shown in Table 5.

To economize the use of coin, it became necessary to increase the limit to which securities might be held in the Paper Currency Re-

TABLE 5
PURCHASES OF SILVER BY THE GOVERNMENT OF INDIA, 1915-1920

Fiscal years ending March 31	In open market	From U. S. Government (Pittman act)
	Fine ounces*	
1915-16	7,989,000	.....
1916-17	115,195,000	.....
1917-18	65,604,000	.....
1918-19	98,429,000	141,079,000
1919-20	48,285,000	56,240,000
Total	335,502,000	197,319,000

* Original data in standard ounces have been converted to fine ounces by multiplying by 0.925. SOURCE: Hilton Young, *Report*, Vol. II, p. 12.

³ *Ibid.*, para. 21.

⁴ *Ibid.*, para. 13; *Minutes of Evidence*, Q. 20-28, 273-282.

⁵ Babington Smith, *Report*, paras. 23-25; *Minutes of Evidence*, Q. 73-76. The restrictions on the movement of gold and silver were removed in 1920 (Hilton Young, *Report*, Vol. II, p. 16).

serve. Before the war this had been set at 140,000,000 rupees. Beginning in November, 1915 the limit was raised nine times till it reached 1,200,000,000 rupees in 1919, the actual amount of securities reaching a maximum of nearly 1,000,000,000 rupees in the latter year. From the end of 1917 an attempt was made to increase the use of paper money by issuing notes of $2\frac{1}{2}$ rupees and 1 rupee; previously 5 rupees had been the lowest denomination used.⁶

2. *Raising the Rate of Exchange with the Rising Price of Silver*

As pointed out in Chapter X, Section 1, the bullion parity of the rupee was 43.1*d.* per ounce. The price of silver had not been as high as 34*d.* since 1893, and the rupee had not been threatened by the rise to nearly that level in 1906 and 1907, when recoinage was necessitated in the Philippines and the Straits Settlements. The brief rise to 37*d.* in the spring of 1916 was not dangerous, but, when the price rose to 46*d.* in August and 55*d.* in September, 1917, the rupee faced the peril of melting as did the silver coins of other countries, as described in Chapter XVIII. The problem, however, was much more serious in India, on account of the status of the rupee. This coin was the standard money of the country, of full legal tender; its weight and fineness had been unchanged since 1835; about five thousand million rupees had been coined, and, although many had been melted up while India was still on the silver standard, there were large amounts in circulation and in hoards throughout the country. To have reduced the silver content of this historic coin might well have caused such popular distrust of the Government as to have precipitated an internal crisis, which would have been fatal to British success in the war. Effective prevention of melting and smuggling out silver, such as the Philippine authorities claimed to have accomplished, could not have been carried out in India. At the same time, an expansion of currency was needed for the increasing trade; and the Government could not afford to buy silver at 55 pence per ounce to coin into rupees with a bullion parity of 43.1 pence per ounce. To let silver be replaced by gold, as Mexico had done in 1906, was also impossible, for the world had no gold to spare.⁷

The Government, therefore, did the only possible thing, and raised the value of the rupee in terms of gold, or rather of sterling, *pari passu* with the rise of silver above 43.1 pence per ounce.⁸ The

⁶ Babington Smith, *Report*, paras. 24, 28.

⁷ Babington Smith, *Minutes of Evidence*, Q. 173-174, 232-236, 407-449.

⁸ Babington Smith, *Report*, para. 22.

minimum rates set for sales of immediate telegraphic transfers by the Secretary of State are shown in Table 6.

TABLE 6
RATES SET FOR THE SALE OF TELEGRAPHIC TRANSFERS ON INDIA
BY THE SECRETARY OF STATE FOR INDIA

Date on which rate went into effect	Rate for T.T. per rupee	Corresponding bullion parity per ounce, 0.925 fine
Jan. 3, 1917	1s. 4¼d.	43.8d.
Aug. 28, 1917	1s. 5d.	45.7d.
Apr. 12, 1918	1s. 6d.	48.4d.
May 13, 1919	1s. 8d.	53.8d.
Aug. 12, 1919	1s. 10d.	59.2d.
Sept. 15, 1919	2s.	64.6d.
Nov. 22, 1919	2s. 2d.	70.0d.
Dec. 12, 1919	2s. 4d.	75.3d.
Feb. 5, 1920	2s. 8½d.	88.6d.
Feb. 12, 1920	2s. 10¾d.	93.8d.

SOURCE: Babington Smith, Report, para. 22; Hilton Young, Report, Vol. II. p. 15.

A comparison of these bullion parities with the course of the London price of silver, given in Chart 2, page 11, will show that, except in 1917 when the price receded quickly from the September peak, the value of the rupee was raised nearly as fast as the price of silver rose; the difference in pence and the time lag were small enough so that there was little chance for profit in melting the coins for clandestine export. In the domestic market, however, the price tended to be above parity with the London price, because of an import duty of 4 annas per ounce and because, in fact, private import of bar silver was prohibited. Thus the melting of coins was the only source of net new supply to the domestic market, over and above the quantity realized by the melting of such old ornaments as came on the market. Although melting was forbidden, subject to the penalty of imprisonment for three years, or a fine, or both, undoubtedly it was carried on secretly to a considerable extent. Evidence sufficient to convict was difficult to obtain, and apparently there were no prosecutions under the law. During a period of wartime prosperity in India there was inevitably a large demand for ornaments which had to be met by melting coin, which could be done without loss for the first time since 1893.*

3. *The Shortage of Rupees and the Danger of Inconvertibility of Notes.*

As will be seen from Table 5, the Indian Government secured only about half as much silver in the open market in the year ending

* Babington Smith, *Minutes of Evidence*, Q. 73, 236-243.

March 31, 1918 as in the previous year. Meanwhile the demand for currency had not abated. As mentioned above, the limits of the fiduciary portion of the Paper Currency Reserve had been expanded almost tenfold. This made possible a great increase in the paper currency, but at the same time dangerously reduced the percentage reserve of silver rupees. This fell rapidly from the latter part of 1917, reaching 17.6 per cent on December 31, 1917 and 10.8 per cent on March 31, 1918, as compared with 57.7 per cent in August, 1914. The total metallic reserve, rupees and gold together, fell below 40 per cent of the note issue, as compared with about 80 per cent in 1914.¹⁰ The rupee reserve was the more important, because the Government did not wish to release gold, and because actual rupee coins were needed for many purposes, such as the pay of laborers and the purchase of crops from the cultivators.

There was thus grave danger that the currency notes could not be redeemed on demand in silver rupees. The Government of India viewed such a contingency with great alarm for a number of reasons. Inconvertibility would lead to a run on Post Office Savings Banks. It would prevent the further expansion of note issues and cause a rise of prices, in paper currency, that would greatly increase the cost of obtaining war supplies for export. It would prevent the successful floating of domestic war loans. It would tend to cause general economic panic, for the Indian people were not educated to understand that inconvertibility was forced merely by the inability to find sufficient silver in the world markets, and that there was ample other security behind the notes. To them it would mean only that the Government was insolvent. In three years the note issue had been greatly expanded, and trust in it had been built up because the notes were readily convertible to rupees on demand in all parts of the country. Even a temporary inconvertibility would destroy the sensitive structure of confidence.

Moreover, in addition to the economic effects, the political effects probably would have been even worse. Anti-British Indian politicians would have made capital of it. Revolts and civil disorders might have arisen. These would have reacted on the loyalty of Indian troops serving on the various fronts, and would have necessitated bringing out to India British troops who could ill be spared. In fact, inconvertibility might have been fatal to the winning of the war.¹¹

This situation led to the negotiations with the United States

¹⁰ *Ibid.*, pp. 12-13.

¹¹ *Ibid.*, Q. 348-350, 384-389; pp. 81-88.

Government for a share of new production and to the passage of the Pittman act, described in Chapter XVII.

News of the Pittman-act supplies came just in time to save the situation, and, although rupee reserves fell dangerously low, it was possible to keep notes convertible to rupees at all offices where there was legal obligation to do so. Even at these offices, some restriction of the drain was effected by limiting conversion of notes to rupees in accordance with the physical capacity of the staff and facilities available, rather than putting on additional staff and working long hours. These restrictions were accepted as reasonable by the public. Moreover, the privilege of note conversion at subtreasuries in smaller centers, not provided for by law but granted as a matter of convenience for many years, was abolished. Progress was made in 1918 in persuading the cultivators to take notes in payment for some of the more important crops, such as cotton and jute. In spite of all this, since Pittman-act silver came in comparatively slowly, and coinage took time, it was not until the latter part of 1918 that reserves were built up again and that the crisis could be considered as past.¹²

4. *The Babington Smith Committee, 1919*

The continued rise in the price of silver after control was removed in 1919 necessitated the successive increases in the exchange rate, shown in Table 6, and brought to the fore the question of stabilizing the currency of India. On May 30, 1919 the Secretary of State for India appointed a committee, under the chairmanship of H. Babington Smith, to

examine the effect of the War on the Indian exchange and currency system and practice, . . . and to consider whether, . . . modifications of system or practice may be required.¹³

This committee sat in London, held 40 meetings, and examined 28 witnesses, chiefly Europeans, although a few Indians appeared before it and others sent in written opinions.¹⁴ While it was still deliberating, the rate of exchange was raised four times, from 1s. 8d. to 2s. 4d. The committee reported on December 22, 1919, at a time when the postwar boom in many countries was still in progress, when the price of silver was rising, and when sterling was depreciating.

The Indian currency system, as it then existed after the application of the various war measures, was as follows: Council bills were

¹² Babington Smith, *Report*, para. 29; *Minutes of Evidence*, Q. 631-649.

¹³ Babington Smith, *Report*, para. 1.

¹⁴ *Ibid.*, para. 2.

being offered at competitive sales subject to a minimum rate of 2s. 4d. The Government was prepared to sell Reverse telegraphic transfers, if desired, at 2s. 3 $\frac{1}{2}$ d. All gold imported had to be sold to the Government at a fixed price, including allowance for the premium of gold over sterling. Gold sovereigns were legal tender at 15 rupees, and the Government was required to pay 15 rupees for a sovereign, but this rate was not effective, because the bazaar price of gold was much higher. The private import and export of silver were prohibited. The market price of silver was so high that purchase for coinage was impracticable.¹⁵

The committee agreed that the system built up since 1893 had worked well before the war, and had insured stability of exchange, but that it had not been able to meet the unforeseen contingency of a high price of silver. It was desirable to return to a stable exchange rate, although not necessarily at the old level. Any reduction of the weight of the rupee was considered inexpedient, on account of the difficulty of getting the people to accept a change in the coin that had been in use for nearly a hundred years. The committee also rejected any idea of replacing rupee circulation by token coins or inconvertible notes. It expressed the belief that there was good probability that the price of silver would remain high for some years. The committee debated whether the rate of exchange should be set in gold or in sterling, which was still depreciating, and decided in favor of gold. This decision was based on the disadvantages of the fluctuating sterling currency, and on the desirability of making the rupee a token coin and encouraging the free movement of gold. The question of the level of exchange was settled in favor of a high one, because that would prevent the rise in the internal commodity price level which would occur if a return were made to the old 1s. 4d. rate; moreover, the current high price of silver made such a return impracticable. The committee recommended, therefore, that the value of the rupee should be set at 2 shillings *gold* (equivalent at that time to over 2s. 6d. *sterling*) which would make its bullion parity 64.6d. *gold* per ounce, or well above the melting point of French and American silver coins.¹⁶ Minor recommendations were: that the Secretary of State should be prepared to sell Council bills freely and that the Government of India should be authorized to sell Reverse Councils whenever necessary; that restrictions on the movements of the precious metals should be removed; that sovereigns should be minted in India and the obligation to give rupees for sovereigns abolished, with the purpose of encourag-

¹⁵ *Ibid.*, para 31.

¹⁶ *Ibid.*, paras. 33-60.

ing the circulation of gold; that facilities for saving and investment be promoted in order to discourage hoarding; that greater elasticity be provided in the paper currency system; and that the Gold Standard Reserve should be allowed to increase and be kept in liquid form.¹⁷

¹⁷ *Ibid.*, paras. 61-85.

CHAPTER XX

POSTWAR CHANGES IN THE INDIAN CURRENCY SYSTEM

. . . to fresh woods, and pastures new.

JOHN MILTON, *Lycidas*

1. *The Fall in the Exchange Rate.*

The recommendations of the Babington Smith committee were accepted by the Secretary of State, and, beginning February 5, 1920, an attempt was made to peg the rupee at the *sterling* equivalent of 2 shillings *gold*. Before that time, the successive increases in the exchange value of the rupee had been made to keep up with its increasing bullion value, and had been maintained by the high price of silver, regardless of the balance of trade. In February, 1920, however, the price of silver began its rapid decline. At about the same time the world-wide postwar depression set in, the demand for India's products decreased, and her trade balance began to become unfavorable. The Government attempted to keep the exchange up to the equivalent of 2 shillings gold by the sale of Reverse Councils, but had to give that up; it then tried, from June 24, to keep the rate at 2 shillings sterling, but even that attempt was not successful, and was abandoned on September 28. The value of the rupee had to be left to the operation of economic forces. Its silver content, of course, set a minimum level, but the price of silver fell below 43.1 pence per ounce, the bullion parity of the 1s. 4d. rate, by the end of 1920, and thereafter usually was well below this point. Two years of unfavorable trade balances, in 1920-21 and 1921-22, reduced the supply of export bills and hence the demand for rupees, and the exchange rate fell, early in 1921, to below 1s. 3d. sterling or less than 1s. gold, since sterling was then depreciated about 25 per cent. Later, as the balance of trade again became favorable, the supply of export bills increased and with it the demand for rupees, so that the exchange rate rose during 1923 and 1924 to 1s. 6d. sterling, which then was equivalent to 1s. 4d. gold, sterling having recovered somewhat in relation to gold. Exchange showed a rising tendency, but the Government kept the rate from going above this level by purchasing sterling exchange freely. After the middle of 1925, when England returned to the gold standard,

sterling and gold were equivalent, and the rate was maintained at 1s. 6d. gold.¹

2. *The Hilton Young Commission, 1925-1926*

In August, 1925 King George V appointed a Royal Commission on Indian Currency and Finance, under the chairmanship of Edward Hilton Young. Four of the ten members of the commission were Indians, as against one Indian on each of the two previous committees, and none on the earlier ones. This commission also was notable as the first to proceed to India and hear evidence on the spot. It held 50 sessions in India from November 23, 1925 to January 8, 1926, hearing 46 witnesses. Over 50 more sessions were held in London, where 17 witnesses were heard between March 1 and May 12, 1926. The commission's report was dated July 1, 1926, but it was not made public until August.²

The Indian currency system at the time when the commission sat was as follows: The currency consisted of paper notes and silver rupees, both of which were token money and were mutually convertible. By statute, the gold sovereign was legal tender at 10 rupees, corresponding to the nominal 2-shilling rupee, and the Government was obligated to give 10 rupees for a sovereign; but this law was inoperative because it undervalued gold in comparison with the current exchange value of the rupee. The value of the rupee was being maintained between the gold points corresponding to a parity of 1s. 6d. gold by the fact that the Government was ready to buy or sell sterling exchange at those points. This was not a statutory obligation on the Government, however, nor had such a policy been declared explicitly.³ The Paper Currency Reserve was being managed under temporary provisions by which the fiduciary portion was limited to 1,000,000,000 rupees, the balance to be in gold and silver coin or bullion. Actually, the outstanding note issue of 1,850,000,000 rupees on April 30, 1926, was backed by 1,070,000,000 rupees of gold and silver coin and bullion,

¹ Hilton Young, *Report*, para. 8.

² *Ibid.*, para. 218; *Commercial and Financial Chronicle*, Vol. 123, Aug. 7, 1926, 644; Aug. 21, 1936, pp. 913-915.

³ Hilton Young, *Report*, paras. 10-11. It should be noted that beginning in 1923-24 the sale of Council bills on India by the Secretary of State in London had been supplemented by the purchase by the Government of India of sterling drafts and telegraphic transfers from the exchange banks and recognized firms (*ibid.*, Vol. II, p. 22). This method was extended in 1924-25, and thereafter no Council bills have been sold, all remittances being effected by the purchase of sterling in India. Since the factors affecting Indian exchange can be followed more closely in India than in London, this method has allowed the Government to plan its operations to the best advantage.

and 780,000,000 rupees of securities, and so conformed to a permanent plan which provided for at least a 50-per-cent metallic reserve. Incidentally, the note circulation had nearly tripled since the beginning of the war. The Gold Standard Reserve of about £40,000,000 was invested in sterling securities. Interest on securities in both reserves was being applied to revenue of the Government.⁴

The commission criticized the existing system on four counts:

(1) The use of two kinds of token money, notes and rupees, and of primary gold money, the sovereign, was anomalous, especially when the sovereign was set at such a low value in rupees that it could not circulate. Moreover, the silver currency might be endangered again if the price of silver should rise.

(2) The two reserves had grown up more or less by force of circumstances, and were not well planned for actual needs; in addition, there was a dangerous division of authority for the control of currency and the control of credit, the former by the Government and the latter by the Imperial Bank of India.

(3) There was not the provision which a well-developed gold exchange standard should have for the automatic expansion and contraction of the currency, since in fact the volume of currency depended on the discretion of the Government in managing its exchange transactions.

(4) The system did not provide for elasticity to meet seasonal and other variations of trade.⁵

The commission recognized that the exchange standard had been well managed and had worked fairly well from 1898 to 1914, but considered that the time had come to place Indian currency "upon a more simple, certain, and stable basis,"⁶ in order to assure the confidence of the public and train people away from hoarding and toward investment. It considered three alternative proposals for reform:

- (i) the perfection of the sterling exchange standard,
- (ii) the adoption of a gold exchange standard, and
- (iii) the adoption of a gold standard proper, with or without a gold currency.⁷

It is interesting, in view of later developments, to note that a distinction still was made, as had been done by the Babington Smith Committee in 1919, between gold and sterling. The return of England to the gold standard in 1925 was so recent that the commission could

⁴ *Ibid.*, para. 12.

⁵ *Ibid.*, paras. 13-21.

⁶ *Ibid.*, para. 22.

⁷ *Ibid.*, para. 23.

not ignore the contingency that the mother country again might have to go off gold. In view of this possibility and of the possibility of another world rise in the price of silver, the commission decided against a sterling-exchange standard, on the grounds that either occurrence would upset the Indian currency as it had been upset during and after the war.⁸

In considering a gold-exchange standard, the commission assumed that the rupee should be linked, not merely to the gold currency of Great Britain, but to the gold currencies of the principal nations, so that the risk of inconvenience due to one nation's going off the gold standard would be minimized. There still would remain, however, the danger that the price of silver again might rise above the bullion parity of the rupee. A still greater objection was that the "mechanism of an exchange standard is refined"⁹ and that it was desirable to have a simple currency system which the Indian people could understand and trust. The commission felt that

in the present state of its development Indian public opinion will have confidence in one thing only as solid enough for a backing for its currency, and that is gold.¹⁰

It therefore decided against a gold-exchange standard.¹¹

3. The Finance Department's Plan for an Ultimate Gold-Coin Standard

The commission proceeded to consider a plan submitted by the Controller of the Currency, in consultation with other officials of the Finance Department. This provided for the introduction of a gold-bullion standard and ultimately of a gold-coin standard. The Government would assume the obligation to give out gold bullion, in quantities of not less than 400 ounces, in exchange for rupees or notes. It would at the same time, so far as it was able, but without legal obligation, give gold coins for notes or rupees. After a period of, say, five years, it would assume the obligation to give gold coins for notes and rupees, and after another five years the rupees would be reduced to a status of limited legal tender. The author of this plan estimated that 1,000,000,000 rupees might be presented by the public for conversion to gold, and that an approximately equivalent amount in the Paper Currency Reserve also would have to be converted to gold, or to sterling securities, making a total of 2,000,000,000 rupees. This

⁸ *Ibid.*, paras. 24-25.

⁹ *Ibid.*, para. 30.

¹⁰ *Ibid.*, para. 31.

¹¹ *Ibid.*, para. 32.

would involve the acquisition of gold to the extent of about 1,372,000,000 rupees, that is, about £103,000,000 or \$500,000,000 worth, or 25,000,000 fine ounces, equivalent to more than a year's world production at the then current rate. It also would involve the melting and sale of 2,000,000,000 rupees, which would yield nearly 700,000,000 fine ounces of silver, equivalent to nearly three years' world production. It was urged that this plan would remove the danger to the currency which would result from a rise in the price of silver, and that it would educate the people against hoarding the precious metals when they learned by experience that gold was always readily obtainable against notes or bank deposits.¹²

The commission examined this plan with care, and objected to it on several grounds:

(1) Evidence from authorities on the subject made it doubtful whether that amount of gold could be obtained by India, even over a period of ten years, without very seriously disturbing the return to financial equilibrium in Western countries.

(2) There was considerable doubt as to whether the need for gold would be limited to the amount estimated, and whether it could be spread over ten years.

(3) It was feared that the disposal of such a large quantity of silver would reduce the price below the average of 24 pence per ounce, on which the proposer of the scheme counted.

(4) This in turn would result in depreciating the value of the silver ornaments held by the masses; although it was proposed to place a heavy import duty on silver, it would be difficult to maintain a price within India well above the world price of silver, on account of the ease of smuggling.

(5) The probable depreciation of silver would affect the purchasing power of China, the sole remaining silver-standard country of any importance and a great undeveloped market.

(6) It would be difficult to raise the necessary credits to put the plan into operation except by the co-operation of the United States; it was brought out in the statements and evidence from prominent Americans that it would be hard to secure American financial support for a project so likely to be injurious to the price of silver, in view of the long-standing political importance of silver in the United States.¹³

¹² *Ibid.*, Vol. II, pp. 43-50.

¹³ *Ibid.*, Vol. III, pp. 550-554, statement of George E. Roberts; p. 606, statement of J. P. Morgan; p. 611 statement of James S. Alexander; Vol. V, Q. 15099-15106, 15131, 15212-17, testimony of George E. Roberts; Q. 15232 (v), (xiv), testimony of Jacob H. Hollander; Q. 15270, testimony of Oliver M. W. Sprague; Q. 15395, testimony of Benjamin Strong.

Because of all these objections, the commission rejected the plan for an ultimate circulation of gold coin in India.¹⁴

4. *The Commission's Plan for a Gold-Bullion Standard*

Instead, the commission recommended a plan which, like the rejected one, would require the Government, or rather a new reserve bank, to buy and sell gold, in quantities of at least 400 ounces, in exchange for notes or rupees, but which did not contemplate any gold coin in circulation, and, in fact, would remove the legal-tender quality of British gold coin in India. It recommended that the buying and selling prices of gold should differ enough from the theoretical par to relieve the Government from supplying gold for nonmonetary purposes, which could be left to the bullion market. It recommended further that the obligation to convert notes into silver rupees should be rescinded, in order to avoid the possibility of such difficulties as occurred during the World War, and in order to accustom the people to the gold basis of the paper currency; the silver rupee itself, however, would remain full legal tender. The commission also recommended the organization of a new reserve bank, which should take over from the Government the management of the currency and exchange, as well as the control of credit. The Gold Standard Reserve and the Paper Currency Reserve would be amalgamated, and the holding of silver rupees would be reduced from the existing figure of 850,000,000 rupees to 250,000,000 rupees over a period of ten years. Finally, the price of gold would be equivalent to a 1s. 6d. rupee, the actual current level, instead of the prewar 1s. 4d.¹⁵

This report was signed by all members of the commission, but one Indian member added a lengthy note of dissent on some points.¹⁶ He favored a freer use of gold, advocated that the control of currency should be given to the existing Imperial Bank of India rather than to a new reserve bank, and argued for a return to the prewar rate of 1s. 4d. on the basis that a higher rate would be unfair to the debtor class and would have a deflationary effect.

It will be seen that the commission's plan involved the same problem of the acquisition of gold and the disposal of silver as the rejected plan, but on a smaller scale. The Paper Currency Reserve

¹⁴ Hilton Young, *Report*, paras. 35-53.

¹⁵ *Ibid.*, para. 221, summarizes 31 specific recommendations, with references to preceding paragraphs in which they are discussed more fully. See, also, *Commercial and Financial Chronicle*, Vol. 123, Aug. 21, 1926, pp. 913-915, for a like summary, and for reprint of comment by London newspapers and authorities.

¹⁶ Hilton Young, *Report*, Vol. I, pp. 103-144.

already had about 220,000,000 rupees of gold, and it was planned to increase this to a minimum of 600,000,000 rupees in ten years.¹⁷ This would involve the acquisition of the equivalent of 380,000,000 rupees, or about 7,000,000 fine ounces of gold, much less than the 25,000,000 fine ounces required under the other plan. This figure did not allow for any gold which would be given out in exchange for notes, but it was believed that such demand for gold would not amount to more than the commercial demand which would exist under any currency system. The stock of silver coin would be reduced from 850,000,000 rupees to 250,000,000 rupees over a period of ten years, that is, by 600,000,000 rupees or about 200,000,000 fine ounces of silver as against 700,000,000 fine ounces contemplated under the other plan. This figure would have to be increased to take care of any rupees that might flow back into the reserve from circulation and hoards. Some such flow might be expected because, with gold obtainable at a fixed rate, there would be a tendency to replace hoarded rupees by gold.

On the whole, the potential effects on the silver market, while not so alarming as those of the rejected plan, were sufficiently great to cause the drop of about 10 per cent in the price of silver which occurred in the summer of 1926.

5. *The Indian Currency Act of 1927*

Action on the Hilton Young report was delayed for a few months to give time for consideration, but meanwhile the Government continued to keep exchange pegged in the neighborhood of 1s. 6d.¹⁸ In March, 1927 the Indian Legislature passed the Indian Currency Act of 1927, which established a par of 1s. 6d. by requiring the Government to purchase gold at an equivalent price, in bars of not less than 15 ounces, and to sell gold, *or, at the option of the Government, sterling, for immediate delivery in London*, in quantities of not less than 400 ounces, at the same price, less transport charges.¹⁹ The 1s. 6d. par for the rupee corresponded to a coinage ratio of 19.47 to 1 and to a bullion parity of \$1.061 (or 48.4 pence) per ounce.

It will be seen from the italicized words that this act did not carry out completely the recommendation of the commission for a gold-bullion standard, but did establish a one-way gold-bullion stand-

¹⁷ *Ibid.*, para. 78.

¹⁸ *Report of the Controller of the Currency . . . 1926-27*, p. 3.

¹⁹ The price of gold was set at Rs. 21-3-10 (that is, 21 rupees, 3 annas, 10 pies) per tola (180 grains) of fine gold. A selling rate of 1s. 5 49/64d. for telegraphic transfers on London was set as the equivalent, to allow for transport charges.

ard for incoming gold, leaving the Government the option of supplying either gold or sterling for outgoing needs; moreover, it confirmed the 1s. 6d. rate. Under this law the Government could acquire gold gradually until it had a sufficient amount accumulated so that it could begin to give it out freely to all comers.

No action was taken in 1927 as to a reserve bank, nor was any taken in regard to the amalgamation of the Gold Standard Reserve and the Paper Currency Reserve.

The new law in effect simply regularized the existing status of the currency, and stabilized the exchange rate at the current level of 1s. 6d. There had been considerable Indian opposition to this rate, with the usual arguments favoring a lowered value of the currency in order to stimulate exports. These arguments continued to be put forth, and when the depression reduced Indian exports, and internal prices were falling, they were urged even more strongly. The Indian Government, however, turned a deaf ear to them. When India accompanied England off the gold standard in 1931, as described below, the rupee was depreciated automatically to the same extent as sterling, but this still did not satisfy the proponents of a lower rate, who continued to urge that the rate should be reduced to 1s. 4d. sterling, or else cut entirely free from sterling.

6. *Government Sales of Silver*

Although the Currency Act of 1927 said nothing about selling silver, the Government in August, 1927 began to carry out the selling policy recommended in the Hilton Young report.²⁰ No details of sales were made public at the time of sale, but from time to time the Government has made general announcements on the subject.²¹ The annual *Report of the Controller of the Currency* stated each year (except in 1928-29) either the face value in rupees of the amount sold during the fiscal year ending March 31, or else the cumulative quantity in fine ounces sold since the beginning of operations in 1927. From these data it is possible to construct Table 7 showing annual sales. A subtotal is shown for sales to March 31, 1935, the date on which the management of the paper currency was taken over by the Reserve Bank of India (see Section 11 below).

It will be seen that before 1935 sales were in the neighborhood of 25,000,000 or 30,000,000 fine ounces per year, except in 1933-34, when the total was increased by 20,000,000 fine ounces which were

²⁰ *Report of the Controller of the Currency . . . 1927-28*, p. 14.

²¹ *Ibid.*, 1926-27, p. 8; 1928-29, p. 6; 1929-30, p. 11.

TABLE 7
SALES OF SILVER BY THE GOVERNMENT OF INDIA

Fiscal year ending March 31	Face value Millions of rupees	Quantity Millions of fine ounces
1927-28	27	9.2
1928-29	65	22.5
1929-30	105	36.1
1930-31	97	33.2
1931-32	77	26.6
1932-33	69	23.6
1933-34	131	45.0
1934-35	93	32.0
Total to Mar. 31, 1935	664	228.2
1935-36	26	9.0
1936-37	2	0.8
1937-38 (9 mos.)	3	0.9
Total to Dec. 31, 1937	695	238.9

SOURCES

Report of the Controller of the Currency . . . 1927-28, p. 14; *ibid.*, 1929-30, pp. 11, 22; *ibid.*, 1930-31, p. 12; *ibid.*, 1931-32, p. 10; *ibid.*, 1932-33, p. 10; *ibid.*, 1933-34, p. 15; *ibid.*, 1934-35, p. 3; *Financial News*, Vol. 6, No. 8, Feb. 26, 1938, p. 14. Conversion between rupees and fine ounces has been made on the basis of the fine-silver content of the rupee, which is 165/480 fine ounces.

applied to the British war debt to the United States.²² For four years beginning January 1, 1934 annual sales were subject to the limit of 35,000,000 ounces per year prescribed in the London Silver Agreement, described in Chapter XXV, Section 5. During the last three years of this period, however, sales were far under the quota. Exact figures for 1938 are not available. Handy & Harman's estimate is 2,300,000 fine ounces.

The first sales of silver were in the form of bar silver which had been held in the Paper Currency Reserve awaiting coinage.²³ Later sales included silver $\frac{1}{2}$ fine obtained from simply melting rupee coins, and also silver refined at the Bombay Mint into bars 0.999 fine. These latter bars, after some initial hesitation, were accepted by the Bombay market as readily as the imported bars which usually were dealt in there.²⁴ In October, 1929 there developed a large demand for British dollars for use in Hong Kong. Normally such dollars were coined at a fee of 30 rupees per 1000 pieces from silver supplied by those desiring them. At this time, however, the Indian Government required applicants for dollars to buy silver from it, making payment in sterling in London. This continued until December 13, 1929, after which the Government suspended sales of silver for a time.²⁵

Since the bullion parity of the rupee was \$1.061 (or 48.4 pence) per ounce, and since the market price of silver after 1927 remained

²² *Ibid.*, 1933-34, pp. 14-15.

²³ *Ibid.*, 1927-28, p. 14.

²⁴ *Ibid.*, 1929-30, p. 11.

²⁵ *Ibid.*

under 30 pence and fell as low as 12 pence per ounce, sales of silver were made at a loss equal to the difference between 48.4 pence per ounce and the price realized. No details were reported as to the price received, but occasional general announcements were made as to the minimum and average prices obtained. For example, the minimum price received up to December 13, 1929 was $22\frac{1}{2}$ pence per ounce, and the average price up to that time was $25\frac{3}{8}$ pence per ounce.²⁶ Again, in November, 1933, Sir George Schuster, Finance Member of the Government of India, announced that the average price realized to date had been 20.2 pence per ounce.²⁷

Down to March 31, 1935 the annual *Finance and Revenue Accounts of the Government of India* contained a suspense account to which losses arising from the sale of silver were charged each year. The loss to March 31, 1935 amounted to over 396,000,000 rupees,²⁸ or just under 60 per cent of the 664,000,000 rupees nominal value sold up to that time, as shown by Table 7. That is, the average price realized was about 40 per cent of the 48.4*d.* bullion parity of the rupee, or about 19.5*d.* per ounce, 0.925 fine. That price was, if anything, slightly less than the average market price for the 8-year period, whether taken as a simple average or weighted by the quantities of silver sold each year by the Government of India.

The accounting procedure, prior to March 31, 1935, when silver was sold was as follows: Supposing silver derived from rupee coins of a face value of 10,000,000 rupees were sold for 4,000,000 rupees, the amount of 4,000,000 rupees was placed in the Paper Currency Reserve, usually in the form of sterling securities, and 6,000,000 rupees of Indian Treasury bills were issued and placed in the reserve, thus making up the full 10,000,000 rupees which were withdrawn from the reserve in coin.²⁹ The Treasury bills so issued formed a liability of the Government, to the same amount as the loss charged to the suspense account described in the preceding paragraph. They were known as "created" or "ad hoc" securities. Created securities also were issued against new currency notes at times when the Government wished to expand the currency. It has been charged that the statutory provision for the issue of created securities was intended only for the expansion of currency, and that to issue them to make up losses without expanding the currency was illegal.³⁰ The law, how-

²⁶ *Ibid.*

²⁷ *Commerce*, Vol. 47, p. 723, Nov. 25, 1933.

²⁸ *Finance and Revenue Accounts of the Government of India . . . 1934-35*, p. 521.

²⁹ *Report of the Controller of the Currency . . . 1927-28*, p. 14.

³⁰ Chunilal B. Mehta, Director of Bombay Bullion Exchange, quoted in *Finance & Commerce*, Vol. 19, No. 86, Jan. 21, 1931, p. 14.

ever, did not seem to be explicit as to the purposes for which such securities might be issued, but merely limited the amount.³¹

On April 1, 1935 the management of the paper-currency system was transferred to the new Reserve Bank of India. In accordance with the provisions of the establishing act, described in Section 11 below, 500,000,000 rupee coins were turned over to the Bank, and the remainder of the silver in the Paper Currency Reserve, amounting to 404,000,000 rupees, partly in bullion, was retained by the Government for melting and sale. These coins, therefore, were definitely out of the monetary system, except for the rather remote possibility that they might eventually be used to replenish the Bank's rupee coin reserve if it should decrease.

7. The Return of Rupees from Circulation and Hoards

In spite of the large sales of silver from 1927 to 1935, the amount of rupee coins in the Paper Currency Reserve increased during that period. This was because of the large number of coins which flowed back from circulation into the Reserve. After April 1, 1935 rupees continued to flow back from circulation into the Issue Department of the Reserve Bank of India.

The exact number of rupees still in existence out of the nearly 6,500,000,000 which were coined from 1835 to 1922 is not known, because there is no record of the large numbers which were melted by the public before 1893 and again during the World War. On the basis of an estimate that 3,500,000,000 were in existence in 1926 and using recorded figures for subsequent transactions, it is possible to construct Table 8, which shows changes in the amount and location of rupee coins from 1926 to the end of 1937. Complete figures for 1938 are not available. The Surplus Silver Stock was increased by 50,000,000 rupees turned back by the Reserve Bank in April, and apparently very little silver was sold during the year.

The total amount of rupee coins thus decreased from 3,500,000,000 to 2,805,000,000, of which only 2,382,000,000 were in the monetary system, the remainder being held by the Government for sale. During the same period currency notes, after a decline in the depression years, showed a net increase from 1,933,000,000 to 2,147,000,000 rupees.³² The total circulation of rupees and notes, however, decreased from 4,584,000,000 to 3,903,000,000 rupees. Most of this decrease of

³¹ *Act No. X of 1923*, Sec. 18, (5), (b).

³² *Report of the Controller of the Currency . . . 1926-27*, p. 60; *Financial News*, Vol. 6, No. 1, Jan. 8, 1938, p. 9.

TABLE 8
RUPEE COINS IN CIRCULATION AND RESERVES IN INDIA
(in millions of rupees)

Dates		IN MONETARY SYSTEM			NOT IN MONETARY SYSTEM
		Circulation (estimated)	In Paper Currency Reserve*	In Reserve Bank of India, Issue Dept.	In Surplus Silver Stock*
(1)	(2)	(3)	(4)	(5)	(6)
Apr. 1, 1926	Balance	2,651	849	.....	.....
1926-1935	Net return from circulation	-719	719	.....	.....
1926-1935	Sales of silver	.....	-664	.....	.....
Mar. 31, 1935	Balance	1,932	904	.....	.....
Apr. 1, 1935	Balance, redistributed	1,932	.....	500	404
1935-1937	Net return from circulation	-176	.....	176	.....
1935-1937	Sales of silver	.....	.....	.....	-31
Apr. 1937	Transfer from Reserve Bank to Government	.....	.....	-50	50
Dec. 31, 1937	Balance	1,756	.....	626	423
Dec. 31, 1937	Balance, in millions of fine ounces	604	.....	215	145

* At times part of these stocks have been in silver bullion, figured at its coinage value.

SOURCES

(3) Circulation. April 1, 1926 balance is based on estimate of A. C. McWatters, Secretary to the Government of India, Finance Department, of 3,500,000,000 rupees as minimum total number in existence (Hilton Young, Report, Vol. II, pp. 72-74). Subtracting 849,000,000 rupees then in the paper Currency Reserve leaves 2,651,000,000 rupees as the amount in circulation, including hoards.

(4) In Paper Currency Reserve. April 1, 1926 and Mar. 31, 1935 balances are from Report of the Controller of the Currency. Sales of silver are from Table 7 above. Net return of rupee coins from circulation is resultant of the other items in this column.

(5) In Reserve Bank of India, Issue Department. April 1, 1935 and December 31, 1937 balances and transfer to Government are from weekly statements as published in Financial News. Net return of rupee coins from circulation is resultant of other items in this column.

(6) In Surplus Silver Stock. Initial stock, April 1, 1935, is result of redistribution when 500,000,000 rupees were transferred to Reserve Bank of India. Sales of silver are from Table 7 above. Transfer from Reserve Bank is indicated by drop in the Bank's stock of rupees shown in weekly statements in April, 1937.

681,000,000 rupees in the circulating medium may be ascribed to the effects of the world depression. With lower prices and decreased trade, not so much currency has been needed in circulation. At the same time peasants have had to draw on their savings of a few rupee coins; such drafts represent reduction of hoarding rather than of real circulation. There has also been a tendency toward increasing investment in Post Office Savings Bank deposits and interest-bearing Post Office Cash Certificates, although the popularity of these has apparently been reduced by the low rate of interest obtainable recently.³³

³³ Reserve Bank of India, Report on Currency and Finance for the Years 1935-36 and 1936-37, p. 27.

8. *The Postwar Movement of Silver*

As has been pointed out in Chapter XIX, Section 1, the Government from 1917 to 1920 controlled the movement of silver, restricting it to monetary uses, although undoubtedly many millions of rupees were melted for the manufacture of ornaments. When India recovered from the post-Armistice boom and the ensuing slump, the normal demand for silver for the ornament trade revived, and during the whole decade of the 1920's the net import of the white metal was considerable, as may be seen in Table 9. During this period the Government was buying no silver for coinage, and from 1927 was selling silver derived from melted rupees. Nevertheless, the demand of the Indian people for the ornament trade continued strong until 1931, when India began to feel the full force of the world depression. For the next five years, imports of silver were small, and exports included not only government sales but also additional stocks of the white metal, as is evident from a comparison of Tables 7 and 9. The large exports in 1934 and 1935 represented silver attracted to the market by the rising prices of those years.

TABLE 9
INDIAN IMPORTS AND EXPORTS OF SILVER, 1920-1938
(Millions of fine ounces)

Period	Imports	Exports	Net Imports
Year ending Mar. 31, 1921	40	19	21
" " " " 1922	68	9	59
" " " " 1923	89	9	80
" " " " 1924	100	14	86
" " " " 1925	113	18	95
" " " " 1926	100	14	86
" " " " 1927	124	9	115
" " " " 1928	100	14	86
" " " " 1929	96	37	59
" " " " 1930	90	32	58
" " " " 1931	103	29	74
" " " " 1932	30	40	-10
" " " " 1933	8	31	-23
" " " " 1934	5	54	-49
" " " " 1935	21	63	-42
{ Apr., 1935 to Dec., 1935	4	44	-40
{ Jan., 1936 to Mar., 1936	42	1	41
{ Apr., 1936 to Dec., 1936	75	2	73
{ Jan., 1937 to Mar., 1937	29	-----	29
{ Apr., 1937 to Dec., 1937	21	5	16
{ Jan., 1938 to Mar., 1938	1	3	- 2
{ Apr., 1938 to Oct., 1938	14	1	13

SOURCES

Statistical Abstract for British India and Accounts Relating to the Sea-Borne Trade of British India, various volumes. Items there given in standard ounces have been converted to fine ounces by multiplying by 0.925.

At the beginning of 1936 the world price of silver had dropped to the neighborhood of 45 cents per fine ounce. The price within India is quoted in rupees per 100 tolas fine. Since the tola is $\frac{1}{8}$ of an ounce, and the 1s. 6d. rupee, with the pound sterling in the neighborhood of \$5.00, is approximately $\frac{2}{3}$ of a dollar, the price of silver in India should be approximately the same number of rupees as it was cents in the United States. Actually the import duty, mentioned below, kept the price at about 50 rupees per tola, or about 10 per cent above the world price. This price, however, was as low as the white metal had ever sold in India, except for a short period in 1930 and 1931. It seemed to the Indian people distinctly a bargain price, and they had more cash to invest in it than in the former period.

As a result, silver began to be imported on a large scale, and imports in the first three months of 1936 balanced exports in the preceding nine months. Imports continued strong and amounted to a net total of 114,000,000 fine ounces for the calendar year. They were at about this rate during the first quarter of 1937, but then declined, and the total for that year was only 45,000,000 fine ounces of net imports.

9. Import Duty on Silver

In March, 1930 an import duty of 4 annas per ounce was imposed on silver, and a corresponding excise tax was placed on silver mined in India.³⁴ In March, 1931 the rate was raised to 6 annas per ounce.³⁵ In September of the same year a 25-per-cent surtax on all taxes increased it to $7\frac{1}{2}$ annas per ounce.³⁶ In March, 1934 the rate was reduced to 5 annas per ounce,³⁷ and in March, 1935, to 2 annas per ounce.³⁸ In March, 1937 it was raised to 3 annas per ounce.³⁹

This tax was imposed partly with the idea of keeping the domestic price of silver above the world price in order to protect Indian holders of silver from the effect of the falling world price, and partly for revenue. The first object was attained, although there is some ground for argument as to whether it was desirable. Since the Indian peasant is normally a buyer rather than a seller of silver, he might be expected to prefer a low price. At the same time there undoubtedly was considerable distress selling of silver during the depression years, and the import duty helped those in need to sell

³⁴ *Report of the Controller . . . 1929-30*, pp. 11-12.

³⁵ *Ibid . . . 1930-31*, p. 12.

³⁶ *Ibid . . . 1931-32*, p. 10.

³⁷ *Ibid . . . 1933-34*, p. 15.

³⁸ *Ibid . . . 1934-35*, p. 4.

³⁹ Reserve Bank of India, *Report on Currency and Finance for the Years 1935-36 and 1936-37*, p. 14.

their ornaments for a higher price than they otherwise would have received.

The second object, revenue, was not attained from 1931 to 1935, because recorded imports of silver were very small, there was a large amount of smuggling, and some silver was imported over land frontiers where duties were not enforced.⁴⁰ The reduction of the rate in 1934 was made with the hope of increasing the actual revenue by making smuggling less profitable, and as a measure of co-operation with the United States and other countries interested in silver.⁴¹ The further reduction in 1935 was

. . . dictated by no theory as to the place to be taken by silver in the monetary economy of the world nor has it any connection with the view sometimes expressed that India should be encouraged to build up her hoards of the metal. It is simply a matter of business. There is no doubt that at the present level the duty is encouraging smuggling . . . I propose to assume that we shall get the same yield from the 2 annas as would have been obtained from the 5-anna duty which is, I think, fully justified by the circumstances in which the reduction is taking place.⁴²

10. The Departure from the Gold Standard and the Export of Gold

The world depression affected India severely by reducing the demand for her products. Her exports of domestic merchandise decreased from 3,301,000,000 rupees in 1928-29 to 1,332,000,000 rupees in 1932-33; during the same period, her favorable balance of trade declined from 865,000,000 rupees to nearly zero.⁴³ Since the favorable balance of merchandise trade normally provides funds to meet the Home charges, the Government had difficulty in making its remittances during the early years of the depression, especially in 1931. It was forced to meet some of its needs for funds in London by the sale there of sterling securities belonging to the Gold Standard Reserve, and their temporary replacement by gold transferred in India from the Paper Currency Reserve.⁴⁴

When Great Britain went off the gold standard on September 21, 1931, the Government of India, after two or three days of uncertainty, made the decision to keep the rupee linked to sterling at 1s. 6d.⁴⁵ This was exactly the step against which the Hilton Young Commission had

⁴⁰ *Report of the Controller of the Currency . . . 1933-34*, p. 15.

⁴¹ *Ibid.* . . . 1933-34, p. 15.

⁴² Finance Member's Budget Speech in *Gazette of India*, Feb. 28, 1935, p. 112.

⁴³ *Report of the Controller . . . 1928-29*, p. 32; 1933-34, p. 51.

⁴⁴ *Ibid.* . . . 1930-31, p. 22; 1931-32, p. 19.

⁴⁵ *India in 1931-32*, p. 158.

wished to guard when it advised against a sterling-exchange standard.⁴⁶ Under the circumstances, however, of the world-wide financial crisis of 1931, it probably would have been impossible for India to remain on the gold standard.

The depreciation of the rupee currency by this departure from the gold standard might have been expected to raise commodity prices in proportion. Because of the continued fall of world prices in terms of gold, however, the prices of Indian export products were merely checked in their decline.⁴⁷

An immediate effect, however, was a rise in the rupee price of gold proportional to the depreciation of the currency. Even before the departure from the gold standard a not inconsiderable amount of gold had been reaching the Bombay market, representing partly distress sales by those who had to realize on their savings and partly the liquidation of excess stocks held by bullion dealers.⁴⁸ The increased price stimulated this movement, and also caused many who were holding gold as an investment to take a profit. This resulted in a steady flow of gold to Bombay, where most of it was refined at the Mint, and then exported by private parties, the Government taking no part in the trade.⁴⁹ Exports continued with little interruption, and in very large quantities, as shown by Table 10. The magnitude of these ex-

TABLE 10
NET EXPORTS OF GOLD FROM INDIA, 1931-1938

Fiscal year ending March 31	Thousands of fine ounces
1931-32	7,781
1932-33	8,354
1933-34	6,695
1934-35	5,695
1935-36	4,019
1936-37	3,010
1937-38	1,767
1938-39 (7 mos.)	1,052

SOURCES

Annual Statement of the Sea-Borne Trade . . . 1933, p. 69; Accounts Relating to the Sea-Borne Trade, March, 1935, p. 266; *ibid.*, March, 1933, p. 276; *ibid.*, October, 1935.

ports in comparison with annual world production of gold may be seen by reference to the top part of Chart 1, page 9, where they form part of the "Other Supplies" of gold there shown.

A result of this gold export was that the Government which, as

⁴⁶ Hilton Young, *Report*, para. 25.

⁴⁷ *India in 1931-32*, pp. 132-133.

⁴⁸ *Report of the Controller of the Currency . . . 1930-31*, p. 10; *1931-32*, p. 8.

⁴⁹ *Ibid.* . . . *1931-32*, pp. 8-9.

stated above, had been having difficulty in making remittances for its Home charges, was able to purchase sterling exchange easily, since the export of gold acted in the same way as exports of merchandise to create a supply of exchange on London. The exchange rate, which had fallen as low as 1s. 5½*d.* during the first half of the fiscal year, rose and remained well above 1s. 6*d.* thereafter.⁵⁰

11. *The Reserve Bank of India Act*

The plan for a reserve bank, proposed by the Hilton Young Commission in 1926, was not adopted, but the subject was discussed from time to time in subsequent years. In 1933 a Committee on Reserve Bank Legislation, under the Chairmanship of Sir Reginald Mant, and with about half of its membership composed of Indians, was appointed by the British Government. This committee reported on August 15, 1933.⁵¹ An act embodying most of the recommendations of the committee was passed by the Indian Legislative Assembly on December 22, 1933,⁵² and received the assent of the Governor General on March 6, 1934.⁵³

The banking provisions of the report and the act are not germane to the subject of silver money, but the committee's remarks about the monetary standard, and the arrangements for the disposition of the rupee coin in the Paper Currency Reserve are of interest. The committee dealt with the question of the monetary standard as follows:

19. The questions which arise in connection with the exchange obligations to be imposed on the Bank present special difficulty in existing circumstances. In the prevalent state of monetary disorganization throughout the world, it is impossible to incorporate in the bill provisions which would necessarily be suitable when monetary systems generally have been recast and stabilized. In these circumstances we consider that the only sound course for India is to remain on the sterling standard. On this basis the exchange obligations incorporated in the bill must necessarily be in accord with the rupee-sterling ratio existing at the time when the bill is introduced. This statement does not, however, imply any expression of opinion on the part of the Committee on the merits or demerits of the present ratio. The ratio provisions in the bill are designed to make it clear that there will not be any change in the *de facto* situation by the mere coming into operation of the Reserve Bank Act.

Suitable Ratio

A considerable majority of the Indian delegates feel it their duty to record their view that a suitable exchange ratio is one of the essential factors for the

⁵⁰ *Ibid.* . . . 1931-32, pp. 12-13.

⁵¹ The report is reprinted in full, together with London newspaper comment, in *Commercial and Financial Chronicle*, Vol. 137, Sept. 2, 1933, pp. 1638-42.

⁵² *Ibid.*, Vol. 138, pp. 956-957, Feb. 10, 1934.

⁵³ *The Reserve Bank of India Act*, 1934.

successful working of the Reserve Bank. They point out that considerable changes have occurred in the currency bases and policies of almost all the countries of the world in the last few years. In their view it is for the Government of India and the Legislature to examine these and all other relevant considerations with a view to ensuring that the minimum possible strain is placed on the currency system of India.

We are all agreed that it should, in any case, be made clear in the preamble that the whole question of the monetary standard best suited to India will have to be reviewed when the international monetary position has clarified itself and become sufficiently stable to make it possible to frame more permanent provisions.⁵⁴

Advocates of a lower rate for the rupee were unsuccessful in attempts to have provision for that incorporated in the act.⁵⁵

The act provided for the transfer to the Reserve Bank of the management of the paper-currency system. Under the new arrangements, at least 40 per cent of the reserve must consist of gold (valued on the basis of the gold content of the sovereign) and of sterling securities; at the outset at least 50 per cent must be in this form and must include all the gold previously held in the Paper Currency Reserve and the Gold Standard Reserve. The remainder of the reserve is to consist of rupee coins, rupee securities, bills of exchange, and commercial paper. The normal holding of rupee coin is to be 500,000,000 rupees or one-sixth of the total assets, whichever is greater. At the end of any fiscal year during which the minimum holding of rupee coin rises above that figure, the Bank is entitled to transfer an amount of rupee coin equal to the excess back to the Government, against payment in legal tender. Similarly, at the end of any fiscal year during which the maximum holding of rupee coin falls below that figure, the Government is entitled to transfer an amount of rupee coin equal to the deficiency to the Bank, against payment in legal tender. Such transfers are not to exceed 50,000,000 rupees in any year except by special agreement.

12. Changes in the Currency System on April 1, 1935⁵⁶

On April 1, 1935 the management of the paper currency was transferred to the newly-organized Reserve Bank of India, and at the same time the Government made a number of changes in the various assets and reserves connected with the currency system.

As noted in Section 6 above, 500,000,000 rupee coins from the

⁵⁴ *Commercial and Financial Chronicle*, Vol. 137, Sept. 2, 1933, pp. 1640-41.

⁵⁵ *Ibid.*, Vol. 138, Feb. 10, 1934, p. 956.

⁵⁶ This section is based on *Finance and Revenue Accounts of the Government of India . . . 1935-36*, pp. 518-522.

Paper Currency Reserve were transferred to the Reserve Bank. At the same time other assets in the form of gold, sterling securities, and rupee securities were transferred to the Bank from the Paper Currency Reserve and the Gold Standard Reserve to an amount, which, with the rupee coins, gave it a total reserve of 1,861,000,000 rupees, divided in accordance with the statute, against the like total of notes outstanding, for which the Bank assumed responsibility.

The Paper Currency Reserve and the Gold Standard Reserve ceased to exist on April 1, 1935. Since the transfers to the Bank were equivalent in amount, though not in form, to the total value of the former, the Government was left with assets equivalent to the latter, amounting to £40,000,000 or 533,000,000 rupees. Of this amount 273,000,000 rupees were in rupee coins, 131,000,000 rupees in silver bullion, valued at the coinage rate, and 129,000,000 rupees in sterling securities. The 404,000,000 rupees of silver was placed in a Surplus Silver Stock account, and is accounted for by weight instead of in rupees. The balance in this account is increased by any return of silver from the Bank under the provisions of the act, and diminished by any return of silver to the Bank or by sales of the white metal.

Of the 129,000,000 rupees of sterling securities, 29,000,000 rupees were applied against old losses on the sale of silver. The remaining 100,000,000 rupees, or £7,500,000, were transferred to a new Silver Redemption Reserve. This Reserve was intended to provide sterling assets as needed to transfer to the Bank in return for the rupee coin which it is entitled to hand back to the Government each year if its minimum stock during the preceding year has exceeded 500,000,000 rupees. It was planned to keep the Reserve replenished when necessary by transfers from the proceeds of sales of silver from the Surplus Silver Stock; occasional other revenue might be received from profits on casual sales of gold and from appreciation of securities.

From another point of view the Silver Redemption Reserve of 100,000,000 rupees may be considered as a provision for loss on the ultimate sale of such rupee coins as may be returned by the Bank under the act. The Finance Member stated in his budget speech at the end of February, 1935 that it would be sufficient to take up the loss on returns to the extent of 250,000,000 rupees, or the maximum allowable in five years.⁵⁷ Apparently this statement was based on a price of about 29*d.* per ounce, which was a fair expectation at the time. Since the end of 1935, however, the price has been in the neighborhood of 20*d.* per ounce, and at that rate the Reserve would be suffi-

⁵⁷ Finance Member's Budget Speech, *Gazette of India*, Feb. 28, 1935, p. 108.

cient to take care of the loss on only 170,000,000 rupees, or about the amount which returned to the Bank from circulation between April 1, 1935 and December 1, 1937, as shown in Table 8.

The accumulated losses on earlier sales of silver, which amounted on April 1, 1935 to 396,000,000 rupees, were transferred on that date to a new account, Purchases and Sales of Silver. An additional 50,000,000 rupees was carried over to this account from a suspense account, Sale of Silver. The account was credited on April 1, 1935 with the 29,000,000 rupees of sterling securities from the Gold Standard Reserve, mentioned above. Since that date it has been credited with proceeds of sales of silver from the Surplus Silver Stock, less any amounts appropriated to the Silver Redemption Reserve.

The transactions in these various accounts were of small magnitude in the fiscal years 1935-36 and 1936-37. Figures are not yet available for 1937-38, but the chief item was a return of 50,000,000 rupees from the Bank to the Government, made in April, 1937. A similar return was made in April, 1938. Instead of using the sterling assets of the Silver Redemption Reserve, however, to pay the Bank, the Government issued *ad hoc* rupee securities, just as was done to take up losses on silver sales under the old system.⁵⁸

As is evident from Table 8, rupees have continued to flow back to the Bank from circulation at an average rate of about 60,000,000 ounces per year, or faster than the rate at which the Bank is entitled to turn back coin to the Government. Moreover, the first return could not be made until April, 1937, two years after the system started. The Bank seems likely for some time to have more than the standard stock of 500,000,000 rupees in coin and to continue to turn back 50,000,000 rupees to the Government each year. The Government's stock of silver will thus be built up, except so far as it is decreased by actual sales. This stock will continue to be a potentially bearish factor in the world silver market.

13. Summary

The Indian currency system, after a few years of dislocation subsequent to the World War, was reorganized in 1927 on what was temporarily a gold-exchange standard but was expected to develop into a gold-bullion standard. The rupee was stabilized at the equivalent of 1s. 6d. gold, somewhat above the prewar rate of 1s. 4d., to which a considerable body of Indian opinion wished to revert. When

⁵⁸ *Financial News*, Vol. 6, No. 35, Sept. 10, 1938, p. 19.

Great Britain went off the gold standard in 1931, the Government of India followed suit, and kept the rupee linked to sterling instead of to gold.

Since 1927 the Government has been selling silver derived from excess rupees, to the extent of nearly 700,000,000 rupees face value or 240,000,000 fine ounces. An even greater quantity, nearly 900,000,000 rupees, has flowed back from circulation, especially during the depression years.

With the establishment of the Reserve Bank of India on April 1, 1935 the Government transferred to it the control of the paper currency system. The Government was left with a stock of silver coin and bullion, of a coinage value of over 400,000,000 rupees, but a market value during most of the subsequent years of less than half this amount. The proceeds of the sale of this bullion will eventually meet part of the old losses on the sale of silver, which had totalled about 400,000,000 rupees up to April 1, 1935. The Government had a reserve of 100,000,000 rupees against losses on sale of the silver which was expected to be returned by the Reserve Bank; it seems probable that the whole of this reserve will ultimately be needed for the purpose. The former Gold Standard Reserve, represented by the stock of silver and the new reserve, will thus have been wiped out, and in addition, the Government probably will have to meet at least 200,000,000 rupees of the old losses on sales of silver, carried for the present in suspense. In return, however, the country has an improved paper-currency system, with adequate reserves in gold and sterling securities, and with a diminishing amount of overvalued silver coin in circulation.

CHAPTER XXI

CHINESE TRADE AND CURRENCY DURING AND AFTER THE WORLD WAR

What says the silver with her virgin hue?
"Who chooseth me shall get as much as he deserves."
WILLIAM SHAKESPEARE, *The Merchant of Venice*

1. *The Situation at the Beginning of the War*

In 1911 occurred the Chinese Revolution in which the Manchu dynasty was overthrown and a nominal republic established. There followed a succession of civil wars, and the rise and fall of one war lord after another, who controlled for a time a province or a group of provinces. In spite of this political unrest there was an increasing economic development and modernization.

Although the Vissering plan, described in Chapter XIV, Section 2, was not adopted, one step toward currency unification was made toward the end of 1914 when a new national dollar, or *yuan*, bearing the head of President Yuan Shih-kai, was coined¹ (it should be noted that the Chinese character for dollar is not the same as the one for the name of President Yuan, although they are pronounced alike). Over 1,000,000,000 of these dollars were coined during the next thirteen years, many of them still dated the Third Year of the Republic (1914) and all bearing the head of Yuan Shih-kai, in spite of the fact that his name was anathema to later patriots.² During this period these coins very largely came to replace throughout the country the great variety of foreign and provincial dollars which formerly had made up the circulation, and also to replace much of the sycee, until the latter remained chiefly in the bank reserves at Shanghai and some other ports.

The beginning of the World War caused something of a slump in Chinese foreign trade as it did elsewhere, but, as the war progressed, trade revived, and China shared in the general wartime prosperity. The rising price of silver from 1915 to 1920 may be con-

¹ Kann, *The Currencies of China*, pp. 159-167.

² Kann, "How Much Silver Is There in China?" p. 418. This gives a total of about 1,292,000,000 of Yuan Shih-kai and Sun Yat-sen dollars. Since only two or three years' coinage of the latter are included, the former must have amounted to at least 1,000,000,000.

sidered in its relation to the movement of merchandise and to the movement of gold and silver.³

2. *The Movement of Merchandise*

A rising price of silver might have been expected to discourage exports, because it would either increase their delivered price in gold currencies abroad, or lower their price in silver currency in China. Actually, however, China's export trade increased fairly steadily during the period, whether measured in gold or in silver.⁴ This increase was due to the world-wide demand for commodities and to the fact that world commodity prices rose just about as much as did silver, so that the gold prices of Chinese commodities were not raised unduly. This was especially true during the postwar boom of 1919, when China exported unprecedented quantities of silk, bean products, cereals, oils, and other produce. Tea was the only important export which fell off during the war period, because of the loss of the important Russian market. From another point of view, the large Chinese exports may be considered as one of the causes of the rise in the price of silver.

A rising price of silver might have been expected to encourage Chinese imports. Actually imports did not increase as much as exports, so that China's foreign trade, which normally shows a large excess of imports of merchandise, was approximately balanced during the war period. This was because favorable exchange rates often were more than counterbalanced by increased gold cost of imports and by high freights, and because the rationing of export permits in Western countries limited their sales of merchandise to China regardless of the price.

3. *The Movement of Gold and Silver*

The low price of silver in 1914 and 1915 meant to the Chinese that gold was high. Holders took advantage of the high price to dispose of their gold and this resulted in the export of about Hk. Tls.⁵ 30,000,000 of the yellow metal during those two years, which, at the average exchange rate for the period, presumably represented about

³ The following paragraphs are based largely on material in the Chinese Customs reports from 1914 to 1920.

⁴ Yang, *Statistics of China's Foreign Trade . . .*, pp. 1-2.

⁵ This is the usual abbreviation for Haikwan (Customs) taels, defined in Chapter XI, Section 5. These and other figures in this section for the movement of gold and silver are taken from Yang, *op. cit.*, p. 142. Annual exchange rates for the Haikwan tael in terms of gold dollars are given in *ibid.*, p. 2.

\$20,000,000 U. S. Currency, or, say, 1,000,000 fine ounces. During the same two years, there was also a net export of silver to the amount of Hk. Tls. 32,000,000 or about 38,000,000 fine ounces; this export of silver probably was necessitated by the great falling off of foreign investment in China and other invisible exports during the early years of the war.

From 1916 through 1919, the price of silver was rising, or gold was becoming cheaper for the Chinese, and seemed like a good investment. It is not surprising, therefore, that about Hk. Tls. 60,000,000 worth of gold, which at the current high rate of exchange may have represented from \$60,000,000 to \$80,000,000 U. S. currency or from 3,000,000 to 4,000,000 fine ounces, was shown as imported during the four years; probably additional amounts came in without being recorded by the Customs.⁶ Many a Chinese bought a few gold coins or a gold ring as an investment; it turned out to be a very good investment.

Net export of silver continued during 1916 and 1917, to the amount of nearly Hk. Tls. 50,000,000 or about 60,000,000 fine ounces; this was natural in view of the world-wide demand for silver which made the operation profitable. A similar process took place in the melting up and exporting of brass cash to supply Japanese needs of copper.⁷ There was, as a result, an inconvenient shortage of both small and large currency, and in 1918 the tide turned, and there was a net import of silver for the first time since 1913. Even then China could not obtain all the silver needed for her expanding trade, because of the restrictions on the movement of the white metal from the United States and Great Britain. During most of the time from the summer of 1918 to the spring of 1920, the value of silver in Shanghai was far above parity with the value in London.⁸ When the restrictions on silver movements were removed in May, 1919, the Chinese demand was one of the chief factors that kept the price rising.⁹ Net imports of silver in 1918 and 1919 amounted to about Hk. Tls. 76,000,000 or over 90,000,000 fine ounces.

On the whole, then, the theoretical discouragement of exports and encouragement of imports, which a rising and high price of silver might be expected to bring about in China, were not realized, because world commodity prices moved upward more or less propor-

⁶ China, Maritime Customs, *Report on the Foreign Trade of China, 1916*, p. 13.

⁷ *Ibid.*

⁸ Leavens, "The Ratio between the T. T. Rate and the Silver Price," Chart 2, p. 402.

⁹ *Annual Report of the Director of the Mint . . . 1920*, pp. 155-157, quoting Sharps and Wilkins.

tionately to the movement of the price of silver, and thus did not disarrange greatly the relative position of import and export prices in China. On the other hand, gold was a commodity in which the full effects were shown; this resulted in Chinese sales of gold when its price was high in 1914 and 1915 and purchases of gold when its price was low from 1916 to 1919.

4. Adjustment of Salaries of Foreigners

A relatively minor matter, but one important to those whom it concerned, was the adjustment of the salaries of foreigners in China. The foreign community included the following principal classes:

1. Diplomatic, consular, and military personnel;
2. Missionaries;
3. Servants of the Chinese Government in the Customs, Post Office, and other services;
4. Foreigners in business for themselves;
5. Employees of foreign corporations.

Prior to the war, the salaries of Classes 1 and 2 usually were set in the gold currency of the country from which they came; salaries or earnings of Classes 3 and 4 usually were in Chinese silver currency; and salaries of Class 5 in some cases were in gold and in some cases in silver. The comparative stability of exchange for the twenty years preceding the war made it of little difference whether salary was set in gold or silver. The American looked on "two to one," that is \$2.00 Mex. per dollar gold, as a kind of normal exchange; the Englishman similarly looked on a half-crown tael as normal. When silver went down, those paid in gold profited, because they got more silver; when silver went up, those paid in silver profited, because such part of their salaries as they saved each month would purchase a larger remittance home. The fluctuations in exchange gave a pleasant zest to life, and formed a never-failing topic of dinner-table conversation.

In 1914 and 1915 those paid in gold were happy while those paid in silver were handicapped in their homeward remittances; but from 1916 to 1920 the shoe was on the other foot. Those paid in gold kept getting smaller and smaller silver proceeds from their salary checks, but found no corresponding reduction in the cost of living. Those paid in silver were no better off for meeting the cost of living, but, in so far as they could save money, they could remit it home at very attractive rates.

To meet this situation, action was taken by many of the employers of foreigners in Classes 1, 2, and 5 to make up some of the "loss

by exchange" experienced by their staffs. In some cases, salaries were changed definitely to a silver basis; in other cases, a bonus was given from time to time; in others, a fixed rate of exchange was guaranteed, the employer making up the difference between the fixed rate and the actual rate; in still others, the salary was fixed partly in gold, and partly in silver, on the theory that the recipient spent part of his income in China for things unaffected by the exchange rate, and part for imported articles or for remittance home. The extent of these adjustments varied with different organizations.

5. *Trade in the Nineteen-Twenties*

China shared in the post-Armistice boom of 1919. The great drop in the price of silver in 1920 coincided with a fall in world commodity prices, and so served to keep the Chinese price level, measured in silver, from being disturbed greatly. Chinese exports, measured in silver, suffered a minor setback, but soon recovered; both exports and imports continued to expand during the 1920's; there was a large excess of merchandise imports and also a large net import of silver. The balance was made up chiefly by the invisible items of foreign investment in China and remittances from Chinese emigrants abroad. In spite of civil wars, of communistic agitation, and of anti-foreign disturbances, especially from 1925 to 1927, the general economic progress of the country was accompanied by a growing foreign trade, especially after the new Nanking Government obtained control over a considerable area in 1928.

As has been seen, the price of silver was remarkably steady from 1921 to 1929, with the exception of a readjustment to a new level in 1926. Thus, the extreme speculative element was taken out of trade, and there was a chance for steady progress.

6. *Currency Developments*

After the close of the war a plan was developed for the unification of the coinage, for its manufacture at one central mint in Shanghai, instead of at provincial mints, and for the replacement of the tael by the dollar or *yuan*. The foreign banks in Shanghai were willing to relinquish the tael only if they could be assured of the maintenance of equal standards of reliability for the dollar currency. In 1921 a loan was raised from a Chinese banking group, and by 1923 a new mint had been constructed at Shanghai and equipped with up-to-date machinery; the installation was not finally completed, on ac-

count of lack of funds, and the plant lay idle for many years.¹⁰ After the establishment of the new Nationalist Government in Nanking in 1927, the minting of Yuan Shih-kai dollars at the provincial mints was replaced by that of Sun Yat-sen dollars, using a die from which a comparatively small issue of memorial coins had been struck in 1912.

7. *The Kemmerer Plan*

The able and progressive Minister of Finance, T. V. Soong, at the end of 1928, invited Professor E. W. Kemmerer to study and report on the Chinese currency system. Professor Kemmerer proceeded to China at the beginning of 1929, with a large staff, and spent the whole year in his investigations.

The Kemmerer report was submitted to the Minister of Finance, November 11, 1929, but was not made public until the spring of 1930. It consisted of the draft of a proposed law, followed by a report on the problem of currency reform and a detailed explanation of the specific provisions of the law.¹¹

The proposed law provided for a new theoretical gold currency unit to be called the "*sun*" (after Sun Yat-sen) containing 60.1866 centigrams of fine gold, or the equivalent of 40 cents, United States currency. This was chosen as the approximate current value of Chinese silver dollars, in order to cause the least maladjustment of prices. Provision was made for token silver coins, the silver *sun* to weigh 20 grams, 0.800 fine, while the 50-cent and 20-cent coins were to be of proportional weight, but only 0.720 fine. This made coinage ratios of 26.58 to 1 and 23.95 to 1, respectively, and bullion parities of 77.7 cents and 86.3 cents per ounce, respectively, in New York, or 35.5 pence and 39.4 pence per ounce, respectively, in London.¹²

The gold parity of the fiduciary coins would be maintained by unlimited redemption of them in drafts on gold-standard countries, or in gold bars, at the option of the Government, for sums of 2,000 *suns* or more, with a charge corresponding to the costs of shipping gold. There was also provision for the sale abroad of drafts on China at a corresponding charge.¹³

A Gold Standard Fund, of at least 35 per cent of the value of

¹⁰ Kann, *The Currencies of China*, p. 168; Dobrovolsky, "The Origin of the Shanghai Mint."

¹¹ National Government of the Republic of China, Commission of Financial Experts, *Project of a Law for the Gradual Introduction of a Gold-Standard Currency System in China, together with a Report in Support thereof*.

¹² *Ibid.*, pp. 89-95, 98-100.

¹³ *Ibid.*, pp. 124-132.

coins in circulation, would be established to support exchange, and would be held partly in interest-bearing gold deposits abroad and partly in silver coins in China. The administration of this fund would be in the hands of a Currency Department of the Ministry of Finance, but would be subject to examination by certain Chinese banking and commercial bodies. Seigniorage profits would go to the Gold Standard Fund.¹⁴

It was proposed to introduce the plan gradually, province by province, beginning at Shanghai. First a date would be announced for the circulation of the new currency; after at least a year another date would be announced, after which only the new money could be used in making new contracts. Another date would be set for the adjustment of old contracts to the new currency at fixed rates to be officially established.¹⁵

The plan also provided for the immediate contraction of the circulation of copper 10-cash coins, with the intention of increasing their value and stabilizing them at 1/200 of a *sun*. There were provisions for the retirement of old issues of paper money, and for the granting of a monopoly of note issue to a Central Reserve Bank of China, which would be reorganized from the Central Bank of China.¹⁶

The plan thus contemplated was a gold-exchange standard to be introduced gradually, and followed to some extent the ideas of both Jenks and Vissering. Nothing was done, however, to put it into operation. The price of silver was falling rapidly before the report was made public, the world depression was beginning, the control of the Nanking Government over many parts of the country was weak, and it would not have been practicable to start the new system.

8. *The Customs Gold Unit*

Although the Kemmerer recommendations could not be carried out, one step toward a gold standard was taken by the Chinese Maritime Customs. Import duties in most cases were specific, that is, so many taels per picul (133 pounds) or other unit of quantity, but were intended to yield a certain percentage on normal prices. When the price of silver declined, the silver price of imported commodities rose (unless compensated for by a decline in their gold price), while the duty remained the same amount of silver currency, and thus represented a decreasing percentage of the price. To remedy this, a new

¹⁴ *Ibid.*, pp. 115-124.

¹⁵ *Ibid.*, p. 31.

¹⁶ *Ibid.*, pp. 137-151.

Customs gold unit (known as C.G.U. or G.U.) was established equivalent to the proposed *sun* unit of 60.1866 centigrams of fine gold or 40 cents U. S. currency.¹⁷ All specific import duties, previously set in Haikwan taels, were converted to gold units at a transitional rate of Hk. Tls. 1 = G. U. 1.50 from Feb. 1 to Mar. 15, 1930, and at a permanent rate of Hk. Tls. 1 = G. U. 1.75 thereafter. The latter rate corresponded to Hk. Tls. 1 = U. S. \$0.70, which was approximately the average for the immediately preceding years. In subsequent tariff revisions, import duties were set directly in gold units. Beginning in 1932 statistics of imports were reported in gold units, while exports continued to be reported in Haikwan taels, or in Chinese standard dollars after the abolition of the tael in 1933.

By the adoption of the gold unit, China was assured of the collection of the intended percentages of the gold value of imports. This was of great importance, in view of the fact that a considerable part of the Customs revenue was earmarked for the service of foreign loans in gold currencies.

The customs gold unit is a money of account, not represented by any coin. While China remained on the silver standard, duties assessed in gold units commonly were paid in silver currency at the rate of the day, which was set by the Central Bank of China on the basis of the exchange rates with gold-standard countries. For the convenience of importers, the bank undertook to sell cashier's checks in terms of gold units, to open current accounts in the same currency, to make forward contracts in it, and to sell gold units for gold or sterling telegraphic transfers at parity, plus a small charge.¹⁸ Later, the bank also issued bank notes in gold units, which, it was expected, might come into general circulation as representing a gold currency; actually their use seems to have been confined to the payment of duties.¹⁹

9. *The New Dollar and the Abolition of the Tael*

In 1932 the plan of abolishing the tael and unifying the dollar currency was revived.²⁰ This policy was announced definitely on December 30 by Finance Minister T. V. Soong.²¹ The equipment of the

¹⁷ *Finance & Commerce*, Vol. 19, No. 34, Jan. 22, 1930, pp. 1-3 (E. Kann).

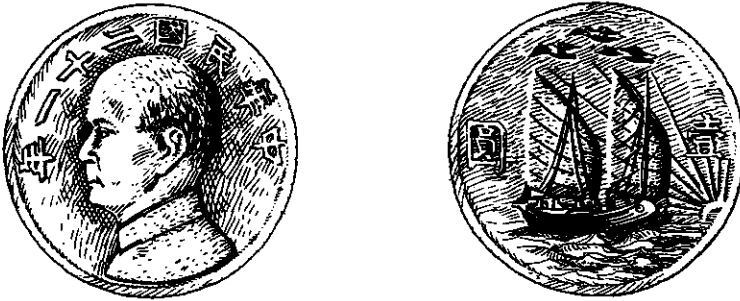
¹⁸ *Ibid.*, Vol. 19, No. 45, April 9, 1930, pp. 5-6 (E. Kann).

¹⁹ *Ibid.*, Vol. 19, No. 100, Apr. 29, 1931, pp. 7-8 (E. Kann); No. 143, Feb. 24, 1932, p. 8 (E. Kann).

²⁰ *Ibid.*, Vol. 19, No. 156, May 25, 1932, p. 6; Vol. 20, July 13, 1932, p. 148 (E. Kann); July 20, 1932, pp. 176-177 (E. Kann); July 27, 1932, pp. 206-207 (E. Kann); Aug. 3, 1932, pp. 235-237 (E. Kann); Aug. 10, 1932, p. 268 (E. Kann).

²¹ *Ibid.*, Vol. 20, Jan. 4, 1933, p. 854.

Shanghai Mint was completed, and early in March, 1933 there began the minting of a new type of silver dollar or *yuan*, with the head of Dr. Sun Yat-sen on the obverse, and a junk with rising sun and flying birds on the reverse, as shown in the illustration. This attractive design, however, did not meet with popular approval, because the rising sun was symbolic of Japan and the birds suggestive of airplanes at-



CHINESE DOLLAR ISSUED IN 1933

tacking Chinese shipping. Accordingly these features were deleted and a modified design adopted.²² Coinage of the new design began in May, 1933, and continued steadily. By the end of 1935 about \$100,000,000 of the new coins had been minted, and in addition the mint had manufactured over \$50,000,000 in \$1000 bars, to be used for bank reserves.²³ Existing stocks of sycee were used before any attempt was made to recoin the older dollars. In order to assure public confidence in the quality of the new coin, the Ministry of Finance appointed a committee of representative Chinese and foreign bankers to examine regularly the coins produced by the mint.²⁴

Soon after the coinage was begun, the Chinese Government suddenly announced on April 5, 1933 that the tael would be abolished as of April 6. Chinese banks and merchants perforce obeyed at once. The foreign banks and merchants at first were reluctant to make the change, but soon accepted the situation, and from April 10 the foreign exchange banks began quoting exchange rates in foreign currencies per Chinese standard dollar instead of per Shanghai tael. Bank accounts, contracts, securities, and outstanding accounts expressed in taels were converted into dollars at the fixed rate of Shanghai Taels 71.50 per \$100.²⁵

²² *Ibid.*, Vol. 21, May 31, 1933, p. 621 (E. Kann).

²³ *Ibid.*, Vol. 22, Sept. 13, 1933, p. 301 (E. Kann); Vol. 23, Feb. 14, 1934, pp. 183-184 (E. Kann); Vol. 25, Jan. 16, 1935, p. 59 (E. Kann); Vol. 27, Jan. 15, 1936, p. 53 (E. Kann).

²⁴ *Ibid.*, Vol. 21, May 17, 1933, p. 551; May 31, 1933, p. 621 (E. Kann).

²⁵ *Ibid.*, Vol. 21, Apr. 12, 1933, pp. 405-407 (E. Kann).

The objection of the foreign banks to the change was based on the fact that sycee, prepared by the smelting shops and assayed by the *Kung-ku-chu*, had proven, for three-quarters of a century, to be a reliable standard, whereas many Chinese coins had been debased. It was suggested by Eduard Kann that, in order to safeguard creditors, all loan, mortgage, and lease contracts expressed in standard silver dollars should contain a silver clause definitely stating the weight and fineness.²⁶ A number of security issues in the years 1933 to 1935 contained such a clause;²⁷ as described in Chapter XXIX, Section 10, this brought up legal questions when China abandoned the silver standard in 1935.

The new dollars by law weighed 26.6971 grams (412 grains), 0.880 fine, thus being $\frac{1}{2}$ grain lighter and containing about 2.33 per cent less silver than the American dollar. They were subject to a coinage fee of $2\frac{1}{4}$ per cent. Based on the silver content, without allowance for seigniorage or charges, the parity of the dollar was 0.8166 times the London price of silver, or 0.7561 times the New York price. Since the cost of importing silver to Shanghai was in the neighborhood of 1 per cent, these charges, combined with the $2\frac{1}{4}$ -per-cent coinage fee, made the silver import point about $3\frac{1}{4}$ per cent above this parity. On the other hand when silver was exported from Shanghai it had to be melted and refined in order to be good delivery in New York, London, or Bombay. The cost of this in 1933, plus shipping charges and interest, worked out to be 5 or $5\frac{1}{2}$ per cent, so that the silver export point was that much below parity. Thus the total spread was 8 or 9 per cent as compared with a spread of about 5 per cent (Chapter XII, Section 1) for the tael. This was partly because of the $2\frac{1}{4}$ -per-cent charge, which was somewhat more than the charges made by the smelting shops for converting bar silver into sycee, and partly because of the fact that, with the price of silver low, some charges which were fixed per ounce worked out at a higher percentage than before.²⁸

The official name of the new coin was *yuan*, and in Chinese it was known by that character, which had been coming into general use for silver dollars in recent years. In English, however, it usually was called dollar, even by Chinese writers and the \$ sign (sometimes preceded by C. S., that is, Chinese Standard) was used when sums

²⁶ *Ibid.*, Vol. 21, Apr. 19, 1933, pp. 434-435 (E. Kann).

²⁷ For typical silver clauses, see *ibid.*, Vol. 21, June 14, 1933, p. 682; Vol. 23, Jan. 31, 1934, p. 139; Feb. 28, 1934, pp. 252-253; Mar. 7, 1934, pp. 286-287; Vol. 24, July 18, 1934, pp. 70-71; Aug. 8, 1934, p. 150; Vol. 26, Nov. 20, 1935, p. 542. See also Leavens, "The Silver Clause in China."

²⁸ The constants given in this paragraph are taken from E. Kann's computations in *Finance and Commerce*, Vol. 21, Apr. 12, 1933, p. 407.

were written in Arabic numerals. In conversation it still was distinguished from the American dollar by the term "Mex."

At the time when the tael was abolished, the Government imposed a $2\frac{1}{4}$ -per-cent export tax on exports abroad of bar silver, sycee, and other forms of silver bullion, except bars to be manufactured by the Shanghai mint at a $2\frac{1}{4}$ -per-cent charge.²⁹ This provision simply placed silver bullion in China on a par with the new coinage and meant that all silver coming into China had to pay the charge if it was to become part of the monetary system. On the other hand, silver imported and used in the arts would not be subject to any tax.

Prior to 1933 China was on a *de facto* silver standard with *quasi* free coinage, since smelting shops for a small charge transformed bar silver into sycee which could enter the monetary system. The adoption of the new standard silver dollar in 1933 placed her on a *de jure* silver standard with free, but not gratuitous, coinage of silver by the Government. The $2\frac{1}{4}$ -per-cent coinage fee was more properly brassage than seigniorage; its only effect was to widen somewhat the distance between the silver import and export points.

10. *The Shanghai Gold-Bar Market*

Although gold seldom has been used as currency in China,³⁰ it has served as a store of value and as a means of speculation. The speculative use developed in the present century out of the market for gold bars which originally served to supply the needs of goldsmiths and of individuals who wished to invest savings in gold.³¹ Transactions in ready gold came to be supplemented by purchases and sales for future delivery carried on by the Shanghai Gold Stock Exchange. The large fluctuations in the relative values of gold and silver during and since the World War caused the Shanghai gold-bar market to play an important part in the Chinese financial system.

Prices of gold originally were quoted in taels per bar of 10 Chauping taels weight, containing 5657 grains of gold, 0.978 fine, or 5532.5 grains of fine gold. This was the equivalent of 238.27 gold dollars of 23.22 grains fine, and formerly a gold bar was taken arbitrarily as equivalent to 240 gold dollars or 480 yen. After various adjustments to depreciated currencies, and to the substitution of the standard silver dollar for the tael, a new standard was established on

²⁹ Customs Notification No. 1290, *ibid.*, Vol. 21, Apr. 12, 1933, p. 410.

³⁰ See Kann, *The Currencies of China*, pp. 259-279, for an account of the scattered instances in which gold has served as currency.

³¹ This account is based on *ibid.*, pp. 298-318, 339-355, which see for further information.

February 16, 1934, of bars of 8.525 Chauping taels weight, containing $0.8525 \times 5532.5 = 4716.5$ grains of fine gold, which was equivalent to 343.91 gold dollars of 13 $\frac{1}{4}$ grains fine, and was taken arbitrarily, including charges, as equivalent to 346 gold dollars.³²

The unit of trading was 7 bars. Some actual bars used to change hands, but in recent years most transactions were in fictitious bars for future delivery. On the monthly settlement date contracts were settled by paying differences or making new contracts, instead of by actual transfer of the yellow metal.

Like other exchanges, the Shanghai Gold Stock Exchange had its good and its bad features. Chinese merchants who were importing foreign merchandise and would have gold obligations coming due in the future could make a forward purchase of gold bars instead of making a forward contract to buy exchange from a bank; the market thus met a legitimate need. At the same time it offered speculators a field which they were not slow to use. While purchases and sales within the exchange offset each other, operators could hedge by making forward exchange contracts with the banks. The magnitude of such operations by "Kiukiang Road" speculators often reacted strongly on the exchange market and on the silver markets of the world.

³² *Finance & Commerce*, Vol. 23, Feb. 14, 1934, p. 183 (E. Kann); Feb. 21, 1934, p. 213 (E. Kann).

CHAPTER XXII

THE EFFECT ON CHINA OF THE FALL IN THE PRICE OF SILVER, 1929-1933¹

The sea of Fortune doth not ever flow,
She draws her favours to the lowest ebb;
Her time hath equal times to come and go,
Her loom doth weave the fine and coarsest web;

ROBERT SOUTHWELL, *Times Go by Turns*

1. *Chinese Trade During the Depression*

It might be expected that rising or high prices of silver, with the accompanying rising or high exchange rates for the Chinese dollar in terms of foreign currencies, would stimulate imports into China and hinder exports. It has been seen, however, in Chapter XXI, Section 2, that in the most conspicuous period of a rising price of silver, from 1915 to 1920, these expected effects were not produced to any great extent. The stimulation of imports was offset by the rising price, in gold currencies, of the foreign goods needed by China, and by the restrictions on exports from all belligerent countries. The hindrance to exports was offset by the fact that the rest of the world in wartime needed certain Chinese commodities, such as vegetable oils and antimony, even at high prices.

Similarly there were special factors which compensated to some extent for the falling or low prices of silver from 1929 to 1933, which might have been expected to hinder imports and stimulate exports. The actual condition of Chinese foreign trade, as compared with United States and world foreign trade, may be seen in Table 11 and Chart 7. The table and chart have been extended to 1937 to include developments subsequent to the period covered by this chapter; the price of silver, of course, has not been an important factor since the departure of China from the silver standard in 1935. Both parts of the chart are drawn with the same ratio scale, so that equal vertical distances represent equal percentage changes.

¹ This chapter is based on extensive reading of current newspapers and other publications during the period and on observations and interviews in China in 1934. References are not given, however, for every statement. To some extent this chapter uses the content and wording of the writer's paper, "American Silver Policy and China."

TABLE 11
INDEX NUMBERS OF CHINESE, UNITED STATES, AND WORLD TRADE, 1929-1937
(1929 = 100)

YEAR	CHINESE EXCHANGE RATE	CHINESE TRADE		UNITED STATES TRADE			WORLD TRADE		
		Exports	Imports	Exports to China	Imports from China	Total Exports	Total Imports	Total	Chinese as per cent of total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1929	100	100	100	100	100	100	100	100	2.1%
1930	73	64	79	72	61	73	70	81	1.8
1931	54	46	66	73	40	46	47	58	2.0
1932	54	30	52	43	17	30	30	39	1.9
1933	63	36	53	40	24	32	33	35	1.7
1934	83	41	53	52	28	41	38	34	1.3
1935	88	47	50	33	43	44	46	35	1.4
1936	73	48	43	38	47	47	55	37	1.1
1937	73	57	44	55	64	65	70	46	1.0

SOURCES

(2) Computed from annual value of Chinese currency in terms of United States dollars as given in *The Trade of China*, annually.

(3) and (4) Computed from annual value of exports and imports in terms of United States dollars, calculated from figures in Chinese currency given in *ibid.*, converted at the annual value of Chinese currency in terms of United States dollars. The figures for the whole period omit the trade of Manchuria.

(5) to (8) Computed from annual figures given in *Monthly Summary of the Foreign Commerce of the United States*, various issues. The figures for trade with China include that with Kwantung (leased territory in Manchuria) and Hong Kong.

(9) and (10) Computed from figures for exports and imports in United States dollars, of old standard, in *Statistical Year-Book of the League of Nations*, 1932-33, p. 168; *ibid.*, 1937-38, p. 225.

Chinese Customs returns do not include any figures for Manchurian trade after July 1, 1932. Therefore indexes for Chinese trade in Table 11 have been based on figures which exclude Manchurian trade for the whole period, as given in the Customs reports for comparative purposes. The American figures for trade with China include the leased territory of Kwantung, in which is located Dairen, the principal Manchurian port, and also include the British colony of Hong Kong. The figures for Chinese trade as a percentage of world trade exclude Manchuria.

Table 11 and Chart 7 indicate, for the period from 1929 to 1932, when the price of silver and the exchange rate were falling, that:

1. Chinese imports, even measured in American dollars, stood up as well as or better than world trade as a whole. (Measured in silver currency, in terms of which Chinese think and do business, they would appear even larger.)

2. China maintained approximately her relative percentage of world trade.

3. Chinese imports declined much less than Chinese exports. In particular, American exports to China declined much less than American imports from China; that is, China was a relatively better customer of ours than we were of hers.

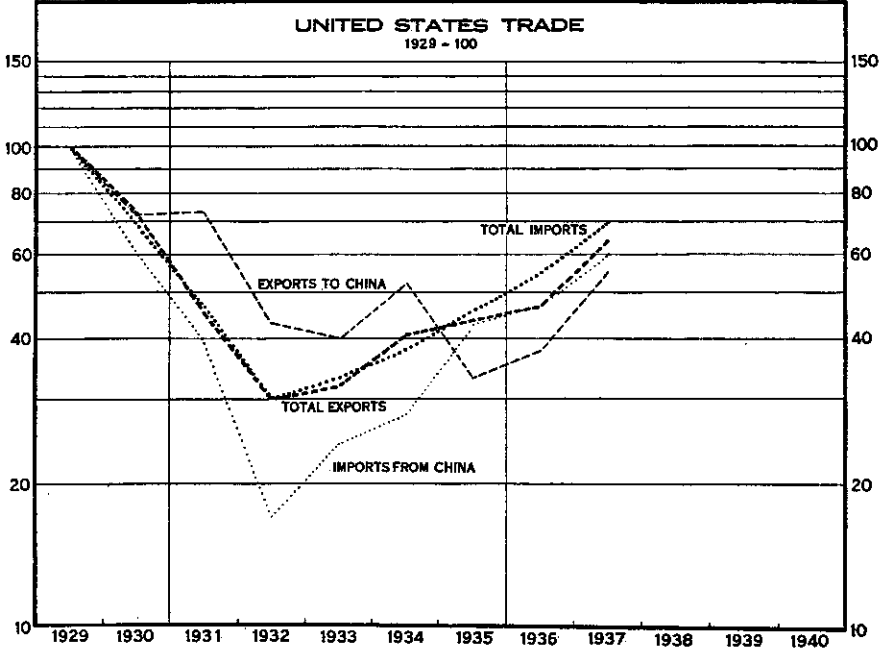
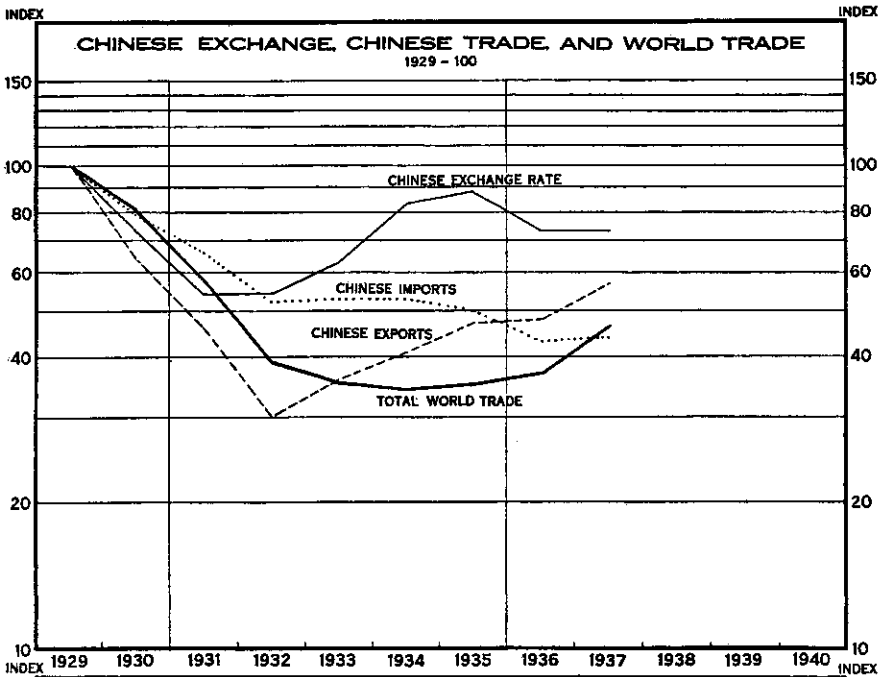


CHART 7.—CHINESE EXCHANGE IN RELATION TO TRADE, 1929-1937
(All indexes are based on figures in United States dollars)

4. American exports to China declined less than American total exports; that is, China was one of our better customers in maintaining purchases, although not in amount of purchases.

2. Reasons for the Course of Chinese Trade

It is evident, therefore, that China did not show the great fall in imports and increase in exports which might have been expected from a fall in the price of silver, and which were alleged in the early years of the depression by silver propagandists. Although these effects did not appear in the total trade, they were felt, nevertheless, in many lines of consumers' goods.

In the case of imported consumers' goods, such as motor cars, bicycles, fancy groceries, clothing, hardware, house furnishings, and a variety of other products used by the foreign communities in China, and, to an increasing extent, by the small fraction of the Chinese population which has become accustomed to such luxuries and can afford them, the manufacturers' selling prices, in terms of gold or other foreign currencies, were not reduced greatly during the depression. Consequently the retail prices of such articles in China had to be raised, in terms of silver currency, almost in the same proportion that the price of silver fell. As a result, the increased retail price was a factor tending to cut down consumption. For example, when a Chinese student could buy an American \$2.50 fountain pen for \$2.50 silver, as in 1919-20, or even for \$5 or \$6 silver, as from 1920 to 1929, he tried to scrape up the money to buy one, even though it was the equivalent of a month's board. When the same pen cost him \$12.50 silver, as from 1931 to 1933, he simply could not afford it, and had to do without or purchase a cheap Japanese substitute.

Foreigners resident in China, who make up a considerable part of the market for the imports of many consumers' goods, had their purchasing power reduced, if they were paid in silver currency, and had to get along without many of the things from home to which they formerly were accustomed. To those paid in foreign currency, the fall of silver was an advantage, for they received more silver currency than before; this advantage, however, was offset in many cases by salary reductions and by the depreciation of the foreign currencies in which they were paid. During the prosperous wartime period, most employers of foreigners in China had been able to make salary adjustments, as described in Chapter XXI, Section 4, to relieve the burden caused by the high price of silver. During the world depression, however, companies which were cutting the salaries of their employees

in the United States and Europe were not inclined to raise the silver salaries paid in China, even though their business there may have suffered less than at home.

Thus the import of many classes of consumers' goods was affected adversely by the low price of silver. This tendency was increased in the case of luxury articles, such as cigarettes, by the imposition of considerably higher import duties. Both these factors restricting imports tended to stimulate the domestic manufacture of many simple articles formerly imported. In the case of some articles which could not be manufactured in China, many potential buyers had to do without because they could not afford to buy the expensive imported goods. American manufacturers of some lines of goods saw a drastic curtailment of Chinese purchases, and were right in believing that this was caused by low silver, and in expecting that a higher price of silver would stimulate sales of their products in China.

This is not the whole story, however, for consumers' goods make up only a part of Chinese imports. In the case of many raw materials imported by China, the fall in their prices in terms of foreign currencies was equal to or even greater than the fall of silver. This being so, they could still be sold in China without an increase in price in terms of silver currency. Chinese imports of such commodities declined much less than imports of consumers' goods. In effect, the depreciation of silver, to a considerable extent, was only in terms of gold and not in terms of commodities.

A shift in the character of Chinese imports resulted: there was a tendency toward a decreased proportion of some manufactured goods, and an increased proportion of some raw materials. The latter compensated for the former to some extent, so that total Chinese imports, as indicated by Table 11, made a good showing in comparison with world trade as a whole.

Chinese exports did not respond to the stimulation which might have been expected from a low price of silver. This perhaps was caused in part by a certain inelasticity in the Chinese economic structure which made it slow to respond to changing forces. There was also the paralyzing effect of continued internal disturbances and Japanese aggression, as well as military restrictions on, and taxation of, trade. Undoubtedly the chief factor, however, was the world depression, which reduced the demand for most of the commodities which China could export. The strong demand for certain Chinese commodities during the World War had overbalanced the high exchange rates of that period; the weakened demand during the depression could not be stimulated by low exchange.

3. Prices in China

Table 12 and Chart 8 show something of the relationship of the

TABLE 12
THE PRICE OF SILVER AND INDEX NUMBERS OF COMMODITY PRICES IN THE
UNITED STATES AND SHANGHAI, 1911-1937

YEAR	PRICE OF SILVER		INDEX NUMBERS OF PRICES					
	New York		United States		Shanghai			
	High	Low	Wholesale	Cost of living	Wholesale	Export	Import	Cost of living
	Cents per oz., 0.999 fine		1926=100	1923-25 =100	1926=100			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1911	56.500	51.375	64.9	.....	.....	.....	.....	.....
1912	64.125	54.625	69.1	.....	.....	.....	.....	.....
1913	63.750	56.750	69.8	57.4	.....	.....	.....	.....
1914	59.250	47.625	68.1	58.9	.....	.....	.....	.....
1915	56.500	46.250	69.5	60.1	.....	.....	.....	.....
1916	77.250	55.875	85.5	66.9	.....	.....	.....	.....
1917	108.500	71.750	117.5	79.4	.....	.....	.....	.....
1918	101.125	85.125	131.3	95.8	.....	.....	.....	.....
1919	137.500	101.125	138.6	98.2	.....	.....	.....	.....
1920	137.000	68.000	154.4	121.3	.....	.....	.....	.....
1921	73.625	52.625	97.6	102.8	104.6	.....	.....	.....
1922	73.750	62.375	96.7	97.0	98.6	.....	.....	.....
1923	68.625	62.500	100.6	98.6	102.0	.....	.....	.....
1924	72.125	62.750	98.1	98.9	97.9	.....	.....	.....
1925	72.875	66.500	103.5	101.4	99.3	.....	.....	.....
1926	68.625	51.500	100.0	102.5	100.0	100.0	100.0	100.0
1927	60.000	53.625	95.4	101.9	104.4	106.1	107.3	106.7
1928	63.625	56.500	96.7	99.2	101.7	104.5	102.6	102.5
1929	57.500	46.500	95.3	99.1	104.5	105.2	107.7	107.9
1930	46.875	30.750	86.4	97.7	114.8	108.3	126.7	121.8
1931	37.250	25.750	73.0	88.3	126.7	107.5	150.2	125.9
1932	31.000	24.250	64.8	79.7	112.4	90.4	140.2	119.1
1933	45.000	24.500	65.9	74.5	103.8	82.0	132.3	107.2
1934	55.750	41.750	74.9	78.3	97.1	71.7	132.1	106.2
1935	81.000	49.750	80.0	80.4	96.4	77.6	128.4	106.6
1936	49.750	44.750	80.8	82.0	108.5	96.1	141.7	113.3
1937	46.750	44.750	86.3	84.5	129.1	.....	.....	131.8

SOURCES

(2) and (3): Handy & Harman records.

(4) United States Bureau of Labor Statistics, index number of wholesale prices, all commodities, annual averages, from *Statistical Abstract of the United States, 1937*, p. 300; 1937 figure from *Monthly Labor Review*, Vol. 46, March, 1938, p. 804.(5) United States Bureau of Labor Statistics, cost of goods purchased by wage earners and lower-salaried workers in the United States, from *Statistical Abstract of the United States, 1936*, pp. 304-305; *ibid.*, 1937, p. 306. The figures for the earlier years are for December; thereafter for June, or for nearest date to middle of year.(6) National Tariff Commission, Shanghai, index numbers of wholesale prices in Shanghai, annual averages, from *Prices and Price Indexes in Shanghai*, June, 1937, p. 2; *ibid.*, March, 1938, p. 2.(7) and (8) National Tariff Commission, Shanghai, index numbers of export (import) prices in Shanghai, annual averages, from *ibid.*, June, 1937, p.4; "Commencing January, 1937, the compilation of the import and export price index numbers will be temporarily suspended for revision of the same."(9) National Tariff Commission, index numbers of the cost of living in Shanghai, from *ibid.*, June, 1937, p. 15; *ibid.*, March, 1938, p. 7.

price of silver, the prices of commodities in the United States, and the prices of commodities in China. All three parts of the chart are drawn on the same ratio scale, so that equal vertical distances represent equal percentage changes. The upper part shows the annual high and low prices of silver in New York from 1911 to 1937. The middle part shows the Bureau of Labor Statistics index numbers of wholesale commodity prices and of the cost of living in the United States. The lower part shows four index numbers in Shanghai, compiled by the Chinese National Tariff Commission: import prices, export prices, wholesale prices, and cost of living. The index numbers are all on the base of 1926 = 100, except for the American cost-of-living index, which is on the base of 1923-25 = 100.

Some consideration of the composition and character of the various index numbers is necessary for an interpretation of their significance. The Bureau of Labor Statistics index number of wholesale prices in the United States is based on several hundred commodities and gives a fair average of wholesale prices, but, like any average, it obscures the differences between prices of individual commodities and groups of commodities. Thus, although the index in 1932 stood at 64.8, various groups of commodities making up the index had the following levels in the same year: raw materials, 55.1; semi-manufactured goods, 59.3; finished goods, 70.3. The cost-of-living index number is intended to represent costs for wage earners and low-salaried workers, and is based on prices of a wide variety of goods and services. It is not, however, necessarily representative of the cost of living for persons with higher incomes.

Even greater reservations must be made in regard to the Shanghai index numbers. These index numbers, of course, are all based on prices measured in silver currency. They relate to prices in Shanghai, a large, semi-modernized city, where East and West meet, and which is not representative of the great interior of China.

The prices of Chinese exports, which are chiefly raw materials, such as bean products (before the loss of Manchuria), wood oil, tea, eggs, peanuts, seeds, skins and hides, raw silk, and raw cotton, and in addition the semi-manufactured item of cotton yarn, are determined in world markets. The Shanghai export price index simply reflects these world prices converted into silver currency at the current exchange rate, and therefore is subject to rapid change in sympathy with changes in world commodity prices and in the rate of exchange. It does not represent so closely the actual prices received by the Chinese farmer in the interior, because of the influence of time, distance, old custom, and the margin absorbed by various middlemen.

The Shanghai export price index, however, is indicative of the course of agricultural prices, although it shows a much smaller amplitude of fluctuations than do such indexes as are available of the prices of particular commodities or average of prices received by the farmer for his products.² It therefore is probably the most satisfactory index to use under the circumstances.

The Shanghai index of import prices includes a variety of manufactured goods and raw materials, whose price movements vary considerably and many of which are not of great importance to the masses.

The Shanghai wholesale price index is of comparatively little significance, since, in lumping together the prices of exported products, imported goods, and goods produced and consumed within China, it gives an average which obscures all details.

The Shanghai cost-of-living index relates to wage earners and low-salaried workers, but represents a far lower standard of living than that enjoyed by the class similarly designated in America. It concerns prices in Shanghai only, where living costs are higher and are affected more by the cost of imported goods than they are in the interior of China.

It must be recognized, therefore, that these index numbers do not give a picture of prices throughout China, although they are indicative of conditions in her most important port. There is a certain reaction of Shanghai prices upon prices elsewhere in China, but it may be slow in reaching the remote interior. Nevertheless, Shanghai prices are the best data available for judging the effects of changes in the price of silver on Chinese prices of commodities entering foreign trade, so that it is worth observing the movement of the index numbers of export and import prices.

The index number of export prices rose a little in 1930 and declined only slightly in 1931; this meant that the Chinese producer, or at any rate the middleman, got some benefit from the fall of silver. In 1932 and 1933, while silver remained practically stationary on a gold basis, the index number fell sharply, because commodity prices in world markets were falling. If silver had remained at its 1929 level, this index would have fallen much more. It is not possible to say just how far, because no index number is available of the American or world prices of the same list of commodities which make up the Shanghai export price index number. Since the components are largely raw materials, it is reasonable to assume that the fall of their

² This statement is based on a chart of the Shanghai export price index in comparison with various agricultural price indexes, mostly for the period 1931 to 1933, given in Hsu, *Silver and Prices in China*, pp. 27, 33, 42, 46, and 57.

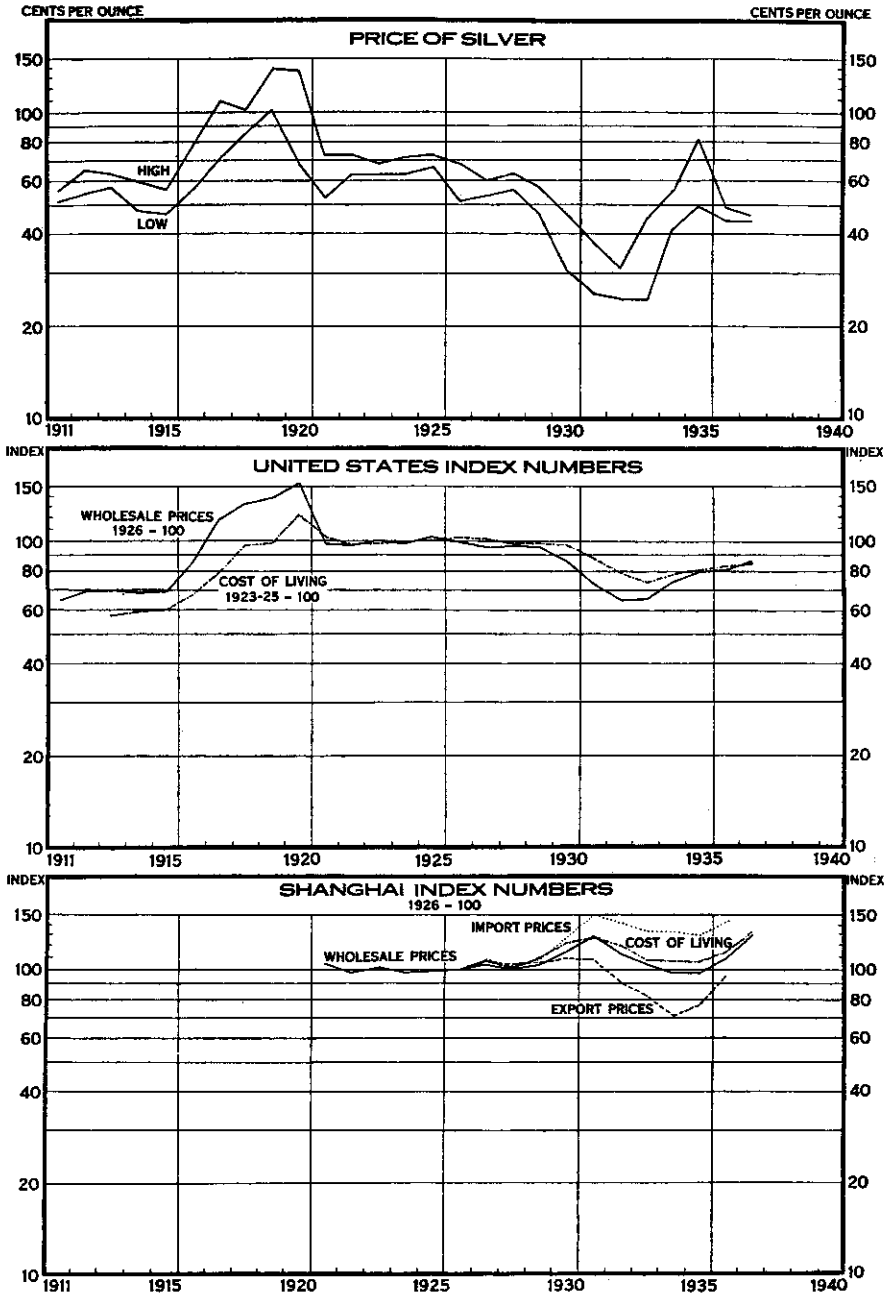


CHART 8.—NEW YORK PRICE OF SILVER IN RELATION TO UNITED STATES AND SHANGHAI COMMODITY PRICE INDEX NUMBERS, 1911-1937

world prices would have been comparable to that of the raw materials in the Bureau of Labor Statistics wholesale price index, which fell in 1932 to 55.1 per cent of the 1926 level. Thus a stationary level of silver from 1929 to 1933 would have meant that, if China were to export at all, the price level of her exportable commodities would have had to be cut almost in half; otherwise her exports would have been curtailed drastically. In the former case China would have experienced the same deflation as that through which other countries were passing; this would have reacted on her whole economic condition and on consumers' purchasing power, and would have made her a poor customer for the rest of the world, regardless of the temporary stimulation of some classes of imports by the high price of silver and high exchange rates. In the latter case, if her exports had declined, her imports would not have held up for long because, in spite of invisible exports, the exports of merchandise play a considerable part in paying for her imports.

The index number of import prices rose in 1930 and 1931, but thereafter, as the price of silver remained stationary, it declined, because of the continued fall in world prices of the commodities which China imports. If silver had remained at the 1929 level, the import price index would not have risen and eventually would have declined. While this seemingly might have tended to increase imports, such a tendency probably would have been counteracted, after the initial stimulation, by the deflationary forces mentioned in the preceding paragraph.

China, therefore, probably was better off during the earlier years of the world depression than she would have been had silver not fallen. She had the benefit of a mild inflation, compared with the deflation elsewhere. In so far as it was necessary for her price level to become adjusted to the world price level, the adjustment was made less painfully by a fall in the price of silver than by a fall in the internal price level of goods entering into foreign trade. On the whole, China's relative escape from the worst of the world depression probably made her a better customer of other countries than she would have been if she had gone through drastic deflation herself. It was fortunate for the rest of the world that there was one spot where conditions were relatively bright in the early years of the depression.³

³ For further discussion of the effects of the fall of silver in China, see: Bratter, "Silver—Some Fundamentals"; Graham, "The Fall in the Value of Silver and its Consequences"; Gregory, *The Silver Situation*; Kirk, "Silver: A Study in Monetary Instability"; Leavens, "Silver and the Business Depression"; Leong, *Silver, An Analysis of Factors Affecting its Price*; Lewis and Chang, *Silver and the Chinese Price Level*; Kreps, "The Price of Silver and Chinese Purchasing Power"; Salter, "The Silver Problem"; Salter, *China and Silver*.

4. *The Flow of Silver to Shanghai*

During the period of falling silver prices, the white metal continued to flow into China on a rather large scale, the net imports for 1929, 1930, and 1931 being approximately \$165,000,000, \$104,000,000, and \$71,000,000 Chinese currency respectively. Part of this remained in Shanghai, and part went out to other ports and the interior. In 1932 and 1933 there was a small net export of silver abroad, but large amounts flowed in from other parts of China. Thus the stocks in Shanghai increased from \$103,000,000 in Chinese banks and \$69,000,000 in foreign banks at the end of 1928, to \$272,000,000 in Chinese banks and \$276,000,000 in foreign banks at the end of 1933.⁴

The increase in the Chinese banks was very largely cover for increasing volume of note issues, which were circulating more widely than ever before in the interior as well as in Shanghai. To some extent the flow of silver from the interior represented a substitution there of notes for silver. It also in part reflected the falling commodity price level and the decreasing export demand for Chinese agricultural products, which resulted in a lessened need for circulation of money. In some cases it represented a flight of capital from regions upset by civil war or communist bands.

The increase in the foreign banks, however, was not a backing for bank notes, but rather for deposits which had accumulated rapidly during the period. Many of these deposits represented funds which were being kept in China by foreigners and Chinese, who would have sent them abroad if it had not been that the low price of silver made the exchange rates seem unattractive. Exchange on London became more favorable after September, 1931, but uncertainty as to the future of the pound probably operated to delay remittances. In 1933, when the Roosevelt Administration showed inflationary leanings and when there was much talk of doing something for silver, there was a tendency to wait and see what would happen, in the hope of making greater profits on the exchange of Chinese dollars to other currencies. The accumulation of these large stocks of silver in the foreign banks made for easy money conditions, and facilitated the financing of real-estate transactions mentioned below.

5. *The Attitude in China toward the Fall in the Price of Silver*

The commercial and banking machinery of Chinese foreign trade always has been geared to adjust itself to moderate fluctuations in

⁴ Bank of China, *Financial & Commercial Monthly Bulletin*, Vol. 3, No. 1-2, Jan., Feb., 1936, pp. 47-52.

the price of silver and the exchange rates, but when fluctuations were large, or when there set in a continued steady movement in one direction, the effect was upsetting. The downward movement in the price of silver was considerable from the spring of 1929 onward; by the beginning of 1930 it was presenting serious problems. To the Chinese Government, which had large foreign obligations in gold currencies, secured upon the Customs revenue, it meant that the fixed specific import duties (so many taels per physical unit) would realize less gold for meeting the service of these loans. To the users of imported products it meant that higher prices in silver currency would have to be paid. To the producer of Chinese products for export it meant, on the other hand, potentially larger sales or better margin of profit, provided foreign demand was maintained. To bankers and merchants it meant the disturbance of price relationships and of part of the usual flow of trade; although they could protect themselves, by future exchange contracts, in the case of any particular transaction, the possibility that customers would be unable or unwilling to fulfill contracts, and that the volume of business would decline, made the future uncertain.

The rapid fall in the price of silver in January, 1930 gave silver and exchange the main place in the thoughts and conversation of the business community in Shanghai.⁵ Throughout the winter and spring various suggestions were offered for government action.

Finance Minister T. V. Soong announced in January that the Government had no intention of interfering with a free silver market in China. Restriction or taxation of the import of silver had been suggested, but it was pointed out that this would cut down the importation and lower the world price of silver still further. Mr. Soong also stated that the Government had no plans contemplating the circulation of gold coins, and that monetary reform would require an increased circulation of silver coins.⁶

On January 15 the Minister of Finance issued an order to the Maritime Customs Administration providing for the collection of duties on imports from abroad on a gold basis, as described in Chapter XXI, Section 8.

The Kemmerer Report, described in Chapter XXI, Section 7, was released in April, but the rapid decline in the price of silver and the beginning of the world depression increased the difficulties in the way of its adoption, and no action was taken.

On May 6 an embargo was placed on the import of foreign silver

⁵ *Finance & Commerce*, Vol. 19, No. 33, Jan. 15, 1930, pp. 1-3.

⁶ *Ibid.*

coins because of the large number of French Indo-China piastres which were being dumped in China, after the adoption of a gold-exchange standard for that colony.⁷ On May 15 an embargo was placed on the export of gold. The high price of gold had caused a flow of the yellow metal to Shanghai and its export abroad.⁸ In spite of the embargo, it was evident that a considerable quantity of the yellow metal continued to be smuggled out of the country. The restriction on the movement of gold also served to make transactions in gold bars, which formerly could be used as a legitimate hedge on exchange, become purely speculative. The price of gold no longer was closely related to the exchange rates, and sometimes varied from parity as much as 60 taels per bar, or around 10 per cent.⁹ Not all the gold was smuggled out, however, and as supplies of the yellow metal continued to flow in from the interior, it accumulated in Shanghai, where, in January, 1931, there were estimated to be 40,000 gold bars or 460,000 fine ounces, worth about \$9,500,000 U. S. currency.¹⁰ In March, 1931 the embargo was relaxed to permit the export of gold by the Central Bank of China, under special license.¹¹ About the same time smuggling ceased temporarily because the Osaka Mint, which had been the chief receiver of the contraband, was closed for repairs.¹²

By the end of 1930, the commercial community in Shanghai had become more or less reconciled to the low price of silver, and had recognized it as part of the world depression.¹³ As noted above, funds which otherwise might have been invested or spent abroad remained in Shanghai and sought investment there, and funds from the interior also gravitated to Shanghai. About the middle of 1930 there began a considerable boom in Shanghai real estate, which expressed itself not only in the purchase of land but also in the construction of new buildings.¹⁴ This continued through the summer of 1931, when it was checked somewhat by the Manchurian situation and by the departure of England from the gold standard.

With the acceptance of the low price of silver began the realization that a sudden and considerable rise would be as disastrous as the fall had been. An interesting interview with a Shanghai foreign importer in March, 1931, treated this subject. The importer admitted

⁷ *Ibid.*, Vol. 19, No. 50, May 14, 1930, p. 7 (E. Kann).

⁸ *Ibid.*, Vol. 19, No. 51, May 21, 1930, p. 5 (E. Kann).

⁹ *Ibid.*, Vol. 19, No. 58, July 9, 1930, p. 5 (E. Kann); No. 87, Jan. 28, 1931, p. 7 (E. Kann); No. 83, Dec. 21, 1930, p. 6 (E. Kann).

¹⁰ *Ibid.*, Vol. 19, No. 87, Jan. 28, 1931, p. 7 (E. Kann).

¹¹ *Ibid.*, Vol. 19, No. 94, Mar. 18, 1931, p. 6 (E. Kann).

¹² *Ibid.*, Vol. 19, No. 95, Mar. 25, 1931, p. 6 (E. Kann).

¹³ *Ibid.*, Vol. 19, No. 83, Dec. 31, 1930, p. 6 (E. Kann).

¹⁴ *Ibid.*, Vol. 19, No. 85, Jan. 14, 1931, pp. 12-13; No. 142, Feb. 17, 1932, pp. 14-16.

that some branches of the import trade had been hit badly, although, in his own line of raw materials, the fall of exchange had been compensated for by a fall in the gold price of the commodities. He pointed out that the export trade would be crippled by a rise in the price of silver, that the greatly enhanced real-estate prices would be deflated, and that this would lead to bankruptcy of those who were financing real-estate transactions. The low price of silver had kept the price level in China, measured in silver, from the disastrous drop which it had undergone in Japan and other gold-standard countries. It also had encouraged domestic manufactures, and this could not fail in the long run to increase domestic prosperity and stimulate the demand for foreign products, even if there were shifts in the kind of products purchased.¹⁵

The view taken by this importer was one which more and more came to be accepted by those familiar with the situation in China. It was somewhat comparable to the attitude which had developed in America by the beginning of 1935, when many who had been opposed to the devaluation of the dollar felt that it had become an accomplished fact and feared that a decision by the Supreme Court upholding the gold clause might do more harm than good.

A somewhat similar opinion, from the Chinese side, was expressed by Chang Kia-ngau, general manager of the Bank of China, in his report for 1930, given in May, 1931. He pointed out that in the case of some raw materials, such as wheat and cotton, the fall in price had more than offset the fall in exchange, so that China had been able to obtain them more cheaply than before. The Government had avoided loss on the service of loans secured on the Customs revenue by collecting duties in gold units, but had lost by exchange on the service of such gold loans as were secured on other revenues. There had been some rise in the cost of living in the larger cities, because of the increased silver cost of imported commodities, other than certain raw materials; and wages had not kept pace with this rise, so that wage earners had been somewhat affected. The high cost of machinery and railroad materials also had been a handicap. On the other hand, exports had held up as well as could be expected in a world depression. The domestic production of woolen textiles, cotton piece goods, chemical products, rubber goods, enamel ware, and cosmetics had been stimulated, and this served to increase employment. Mr. Chang concluded that it was desirable for China to have the price of silver stabilized, but not greatly increased.¹⁶

¹⁵ *Ibid.*, Vol. 19, No. 92, Mar. 4, 1931, pp. 1-2.

¹⁶ *Ibid.*, Vol. 19, No. 103, May 20, 1931, pp. 9-13.

When Great Britain went off the gold standard in September, 1931, the exchange rates in Shanghai on countries in the sterling area rose proportionately to the depreciation of the pound. This tended to give those countries an advantage over the gold-standard countries in selling to China. This advantage was greatest in the case of manufactured goods, the prices of which in sterling did not rise so much as did the prices of raw materials. For example, British motor cars maintained their positions in Chinese imports in 1931 and 1932 better than did American cars.¹⁷

On the other hand, the depreciation of the sterling currencies was a factor which tended either to lower the level of export prices in Chinese currency or to decrease the volume of exports from China. In fact, both effects were seen, as is evident from Tables 11 and 12 and Charts 7 and 8. The index of export prices dropped from 107.5 in 1931 to 90.4 in 1932. The index of the U. S. dollar value of Chinese exports at the same time dropped from 46 to 30, while the index of the value of the U. S. imports from China dropped from 40 to 17. China at last was feeling the effect of the world depression.

The situation was aggravated in 1932 by the Japanese attack upon Shanghai in February. Real-estate transactions had also declined greatly after September, 1931, although building projects initiated before that time were still being carried out and served to give Shanghai a certain amount of activity.

At the beginning of 1933 the increasing agitation in the American Congress in favor of doing something for silver caused some uneasiness among Chinese bankers, who realized that such action would be disastrous to the export trade of China.¹⁸ When in the spring the price of silver did begin to rise in terms of the depreciating American dollar, it created further apprehension and there was even talk of an export embargo on silver to prevent supplies needed in China from being attracted out of the country by the higher price.¹⁹ At the end of 1933, commenting upon President Roosevelt's silver-purchase proclamation of December 21, and on the possibility of further action which might raise the world price of silver, the editor of *Finance & Commerce*, Shanghai, pointed out that unless further action were taken, the price of silver was likely to fall:

The tremendous stocks which have accumulated, it is believed, make this inevitable and, quite frankly, many of those who are directly concerned with Chi-

¹⁷ As shown by computation of percentages of total automotive imports given in Chinese Customs returns.

¹⁸ *Finance & Commerce*, Vol. 21, Mar. 29, 1933, p. 340.

¹⁹ *Ibid.*, Vol. 21, Apr. 26, 1933, p. 463; May 10, 1933, pp. 528-529 (Koh Tsung-fei); May 17, 1933, pp. 557-560 (Y. C. Koo).

na's internal economy are looking forward to, and hoping for, the decline.

To restore prosperity to the great agricultural community an inflation of the price of primary products is essential and it is thought that a drop in silver is the quickest and best way of bringing this about. The only alternative is the restoration of robust health to world trade, with an increase in the price of all commodities, in which case, of course, silver would move up with the rest. But while this would be the ideal way out of all difficulties, the process will probably be a long one and China cannot afford to wait.²⁰

6. *The Situation at the Beginning of 1934*

The prospects early in 1934 of American silver legislation caused considerable alarm in China. In February Pei Tsu-ye, manager of the foreign department of the Bank of China, pointed out that China had signed the London Silver Agreement (described in Chapter XXV, Section 5) because she desired stability in the price of silver, but that current agitation in America looked toward a great increase in the price, which was quite a different thing.²¹ It was reported that Chinese bankers had sent urgent cables of protest to Washington, and that the question of an embargo on the export of silver was being raised again. The Shanghai Foreign Residents' Association later in the month cabled President Roosevelt urging that the price of silver be allowed to advance only proportionately with other commodity prices.²²

In February, 1934 Sir Arthur Salter, who had been acting for a few months as an adviser to the National Economic Council, submitted an official report to the Chinese Government on the silver situation.²³ In this he pointed out that China had escaped many of the influences of the world depression so long as the price of silver was falling, but had begun to feel them when the departure from the gold basis of the pound, the rupee, the yen, and finally of the American dollar had caused the appreciation of the Chinese dollar in terms of these currencies. Since the principal factor in the silver market was the policy of the United States, he recommended that China should make her position clear to the Government of that country.

On March 9 the Legislative Yuan of the National Government of China ratified the London Silver Agreement (see Chapter XXV, Section 5) but with a reservation that if the price of silver should rise to an extent that would endanger China's trade and industries, the Government would retain the right to take whatever action it might

²⁰ *Ibid.*, Vol. 22, Dec. 27, 1933, p. 713.

²¹ *Ibid.*, Vol. 23, Feb. 21, 1934, p. 207.

²² *Ibid.*, Vol. 23, Feb. 28, 1934, p. 239.

²³ Salter, *China and Silver*, is a condensed version of the official report.

deem necessary.²⁴ The alleged beneficiary of the agreement seemed to doubt whether it would really be beneficial.

At about the same time a committee was appointed by the Ministry of Industry to study the silver question; special attention was to be given to the effect of silver inflation in rural areas.²⁵ A study of the effects on China of an increase in the price of silver had been published in December, 1933 by Ardron B. Lewis and Chang Lu-luan of the Department of Agricultural Economics, University of Nanking.²⁶ They argued that a further rise would be disastrous and that it would be desirable for China to reduce the content of her dollar as America had done with the gold dollar.

7. Summary

The fall in the price of silver during 1929 and 1930 brought a period of adjustment, which was upsetting to China's foreign trade; in particular, it tended to reduce her imports of consumers' goods, purchased by those who had fixed incomes in silver. On the other hand, the price in gold of many raw materials declined sufficiently so that their price in silver was not increased. China's import trade as a whole held up better than the world average. Her export trade declined because of decreased world demand for her products; it would have declined far more if the price of silver had not fallen. With the departure of England and other countries from the gold standard in 1931, China, and especially Shanghai which had been experiencing something of a boom, began to feel the force of the world depression.

By the end of 1930 it was recognized that China was better off than many other countries, because of the mild inflationary influence of the fall in the price of silver. After that time there was little desire for an increase in the price of silver, except on the part of those interested in the import of some consumers' goods. The preponderating opinion was against any artificial increase in the price of silver. It was generally believed that while such an increase might stimulate some lines of the import trade, its reaction on the export trade and on the internal situation in China would be deflationary. Thus there was, at the beginning of 1934, considerable apprehension as to what might result from American silver legislation then under discussion.

²⁴ *Finance & Commerce*, Vol. 23, Mar. 14, 1934, pp. 306-307.

²⁵ *Ibid.*

²⁶ Lewis and Chang, *Silver and the Chinese Price Level*.

CHAPTER XXIII

PROPOSALS TO DO SOMETHING FOR SILVER, 1923-1933

"In *that* direction," the Cat said, waving its right paw around, "lives a Hatter; and in *that* direction," waving the other paw, "lives a March Hare. Visit either you like; they're both mad."

"But I don't want to go among mad people," Alice remarked.

"Oh, you can't help that," said the Cat: "we're all mad here. I'm mad. You're mad."

LEWIS CARROLL, *Alice's Adventures in Wonderland*

The postwar decline in the price of the white metal brought out a large number of schemes for doing something for silver, especially after it began to fall sharply in price in 1930. Many newspapers and magazine articles, interviews, Congressional bills, speeches, and radio addresses appeared on the subject, although the literature was by no means as extensive as that of the 1890's, nor did the subject become one of such general popular discussion as it did then.

1. *American Silver Producers' Association*

The break in silver prices in 1920 did not affect American producers seriously because the Pittman act assured them a price of \$1.00 per ounce for the next few years. Not until the Treasury announced on March 30, 1923 that purchases soon would be concluded did they face the prospect of having to dispose of their output at the current world price of between 60 and 70 cents. The Senate Commission of Gold and Silver Inquiry, appointed under the resolution of March 3, took up the cause and called a meeting of producers at Reno, Nevada, for September.¹ Meanwhile, the investigation of the operations of the Pittman act was assigned to Senator Pittman, whose correspondence on the subject has been described in Chapter XVII, Section 5. The commission also published an extensive collection of statistics,² and secured the publication by the Department of Commerce of the study of the monetary use of silver since 1914, mentioned in Chapter XVIII, Section 7.³

¹ Commission of Gold and Silver Inquiry, *Serial 4*, p. 2.

² *Ibid.*, *Serial 3*.

³ Robinson, *Changes in the Monetary Use of Silver since 1914*.

At the Reno meeting,⁴ held on September 4 and 5, 1923, there were present representatives of both silver miners and smelting companies, including those producing in Mexico and Canada as well as in the United States. They considered the organization of a silver export association under the Webb-Pomerene act, which permitted American companies to combine for operating in the export market provided they did not influence the domestic market. There were, however, a number of legal and financial difficulties in such a plan, and it was referred to a committee, as was the question of a permanent organization. Although the meeting was adjourned without any definite accomplishments, it served the purpose of bringing together for the first time producers and smelters, which two groups in the past had been somewhat antagonistic.

Delays in securing an opinion from the Federal Trade Commission as to the legality of an export association made an early re-assembly impossible. A second conference was held at Salt Lake City, Utah, on August 6, 7, and 8, 1924.⁵ At this meeting the American Silver Producers' Association was organized with membership open to all silver producers and smelters on the American continents. Dues were not to exceed 0.1 cent per ounce produced by miners, and the same rate on not over 25 per cent of the quantity treated by smelters. The purpose of the association was:

. . . to advise, aid and support legislation and other procedure looking to the lowering cost of production, reduction, and transportation of silver and the orderly marketing of the same, the elimination of discrimination against the industry, and to subserve, promote and protect the interest of all those engaged in the production of silver in the United States and elsewhere and in that behalf to prosecute any and all lines of activity which may subserve and promote the welfare of the silver mining industry and those engaged therein.⁶

It was not possible, however, to organize an export association, for a majority opinion of the Federal Trade Commission held that such an association could not include foreign members or deal in silver produced outside of the United States, and that it would have to avoid any direct effects on domestic price.⁷ Since the silver market was a world market and the price in America necessarily adjusted itself closely to that abroad, a marketing association could not be successful unless it could control a large proportion of the total production, such as that produced in the two Americas, and unless it could

⁴ Commission of Gold and Silver Inquiry, *Serial 4*, is devoted to an account of this meeting.

⁵ *Ibid.*, *Serial 7*.

⁶ *Ibid.*, *Serial 7*, p. 11.

⁷ *Ibid.*, *Serial 7*, pp. 17-21.

raise the price universally. Although the organization problems were referred to the executive committee for further study, no solution was found, and the association eventually was discontinued.

Fears of a sharp decline in the price of silver after the cessation of Pittman-act purchases were not realized, and in fact the price improved somewhat in 1924, because of large European purchases for subsidiary coinage.⁸ The fall in price in 1926, after the Indian currency report was made public, called forth a resolution of the American Mining Congress asking the President to begin diplomatic conversations with Great Britain on the subject, but this was not supported by the large mining companies.⁹ Comparatively little was heard about silver until 1930 when the decline became severe. Then a variety of plans began to be presented.

2. *Proposal of a Silver Loan to China*

On October 8, 1930 Senator Pittman announced that a plan to lend China several hundred million ounces of silver was being considered by a subcommittee of the Senate Committee on Foreign Relations.¹⁰ The plan provided that Great Britain, France, Japan, the United States, and other governments should organize a silver pool, from which loans would be made to China for approved purposes, such as road building and famine relief. Senator Pittman stated that he believed an agreement could be made with the dominant military leaders of China, that it would increase American commerce with China tenfold and permit the disposal of many of our surplus commodities, and that it would raise the price of silver to between \$1.00 and \$1.29 per ounce.

A few days later a cable from Tokyo announced that P. M. W. Linebarger, "adviser to the Nanking Government," was on his way to the United States to induce the American Government to make a loan to China of 1,000,000,000 ounces of silver, "from silver now lying idle in its vaults."¹¹ This plan later was repudiated by T. V. Soong, the Chinese Minister of Finance, and the Nanking Government denied that Linebarger had authority to represent it.¹² He apparently represented Hu Han-min, President of the Legislative Yuan, who a few months later broke with his colleagues in the Nanking Government,

⁸ *Annual Report of the Director of the Mint, 1925*, quoting Sharps & Wilkins.

⁹ *Commercial and Financial Chronicle*, Vol. 123, Oct. 2, 1926, pp. 1702-03.

¹⁰ *New York Times*, Oct. 9, 1930.

¹¹ *Ibid.*, Oct. 17, 1930.

¹² *Ibid.*, Nov. 1, 1930.

and was held prisoner for a time.¹³ The loan plan was kept under consideration by Senator Pittman's subcommittee, and it received some publicity in the early part of 1931.¹⁴ It was not favored, however, by either Chinese or foreigners in China.¹⁵ On February 11, 1931 the subcommittee presented a unanimous report to the Senate Committee on Foreign Relations, together with two recommended resolutions. One of these proposed a silver pool, which might include some of the silver dollars in the United States Treasury, for a loan to China.¹⁶ The Senate did not act on this resolution.

The whole idea of a silver loan to China was rather vague. It was not brought out clearly whether the repayment would be in silver or in gold. The important questions of adequate security and of supervision of its expenditure were not discussed. The argument that a silver loan to China would enable her to absorb American products was fallacious; for that purpose, a gold loan would be needed. At first sight, the idea of dumping into China the silver dollars which were sequestered safely in the United States Treasury vaults, at a time when there was admittedly an oversupply of silver on the market, seems opposed to the interests of silver producers; Senator Pittman's proposal of this can be understood only on the assumption that he intended later, when these dollars had been shipped to China, to press for legislation to replace them by purchases of newly-mined American silver. All in all, the proposal was a most amazing one.

3. *Proposed International Conference on Silver*

On February 20, 1931 the Senate approved the other resolution presented by the subcommittee, after some modifications had been made in it by the Committee on Foreign Relations.¹⁷ This called upon the President to enter into negotiations with other governments (not specifically named in the resolution)

... looking to the suspension of the policy and practice of governments of melting up or debasing silver coins and sales by governments of silver, and that he take such other and further action in the premises as he may deem necessary to eliminate the abnormal fluctuations and depressions in the price of silver.¹⁸

It further suggested that the President, if he thought best, call an international conference for this purpose.¹⁹

¹³ *Ibid.*, Feb. 17, 20, 24, Mar. 3, 1931.

¹⁴ *Ibid.*, Jan. 8, 9, 11, 1931.

¹⁵ *Ibid.*, Jan. 12, 1931; *Boston Evening Transcript*, Jan. 17, 1931.

¹⁶ *New York Times*, Feb. 12, 1931.

¹⁷ *Ibid.*, Feb. 21, 1931.

¹⁸ *Ibid.*, Feb. 19, 1931.

¹⁹ *Ibid.*

News of this resolution was received in China without great enthusiasm, but Finance Minister Soong announced that China would co-operate in such a conference.²⁰ In Washington the plan received little support from administration officials, because it was believed that American concern in the silver problem was not sufficient to justify calling a conference, which might involve international complications in the interference with monetary policies of other countries, and because the bearing of silver on world trade was regarded as doubtful in any case.²¹

In May, 1931 meetings of the International Chamber of Commerce were held in Washington. After some rather hot discussion between those holding opposing points of view, the Chamber adopted a resolution urging the assembly during the current year of a conference on silver, and asking the various national committees to bring the matter to the attention of their governments.²² Subsequently various nations expressed themselves as ready to co-operate in such a conference, but none took the initiative in calling it.²³ Finally, on June 2, President Herbert Hoover informed Senator Reed Smoot of Utah, Chairman of the Senate Finance Committee, that informal conversations with nations, some of which would be essential for the success of the plan, developed the fact that they would not favor a conference at the time.²⁴ Senator Pittman and others continued throughout the remainder of 1931 to urge a conference.

Little was heard of the plan in 1932 until May, when a joint resolution was introduced by Representative Andrew L. Somers of New York, who, as chairman of the Committee on Coinage, Weights, and Measures, had been conducting hearings on the effect of low silver.²⁵ This resolution asked the President to call an international monetary conference, which would consider the gold standard and international exchange as well as silver.²⁶ Before this had been acted upon by the House, however, the British Government had suggested to the United States a world economic conference. The Somers resolution was revised to approve participation in that conference, omitting all mention of silver specifically, and was adopted by the House on June 17, 1932.²⁷

On June 29, 1932 in the debate on an appropriation bill, Senator

²⁰ *Ibid.*, Feb. 24, 1931.

²¹ *Ibid.*, Apr. 5, 1931.

²² *Ibid.*, May 4, 6, 7, 8, 9, 1931.

²³ *Ibid.*, May 15, 16, 17, 18, 19, 20, 22, 30, 1931.

²⁴ *Ibid.*, June 4, 1931.

²⁵ From March 7 to April 15, 1932. See *The Effect of Low Silver*.

²⁶ *New York Times*, May 15, 1932.

²⁷ *Ibid.*, June 2, 3, 8, 18, 1932.

Oddie of Nevada proposed an amendment appropriating \$40,000 for the expenses of an international economic conference. At the instance of Senator Hayden of Arizona this was modified to include the consideration of "restoring silver to a proper monetary status," and the amendment was passed in that form.²⁸

4. *Proposed Acceptance of Silver on War-Debt Account*

In June, 1931 some silver producers, accompanied by Senator Smoot, called on President Hoover with a suggestion that the United States might accept silver from European countries on war-debt account at a fixed valuation somewhat above the market price.²⁹ Such a plan already had been proposed by Arthur Bassett, of the British-American Tobacco Company, Shanghai, who had suggested a price of 50 cents per ounce.³⁰ Not very much was heard of it at the time, but in May, 1932 Senator Carl Hayden of Arizona offered a resolution proposing the acceptance of silver on war-debt account, provided the paying nations would not melt their own coins to get the silver, and would agree to restore the fineness of their coins to 0.900.³¹ The rate which he suggested was the acceptance of 1½ ounces of silver as \$1.00, that is, 66.7 cents per ounce. A similar measure was introduced in the House by Representative Somers of New York.³² Both resolutions provided that the silver received should be coined into dollars and used as a basis for silver certificates.

These bills never were acted upon, but similar ones were brought up at subsequent sessions of Congress. The plan, however, was included in the Thomas amendment to the Emergency Farm Mortgage Act of 1933, approved May 12, 1933.³³

5. *Silver-Purchase Plans*

At the First Session of the Seventy-second Congress Senator Pittman proposed a bill for the purchase at the market price of not over 5,000,000 fine ounces per month of silver produced within the United States. This bill was favorably reported by the Committee on Banking and Currency, with a clause designed to prevent too rapid a rise in the price; the report, incidentally overstated by about 100 per cent

²⁸ *Congressional Record*, Vol. 75, June 29, 1932, pp. 14241-51.

²⁹ *New York Times*, June 24, 1931.

³⁰ *Finance and Commerce*, Vol. 9, No. 86, Jan. 21, 1931, pp. 1-2.

³¹ *New York Times*, May 2, 7, 11, 1932.

³² *Ibid.*, May 6, 1932.

³³ Appendix VII.

the quantity of silver sold by the Government of India. The bill did not, however, come to a vote.³⁴

At the "lame duck" session of the Seventy-second Congress, which opened in December, 1932, several bills were presented for the purchase or receipt of silver against the issue of silver certificates. Among the proposers were Senators Clarence C. Dill of Washington,³⁵ John H. Bankhead of Alabama,³⁶ and Key Pittman of Nevada,³⁷ and Representatives Oliver H. Cross of Texas,³⁸ and Henry B. Steagall of Alabama.³⁹ These bills varied in details, as to the price to be paid, the quantity to be purchased, and whether or not limited to American-produced silver. Some of them were essentially on the Windom plan described in Chapter VI, Section 3, thus assuring a reserve of full value behind the silver certificates as long as silver did not fall below the purchase price.

None of these bills came to a vote, but the House Committee on Coinage, Weights, and Measures held extensive hearings on the subject in February, 1933. A subcommittee drafted a new purchase bill, somewhat on the Windom plan, providing for the purchase of not more than 40,000,000 ounces per month, at prices not exceeding quarterly limits of 40 cents, 50 cents, and 60 cents, and thereafter rising gradually to 75 cents per ounce. The bill was rejected by the main committee on February 21, 1933,⁴⁰ and then reconsidered and reported favorably the following day. According to the *New York Times*,

... the committee was accused yesterday by a Republican member of being a lot of prima donnas, each of whom had his own particular bill and would not give in to anyone else.⁴¹

In the crowded final week of the session the bill was not brought before the House.

6. Proposed Free Coinage of Silver at 16 to 1

Senator Burton K. Wheeler of Montana was the most thorough-going supporter of silver in Congress. In January, 1932 he presented a bill for the free and unlimited coinage of silver at 16 to 1, urging

³⁴ *Congressional Record*, Vol. 75, Feb. 11, 1932, pp. 3733-34; June 20, 1932, p. 13432; June 21, 1932, pp. 13599-601; June 27, 1932, p. 13991.

³⁵ *Ibid.*, Vol. 76, Jan. 9, 1933, pp. 1401-02.

³⁶ *Ibid.*, Vol. 76, Jan. 17, 1933, p. 1932.

³⁷ *Ibid.*, Vol. 76, Feb. 13, 1933, pp. 3953-55.

³⁸ *Ibid.*, Vol. 76, Dec. 28, 1932, p. 1055.

³⁹ *Ibid.*, Vol. 76, Jan. 17, 1933, p. 1986.

⁴⁰ *New York Times*, Feb. 18, 22, 1933.

⁴¹ *Ibid.*, Feb. 23, 1933.

that it would double the world's supply of primary money, increase the purchasing power of the Orient, and raise prices.⁴² He further developed his ideas in an article in a popular magazine.⁴³ His bill as such did not come to a vote during the first session of the Seventy-second Congress in the spring of 1932, nor yet in the short session which began in December, 1932.

The Senate had a chance, however, to express itself on the Wheeler plan. On January 23, 1933, in the course of his lengthy filibuster against the Glass banking bill, Senator Huey Long of Louisiana offered as an amendment to that bill a silver-purchase measure on the lines of the Windom plan. This provided for the purchase of silver at the market price, by the issuance of silver certificates, redeemable in silver bullion at the market price; the Government to be responsible for purchasing additional bullion, if needed, to keep the value of the bullion reserve at least 10 per cent above the face value of the certificates. Senator Wheeler immediately offered his 16-to-1 bill as a substitute amendment. It was debated hotly for eight hours on January 24. Senator Carter Glass of Virginia protested unsuccessfully against it as irrelevant to the topic of his bill. Finally he moved to lay on the table the amendment of Senator Long which would carry with it that of Senator Wheeler. This motion was passed by a vote of 56 to 18, and was supported even by such loyal silver Senators as Key Pittman and Tasker L. Oddie of Nevada, who evidently considered the 16-to-1 plan as too radical for practical purposes.⁴⁴

7. *Other Bimetallic Plans*

Of various plans for some sort of bimetallicism which were proposed during the depression, two or three deserve special mention.

The first was that of J. F. Darling, a director of the Midland Bank in London, with eleven years of banking experience in India. After retirement from active business he had been much interested in the unification of the British Empire. He proposed the establishment of an Empire superbank and an Empire currency, tentatively called the "rex." The superbank would establish a minimum price of 1 rex for 113 grains of fine gold, or the equivalent of a sovereign, and a minimum price for silver on a 20-to-1 ratio. When necessary to keep up its supply of either metal, it would pay more than the minimum price, and also would sell at the minimum price or higher. The bank

⁴² *Ibid.*, Jan. 4, 1932.

⁴³ Wheeler, "The Silver Lining."

⁴⁴ *Congressional Record*, Vol. 76, Jan. 23, 1933, pp. 2293-94; Jan. 24, 1933, pp. 2349-93.

would take over the gold and silver reserves of the various governments within the British Empire and of their central banks, and their currencies would be given a par in relation to the rex instead of to gold. The bank also would absorb much of the new gold and silver production. By management of the price of gold and silver it was expected that the superbank could keep a steady exchange rate between the Empire countries, could maintain the 20-to-1 ratio between the two metals, and could adjust rates between the Empire and gold- or silver-standard countries in the interests of stability of trade. Eventually other countries might be attracted to join the system.⁴⁵

Another bimetallic plan was proposed by F. H. Brownell, chairman of the board of the American Smelting and Refining Company. He admitted that experience with bimetallism gave good ground for the argument that, at a fixed coinage ratio, the overvalued metal would drive the other out of circulation. He proposed, however, a system of "bimetallism at no fixed ratio." On the assumption of a metallic base of 50 per cent for currency (which is higher than the 40-per-cent gold reserve against Federal Reserve notes) it would be required that half of the reserve be in gold, that at least one-sixteenth be in silver, and that the remaining seven-sixteenths might be in either gold or silver. The silver would be taken at its average market value for the preceding six months. For example, the metallic reserve for \$1,000 of currency would be as follows, based on silver at 25 cents per ounce and at 50 cents per ounce:

	Silver at 25c	Silver at 50c
Gold	\$250.00	\$250.00
Silver	125 oz = 31.25	62.5 oz = 31.25
Gold or Silver	218.75	218.75
	<hr/>	<hr/>
Total Metallic Reserve	\$500.00	\$500.00

Paper currency would be redeemable in gold and silver together in the proportion of the current composition of the reserve. It was argued that this system would have the advantage of adding silver to gold in the monetary system, but would be flexible enough to adjust itself to the varying supply of and demand for the two metals, and so would avoid the weaknesses of ordinary bimetallism.⁴⁶

The Brownell plan had some similarity to the proposal of the

⁴⁵ Testimony by Mr. Darling and a reprint of his pamphlet are given in *Commercial Relations with China*, Part 3, pp. 357-394. See also *New York Times*, Jan. 28, May 17, Dec. 17, 20, 1931.

⁴⁶ *New York Times*, Feb. 28, 1932. The original plan will be found in Brownell, *Limited Bimetallism at No Fixed Ratio*.

English economist, Alfred Marshall, for a system which he named symmetallism. That proposal was first presented to the Royal Commission on the Depression of Trade and Industry in 1886. Marshall, however, unlike Brownell, contemplated a fixed ratio between the quantities of gold and silver to be given in redemption of paper money.⁴⁷ Symmetallism did not receive much support during the bi-metallic discussion in the 1890's, but in recent years has been referred to from time to time.

A third plan was put forward by Constantino Perez Duarte, consulting engineer of the Treasury Department of Mexico. He proposed that nations make bars of silver bullion unlimited legal tender for a period of five years at a ratio of 50 to 1 as compared with gold, and thereafter for successive periods of five years at ratios of 45 to 1, 40 to 1, 35 to 1, 30 to 1 and after twenty-five years at a permanent ratio of 25 to 1. As subsidiary propositions, he would provide for government restriction of production, for agreement to undertake considerable coinage of subsidiary silver during the early years of the plan, for government manufacture of stamped bars of silver bullion, and for encouragement of the use of silver where not already used. He argued that this plan would benefit producers of silver and countries holding stocks of it.⁴⁸

8. Sources of Silver Propaganda

As was the case in the latter part of the nineteenth century much of the propaganda for doing something for silver came from the silver states or from persons interested in silver production. Most of the silver in the United States has been produced in seven states, Arizona, California, Colorado, Idaho, Montana, Nevada, and Utah. In some of these states it is considered, perhaps with insufficient basis, a very important factor in their prosperity. There are therefore 14 Senators naturally predisposed to aid silver, and the silver bloc in the Senate is powerful enough so that it must be taken into account and given some encouragement if other measures are to be carried successfully.

Silver also received some support in Congress and outside from those who were in favor of inflation in general, or who accepted the argument that raising the price of silver was desirable to help foreign

⁴⁷ Marshall, *Official Papers*, pp. 13-15, 28-31, 101-113. A somewhat similar plan, under the name of joint-metallism, was proposed, apparently independently, in 1894 by Anson Phelps Stokes, in *Joint-Metallism*. The subject was revived in 1936 by Barthold A. Butenschön in *Symmetallism, An Alternative to Orthodox Bimetallism*, a mathematical discussion.

⁴⁸ Duarte, *The World Crisis and the Depreciation of Silver*.

trade. Such support was less widespread than in the 1890's because silver had been out of the limelight for a generation; and, after 1933, because the devaluation of the gold dollar provided a simpler means of inflation.

There was for a time, however, one advocate of silver from the inflationary standpoint whose influence perhaps was comparable to that of "Coin Harvey" in the 1890's, mentioned in Chapter VIII, Section 2. That was Rev. Charles E. Coughlin, a Roman Catholic priest, at Royal Oak, Michigan, near Detroit. His Sunday-afternoon radio broadcasts over a national network were reputed to have ten million listeners, many of whom contributed toward the support of the work. During 1933 in his discussion of various public questions Father Coughlin laid considerable stress on silver, using many of the forty-year-old arguments and also some new ones, accusing Great Britain of willful depreciation of silver for over a century, and urging some kind of aid to silver to revive Oriental trade. In particular he advocated a dollar based on 75 cents worth of silver and 25 cents worth of gold.⁴⁹ His explanation of this was hazy and called forth an open letter of criticism from J. P. Warburg.⁵⁰

Although most of the agitation for silver came from Americans, there were a few supporters in other countries. J. F. Darling's plan for bimetallism has already been mentioned. Some others in Great Britain favored doing something for silver. Sir Robert Horne, a former Chancellor of the Exchequer, and a director of the Burma Corporation, producers of silver, was influential in the formation of a Silver Association in 1931, and from time to time made suggestions on the subject.⁵¹ L. S. Amery, a former Secretary of State for the Colonies and for the Dominions, also favored aid to silver.⁵² Sir Hugo Cunliffe-Owen, president of the Board of Trade, and chairman of the British-American Tobacco Company, which does a large business in China, suggested combination between American producers and the Indian Government to support the price.⁵³ Sir Henri Deterding, director-general of the Royal Dutch Petroleum Company, one of whose subsidiaries sells kerosene oil in China, urged a return to silver;⁵⁴ he was reported to have accumulated a large quantity of the white metal.⁵⁵ Former Finance Minister Caillaux in France advocated broadening

⁴⁹ Coughlin, *The New Deal in Money*, p. 63; "Inflation and Silver," pp. 22 ff.

⁵⁰ *New York Times*, Jan. 12, 1934.

⁵¹ *Ibid.*, Sept. 23, Nov. 17, 19, 1931; Mar. 15, May 26, June 16, 1932.

⁵² *Ibid.*, Sept. 23, 1931; May 26, 1932.

⁵³ *Ibid.*, Sept. 25, Oct. 21, 1931.

⁵⁴ *Ibid.*, Aug. 21, 1931, Apr. 23, 1933.

⁵⁵ *Ibid.*, Nov. 11, 1931.

the metallic base by the use of silver.⁵⁶ Sir Montagu de P. Webb, of Karachi, India, was active in writing and lecturing in favor of the rehabilitation of silver.

⁵⁶ *Ibid.*, Sept. 27, 1931; May 19, 1932

CHAPTER XXIV

THE ARGUMENTS FOR DOING SOMETHING FOR SILVER

Alice laughed. "There's no use trying," she said; "one *can't* believe impossible things."

"I dare say you haven't had much practice," said the Queen. "When I was your age, I always did it for half-an-hour a day. Why sometimes I've believed as many as six impossible things before breakfast."

LEWIS CARROLL, *Through the Looking-Glass*

The preceding chapter has considered some of the proposals as to what should be done for silver. In this chapter the reasons given for such proposals will be discussed from the point of view of early 1933, before any American action had been taken on silver and on other changes in the monetary system.

The three main arguments which were used by the supporters of silver were:

1. To increase the purchasing power of a large fraction of the world's population and so aid American exports.

2. To broaden the metallic monetary base, since the world's accumulated supply and current increase of gold were held to be inadequate to the demands of trade.

3. To bring about a "controlled inflation" of the currency, by which phrase its supporters apparently meant inflation limited in extent.

1. The Argument for Increasing Purchasing Power

One of the chief arguments used by almost every supporter of silver was that the purchasing power of a large part of the world's population had been reduced by the fall in the price of silver. The fraction of the world's population dependent upon the price of silver was stated variously by different persons. Thus, Senator Borah spoke of "nearly half the human family" or "800,000,000 people."¹ Senator Pittman usually stuck to "over half the people of the world."² Senator Wheeler mentioned "sixty per cent of the people of the world."³ A

¹ *Congressional Record*, Vol. 76, Jan. 4, 1933, p. 1286.

² *Ibid.*, Vol. 76, Dec. 15, 1932, p. 479; Feb. 3, 1933, p. 3260.

³ *Ibid.*, Vol. 76, Jan. 24, 1933, p. 2365.

memorial of the Legislature of the State of Idaho referred to "three-fifths of the people of the world."⁴ Senator Tydings of Maryland went as high as "two-thirds of the world's population."⁵ Representative Dies of Texas talked of "1,500,000,000 people of the world,"⁶ or over three-quarters of the population. Father Coughlin topped the list with the statement that four-fifths of the world's population were "silver trading nations."⁷

Actually China, with perhaps one-quarter of the world's population, was the only country of importance on the silver standard. Most of the silver propagandists seemed entirely ignorant of the fact that India went off the silver standard in 1893, although some of them said that she changed to a gold standard in 1926. In arriving at these large figures, they apparently included not only China and India, but also Mexico and South America.⁸ Representative Duncan of Missouri made the explicit statement: "Every republic to the south of us is on the silver standard."⁹ Senator Long, like many other persons, was apparently under the impression that 40 countries which had abandoned the gold standard were *ipso facto* on the silver standard.¹⁰ Many speakers did not use the words "silver standard," but implied it in speaking of "silver-using" countries, and either ignorantly or purposely did not make the important distinction between the two phrases.

In India, as has been seen in earlier chapters, the rupee was pegged at 1s. 6d. gold before 1931 and at 1s. 6d. sterling thereafter; that rate represented two or three times the bullion value of the silver in the coin. The price of silver had absolutely no relation to the exchange rate and to the purchasing power of the holder of the rupees. The charge sometimes was made that the fall in the price of silver had depreciated the value of the savings of the Indian people, and had cut their purchasing power in that way. This argument had comparatively little foundation. In the first place, such savings as were in the form of rupee coins, notes, or gold coins were unaffected. In the second place, the value of silver in ornaments had been maintained well above the world level by the import duty on silver, described in Chapter XX, Section 9, so that the fall in their value had not been comparable to that in the price of silver bullion in New York and London. In the third place, as was pointed out in Chapter IX, Section

⁴ *Ibid.*, Vol. 76, Feb. 4, 1933, p. 3346.

⁵ *Ibid.*, Vol. 76, Feb. 4, 1933, p. 3373.

⁶ *Ibid.*, Vol. 76, Dec. 9, 1932, p. 281.

⁷ Coughlin, *The New Deal in Money*, p. 33.

⁸ Senator Pittman in *New York Times*, Dec. 7, 1930.

⁹ *Congressional Record*, Vol. 78, Jan. 20, 1934, p. 1019.

¹⁰ *Ibid.*, Vol. 76, Jan. 3, 1933, p. 1188.

2, the ornaments were not held primarily as a store of purchasing power, and the quantity coming on the market, even in years of famine and depression, was only a small fraction of the great mass held.

There was also considerable misapprehension of the status of silver in Mexico, which often was spoken of as if it were on the silver standard. Actually, the exchange value of the peso had depreciated below its gold par, but not down to the bullion value of the silver coins. The depreciation of the peso must be laid to the poor financial condition of the Mexican Government rather than to the fall in the price of silver. A rise in the price in silver, unless it were so great as to make the silver coins worth more than the exchange value (as in fact occurred for a time in 1935; see Chapter XXVII, Section 2), would not improve the exchange value of the peso and its purchasing power abroad, except in so far as it had a psychological effect. On the other hand, Mexico, as a large producer and exporter of the white metal, was affected, of course, by its low price. In this respect, however, she was in much the same position as countries which exported wheat, cotton, rubber, and other raw materials which had fallen in price. Moreover, since much of the silver production of Mexico was controlled by American interests, not all of the benefit of an increase in the price of silver would go to Mexico, although probably such an increase would be helpful to the mining districts in relieving unemployment, and to the Government in increasing revenue from taxes.

In Japan and in many South American countries, the currency, nominally on a gold basis, had depreciated. Since all these countries used silver, if at all, only for subsidiary coins, a rise in the price of silver would have no effect on the exchange value of their money.

Even in the case of China, the argument of increasing purchasing power by raising the price of silver was of very doubtful validity, except perhaps in the case of a few consumers' goods. As pointed out in Chapter XXII, although the fall in the price of silver had been upsetting to Chinese trade at first, it actually worked to save China from the worst effects of the world economic depression. By 1933 China was anxious to be delivered from her American "friends" who would help her by an artificial increase in the price of silver.

The argument for raising the price of silver to increase purchasing power, therefore, could not be considered as important. India, with a currency unrelated to silver and with her people's enormous holdings of silver in the form of ornaments which were practically out of the active market, except in times of distress, would have her buying power for American goods affected comparatively little by a

rise in the price. Mexico as a producing country might receive some benefit. In China there might be a temporary stimulation of some imports, but the general effect would be deflationary and would decrease her buying power. In any case, under the best of conditions, the share of Mexico and China in world trade was very small.

2. *The Argument for a Broader Metallic Base*

The argument that silver was needed to broaden the metallic base of world currency was based on the assumption that the gold supply was insufficient to meet the current demands of trade and was not increasing rapidly enough to keep up with future expansion, if what was considered a normal price level was to be maintained.

The premise of a gold shortage was a controversial question, which will not be discussed here.¹¹ Assuming, however, purely for the sake of argument, that the metallic monetary base did need broadening, it may be of interest to examine some quantitative data to determine how much effect the addition of silver would have had.

Table 13 gives a rough estimate of the distribution at the beginning of 1933 of the gold and silver produced since 1493. The year 1933 has been chosen because it was prior to the devaluation of the American gold dollar and the commencement of the American silver purchase program described in Chapter XXV. Detailed figures are given in Appendix VI.

These data are presented graphically in Chart 9. The first column represents the total production of gold since 1493; it is drawn with the same area scale for ounces as the top part of Chart 1, page 9.

The second column represents the total production of silver since 1493. It is drawn with the same area scale for ounces as the middle part of Chart 1, page 9, that is, $\frac{1}{16}$ as large as that for gold.

The dollar value of the gold, in terms of pre-1934 dollars of 23.22 grains fine, may be read from the dollar scale at the right. The value of the silver, at the ratio of 16 to 1, may be read from the similar dollar scale at the right of the silver column. Since a weighted average of postwar coinage ratios in gold-standard countries, as shown in Table 4, page 165, was 14.4 to 1, this dollar scale (if the depreciation of sterling and other currencies at the beginning of 1933 is neglected) is approximately applicable to the silver in monetary use except in China. The monetary silver in China and all the nonmonetary silver, however, were worth only the market price, which corresponded to a

¹¹ See the publications of the Gold Delegation of the League of Nations, Geneva, 1930-1932, for extended discussion of this problem.

TABLE 13
 DISTRIBUTION ON JANUARY 1, 1933 OF THE GOLD
 AND SILVER PRODUCED SINCE 1493
 (Millions of fine ounces)

	Gold	Silver
A. Monetary		
United States	196	640
China	-----	1,700
India	8	1,050
Other Countries	372	1,550
Circulation and Hoards	40	-----
Total Monetary	616	4,940
B. Nonmonetary		
United States	80	1,000
China	13	800
India	119	3,300
Other countries	120	1,500
Total nonmonetary	332	6,600
C. Permanently lost or destroyed, or unaccounted	162	3,946
Grand Total Production, 1493-1932	1,110	15,486
Maximum annual production	25	260

SOURCE: See Appendix VI.

ratio of about 80 to 1. To represent their value, therefore, the heights of the corresponding parts of the silver column should be compressed to one-fifth of the magnitudes shown.

It is evident from the chart that more than one-half of the gold and about one-third of the silver produced since 1493 were in monetary use in 1933. Of the remaining gold and silver a considerable quantity was in the form of fabricated metal in India, and smaller quantities were in that form in the United States, in China, and in other countries. The unshaded areas represent the total quantity of the metals which has been lost by abrasion, chemical combination, shipwreck, and otherwise, with a considerable margin of error in the estimate.

The quantity of silver which might have been brought into the monetary system from the nonmonetary supplies at the time when this argument was advanced was problematical. It was not likely that large quantities of sterling-silver tableware would be attracted to the melting pot in Western countries unless economic conditions should become so bad that middle-class and upper-class families had to realize on their possessions. The quantity of fabricated silver in India looms up large on the chart, but, as pointed out in Chapter IX, Section 2, most of this represented ornaments owned by the women of the country, and was not likely to be disposed of except under severe economic pressure, even if the price should be raised consid-

erably. So it was not probable that any large supplies of nonmonetary silver would be transferred to the world's monetary system.

The silver in China was largely in the monetary system already, and if it had been attracted out by a high price it would not have made any net addition to the world's money, except in so far as it was coined at a value artificially above the market value. Such a transfer would mean simply a maladjustment in the distribution of silver, similar to the maladjustments which have been evident in the distribution of gold.

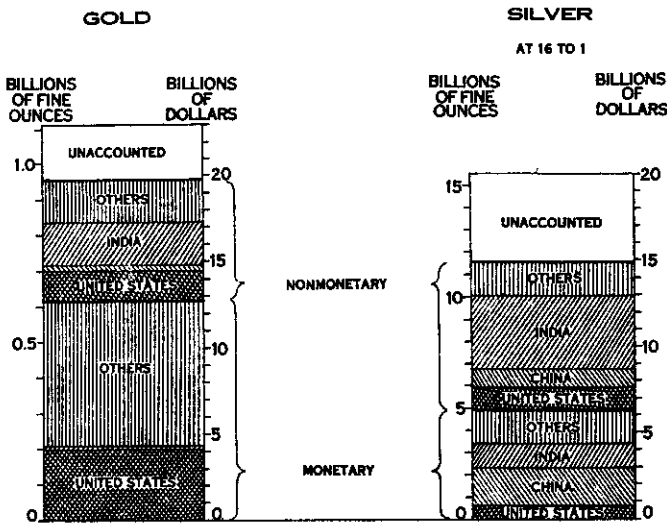


CHART 9.—DISTRIBUTION OF THE WORLD'S GOLD AND SILVER, 1933

The annual new production of silver, shown at the bottom of Table 13, might make some addition to the world's money, but, except for the worst years of the depression period, the new production had been absorbed by the normal demands for ornaments in India, for money in China, and for subsidiary currency and industrial uses in other countries.

Thus it would seem that no very great addition to the world's metallic monetary base could have been obtained from the existing stock of silver, even if it had been remonetized at the 16-to-1 ratio, although there would have been some stimulus to the production of new silver. Moreover, such strength as the argument had at the beginning of 1933 was weakened later by the devaluation of the gold dollar.

3. *The Argument for Inflation*

The third argument was that of those who wished to see some inflation of the currency. Here again it was a controversial question as to whether inflation were necessary and if so, whether or not it could be controlled.

As seen in the preceding section, the quantity of silver that could be brought into the world's monetary system, even at 16 to 1, was not large compared with the existing stock of monetary metal. On the other hand, if the United States alone were to remonetize silver, it might have to take in not only the above supply from nonmonetary stocks, but also from stocks already in monetary use elsewhere, so that the possible percentage increase of American currency might be much more than the increase for the world as a whole, and might be sufficient to cause appreciable inflation in this country. Such inflation might be called controlled, because there would be some limit to the amount of silver brought in, but it would be controlled more by force of circumstances than by government management.

Silver was only one of the possible ways of inflation, and later lost some support, when the principle of adjusting the weight of the gold dollar gained supporters.

4. *The Production-Ratio Argument*

One minor argument was repeated so often that it is worth mentioning. Senator Pittman stated it as follows:

The ratio of the production of such metals (gold and silver) was not only uniform but substantially certain. Since the beginning of time, as far as information can be obtained, there has not been produced throughout the world on the average more than 15 ounces of silver to 1 ounce of gold. During 1932 there were less than 13 ounces of silver produced to 1 ounce of gold throughout the world. This uniformity of production and ratio facilitated the use of both metals in trade, and in the exchange of such metals. There was a natural ratio between such metals based upon equal demand and relative supply.¹²

For the period from 1493, for which there are generally accepted estimates of production, Senator Pittman's statement that "on the average" the production ratio has not been more than 15 to 1 was quite correct. His implication that it had been "uniform" and "natural" was entirely contrary to fact. As shown in Table 1, page 3, the average production ratios in the sixteenth, seventeenth, and eighteenth centuries were 32, 44, and 30 to 1 respectively. For the first forty

¹² *Congressional Record*, Vol. 76, Feb. 3, 1933, p. 3260.

years of the nineteenth century, it was about 39 to 1; in the 1850's and 1860's it was about 5.5 to 1; since then the annual ratio has ranged between 7 to 1 and 23 to 1. The cumulative ratio of the total production of the two metals since 1493 is in some ways more significant as representing the relative proportion of the total supply of gold and silver, although not necessarily of monetary stocks. This ratio was between 40 to 1 and 30 to 1 down to 1850, had fallen to about 20 to 1 by 1870, and since then was generally decreasing, but did not fall below 15 to 1 until 1916. Thus, there has been very great variation from the average 14-to-1 production ratio. In any case the abandonment of bimetallism in the 1870's removed a large part of the monetary demand for silver while increasing the monetary demand for gold. Under these circumstances the relative prices of the two metals could not be expected to be inversely proportional to their supply alone.¹³

5. *Summary and Conclusions*

The argument for increasing world purchasing power was invalid because China was the only country of importance to which it could apply and because it was probable that even in China the deflationary effects of a rise of silver would counterbalance the immediate stimulation of imports. The argument that silver was needed to increase the metallic base of world currency was weakened by the fact that comparatively little additional monetary service could be obtained from silver; it was further weakened by the devaluation of the dollar and of other currencies, which made the world's gold able to support a much larger number of currency units than before. The argument for inflation had a certain appeal to those who feared uncontrolled paper currency but was only one of several ways of inflation. Taking it altogether, it does not seem that in 1933 there was a very strong case for doing something for silver.

¹³ Ratios in this paragraph computed by the writer from data in Ridgway, *Summarized Data of Gold Production*, and Merrill, *Summarized Data of Silver Production*.

CHAPTER XXV

SILVER UNDER THE NEW DEAL, 1933

Every bill and every measure
That may gratify his pleasure
Though your fury it arouses
Shall be passed in both your Houses.

W. S. GILBERT, *Iolanthe*

1. *The Beginning of the Roosevelt Administration*

As outlined in Chapter XXIII, in spite of considerable agitation for congressional or international action on silver, nothing was done during the administration of President Herbert Hoover.

President Franklin D. Roosevelt took office on Saturday, March 4, 1933. Banking difficulties in many parts of the country and large withdrawals of gold and currency by the public forced the closing by state action of practically all banks on that day. On Monday, March 6, the President, by proclamation, declared a bank holiday for several days.

The Seventy-third Congress assembled in special session on March 9, with a large Democratic majority, ready to support the President in many of his measures, but with a strong inflationary sentiment which went beyond what it generally was believed the President would have favored had he been independent of Congress. With this sentiment in Congress and with the very real financial and monetary crisis at hand, it is not surprising that legislation and administrative action on monetary matters took such a prominent place in the ensuing months, and that much of it was apparently of the nature of a compromise between radical and conservative viewpoints. The President frankly admitted an experimental policy.¹ Monetary affairs were destined to be submitted to their full share of tinkering by the trial-and-error method.

Congress on March 9 passed an act giving the President broad powers to regulate banking, to control transactions in foreign exchange and in gold and silver coin and bullion, and to order the delivery to the Treasury of gold held by banks and individuals in ex-

¹ President Roosevelt's radio address of May 7, 1933, in *Commercial and Financial Chronicle*, Vol. 136, May 13, 1933, pp. 3268-69.

change for currency.² On April 5 the President issued an executive order which called for the turning in of all gold and gold certificates in excess of \$100 held by any person, with exceptions for certain legitimate purposes.³ On April 20 he issued an executive order prohibiting the export or earmarking of gold or gold certificates, except under licenses from the Secretary of the Treasury to complete prior contracts, or for transactions deemed by the President as necessary to promote the public interest.⁴ This action definitely put the United States off the gold standard, and immediately was reflected in a drop in the value of the dollar in terms of foreign currencies, and a jump upward in prices of stocks and commodities, including silver.

2. *Silver in Congress*

Meanwhile, most of the old bills in regard to silver and other forms of inflation had been presented again to Congress and referred to committees. The first showdown on the subject came during consideration of a bill for farm relief. On April 14 Senator Huey Long proposed as an amendment a silver-purchase plan by which the price would be raised steadily until it reached the monetary value of \$1.29 per ounce, or the equivalent of the 16-to-1 coinage ratio.⁵

Senator Burton K. Wheeler immediately moved his 16-to-1 plan as a substitute amendment. It was debated on April 17, but received only limited support. Senators Key Pittman and William E. Borah preferred international action on silver. Senator Joseph T. Robinson of Arkansas, Democratic leader, announced that the President favored neither the Long nor the Wheeler amendment. On the vote the Wheeler substitute was rejected 44 to 33, but showed a gain of 15 votes since the time when the question had been voted on in January as described in Chapter XXIII, Section 6.⁶ The Long amendment was withdrawn without being brought to a vote.

3. *The Thomas Amendment*

Apparently with the purpose of forestalling legislation which would make inflation mandatory, the President now stepped into the game. Through Senator Elmer Thomas of Oklahoma, a sturdy infla-

² *Ibid.*, Vol. 136, Mar. 11, 1933, pp. 1625-27, gives the full text.

³ *Ibid.*, Vol. 136, Apr. 8, 1933, pp. 2346-47.

⁴ *Ibid.*, Vol. 136, Apr. 22, 1933, p. 2724.

⁵ *Congressional Record*, Vol. 77, Apr. 14, 1933, pp. 1741-42.

⁶ *Ibid.*, Vol. 77, Apr. 17, 1933, pp. 1817-42.

tionist, he presented to the Senate on April 20 an amendment to the agricultural relief bill which would give the President authority to adopt various inflationary measures at his discretion.⁷ In addition to allowing Federal Reserve open-market purchases of government securities up to \$3,000,000,000 and issuance of greenbacks up to the same amount, the Thomas amendment contained two provisions about silver, which are given in full, as finally passed, in Appendix VII.

The first of these provisions authorized the President to reduce the weight of the gold dollar not more than 50 per cent, to fix the weight of the silver dollar at any ratio to that of the gold dollar, and to provide for the unlimited coinage of both metals at the ratio so fixed. It also provided that such new gold dollar should be the standard unit of value and that the Secretary of the Treasury should maintain all forms of currency at a parity with it.

The second provision authorized the President for a period of six months to accept silver on account of principal or interest of war debts, at not to exceed 50 cents per ounce and not to exceed a total value of \$200,000,000. Silver certificates were to be issued against silver so received to the total value at which the silver was taken. Sufficient silver was to be coined into silver dollars and subsidiary currency to provide for demands for the redemption of the certificates, and the balance of the bullion was to be retained in the Treasury as additional security against the certificates.

The Thomas amendment was debated in the Senate for a whole week. It was opposed by many conservatives, but supported by others who felt that it was safer to trust the President with large discretionary powers than to risk mandatory inflationary legislation by Congress. The original draft did not include the provision for the unlimited coinage ("free coinage") of silver, but this amendment was proposed by Senator Wheeler and was adopted by a vote of 41 to 26.⁸ An amendment by Senator David A. Reed of Pennsylvania to cancel the gold-content reduction, but to leave the free coinage of silver, was rejected by a vote of 53 to 35.⁹ Senator Glass, on April 27, made an earnest and eloquent speech opposing the Thomas Amendment, regretting that the Democratic party should take such a step, disavowing the necessity for a gold embargo, and pointing out the dangers of inflation.¹⁰ An amendment proposed by Senator C. C. Dill of Washington making invalid any gold clause in contracts written in the fu-

⁷ *Commercial and Financial Chronicle*, Vol. 136, Apr. 22, 1933, pp. 2718-20.

⁸ *Congressional Record*, Vol. 77, Apr. 24, 1933, p. 2246; Apr. 26, 1933, p. 2410.

⁹ *Ibid.*, Vol. 77, Apr. 27, 1933, pp. 2452, 2467-68.

¹⁰ *Ibid.*, Vol. 77, Apr. 27, 1933, pp. 2460-62.

ture, but not affecting existing contracts, was rejected;¹¹ this is interesting in view of the action later taken by the House on May 29, and by the Senate on June 3, making existing gold clauses of no effect.¹²

The Thomas amendment was adopted by the Senate by a vote of 64 to 21 on April 28, and the bill itself on the same day by a vote of 64 to 20.¹³ It was subjected to some debate in the House, where Representative Louis T. McFadden of Pennsylvania was especially alarmed about the acceptance of silver on war-debt account because it meant a partial cancellation of debts. Others, however, favored silver, with the usual arguments about increasing the purchasing power of various fractions of the world's population. After some negotiations about Senate amendments, the bill, including the Thomas amendment, was accepted by the House,¹⁴ and was signed by the President on May 12.

4. *Acceptance of Silver on War-Debt Account*

On June 15, when installments of the war debts were due, such nations as met their obligations at all took advantage of this legislation to make payment in silver at 50 cents per ounce (the market price was 35½ cents) except Latvia, which paid its small installment of \$6,000 in cash. Full payment from Finland, and token payments from Czechoslovakia, Great Britain, Italy, Lithuania, and Rumania, totalled \$11,367,412, and were settled with 22,734,824 fine ounces of silver. The British payment consisted in earmarking 20,000,000 ounces of silver in Bombay for later delivery.¹⁵ Since the time for the receipt of silver was limited to six months, none could be received on account of payments due December 15, nor was any received for arrears of old payments within the time limit.

On July 31 the Treasury announced that this silver would be held in bars, and silver certificates issued against it.¹⁶ On November 2 announcement was made that it was not yet certain whether silver certificates would be issued, since it had not been decided whether the legislation was mandatory on this point. It was stated that issuance of them would not be inflation, since they would replace other forms

¹¹ *Ibid.*, Vol. 77, Apr. 28, 1933, pp. 2531-38.

¹² *Ibid.*, Vol. 77, May 29, 1933, pp. 4519-57; June 3, 1933, pp. 4889-4929.

¹³ *Ibid.*, Vol. 77, Apr. 28, 1932, pp. 2551-52, 2562.

¹⁴ *Ibid.*, Vol. 77, May 1-12, 1933, pp. 2648-3373, *passim*.

¹⁵ *Commercial and Financial Chronicle*, Vol. 136, June 17, 1933, pp. 4177-80; *Annual Report of the Secretary of the Treasury . . . 1933*, p. 27.

¹⁶ *New York Times*, Aug. 1, 1933.

of currency.¹⁷ Early in 1934 some 3,120,000 fine ounces of this silver were placed in the silver certificate reserve at the cost of 50 cents per ounce, and held as reserve against \$1,560,000 silver certificates.¹⁸ These certificates differed from existing ones, in that they were secured by 2 ounces of silver bullion per dollar, instead of by only 371¼ grains (0.7734 ounces) of silver in the form of a coined dollar.

5. *The London Silver Agreement*

In April and May, 1933 President Roosevelt held a series of conferences with the representatives of one foreign government after another, as a preliminary to the work of the coming World Monetary and Economic Conference. Although only very general reports of these conversations were made public, it was mentioned in several cases that the subject of silver had been discussed.¹⁹

Meanwhile Senator Wheeler proposed a resolution asking the delegates to the conference to

. . . work unceasingly for an international agreement to remonetize silver on the basis of a definite fixed ratio of not to exceed 16 fine ounces of silver to one fine ounce of gold.²⁰

This was passed by the Senate on May 8. A similar resolution was proposed in the House, but Secretary of State Cordell Hull announced that he would regret any legislation which would tie the hands of the delegation.²¹ No action was taken by the House.

On May 19 Senator Pittman announced that the nations with which the United States had discussed silver were in agreement on a six-point program, as follows: (1) raising and stabilizing the price of silver; (2) including silver in the general problem of currency and exchange stabilization; (3) governmental agreement to refrain from melting or debasing silver coins; (4) restoration of fineness of debased coins; (5) larger use of silver as a basis for currency; and (6) removal or reduction of tariffs and other limitations on the free movement of silver.²² Senator Pittman was one of the American delegates to the London Conference and went with the avowed intent of securing action on silver,²³ although not favoring bimetallism.²⁴

¹⁷ *Ibid.*, Nov. 3, 1933.

¹⁸ *U. S. Treasury, Daily Statement*, Feb. 28, 1934.

¹⁹ *Commercial and Financial Chronicle*, Vol. 136, Apr. 29 to June 3, 1933, pp. 2875-76, 2880-81, 3068, 3259-61, 3814.

²⁰ *Ibid.*, Vol. 136, May 20, 1933, pp. 3443-44.

²¹ *Ibid.*

²² *Boston Evening Transcript*, May 19, 1933.

²³ *Ibid.*, June 3, 1933.

²⁴ *New York Times*, June 7, 1933.

The World Monetary and Economic Conference, with delegates from 66 nations, opened in London on June 12, 1933. A plan worked out for world monetary stabilization, which reflected the views of most of the foreign delegates, proved to be unacceptable to President Roosevelt,²⁵ and further progress in that direction became impossible. Senator Pittman seized this opportunity to press the cause of silver. He proposed to a subcommittee of the Monetary and Financial Commission resolutions favoring the gold standard in principle, with some modifications of past practice. He asked for agreement on the limitation of sales of demonetized silver and of further debasement of coinage, on the restoration of a higher fineness for silver coins when practicable, and on the admission of silver as part of central-bank reserves to a maximum of one-fifth.²⁶ The support of the Indian delegation and of the chief silver-producing nations was secured for the plan.²⁷ The Chinese delegation expressed some anxiety lest the price of silver rise too high for the good of their country.²⁸

Some progress was being made on both the gold and silver plans, when President Roosevelt again upset the conference by a message on July 3 in which he opposed present action on gold and stood out for the regulation of currencies to stabilize internal purchasing power.²⁹ As a result of this the conference nearly broke up, but was held together by Secretary of State Hull, with agenda restricted to matters on which some common ground could be found.

On July 20 the silver subcommittee unanimously adopted a general resolution on silver. This resolution was approved by successive commissions, and finally by the Conference at its closing plenary session on July 27.³⁰ It recommended that an agreement be made between the principal producing and consuming countries, and that other nations refrain from measures which would affect the silver market; that all governments refrain from further debasement of their silver coinage below a fineness of 0.800; and that they substitute silver coins for low-value paper currency as far as possible. These recommendations were to be subject to the ratification of some agreement as suggested, and were not to be in force beyond January 1, 1938.

Meanwhile, on July 22, an agreement was signed between

... the delegates of India, China, and Spain, as large holders or users of silver,

²⁵ *Ibid.*, June 18, 1933.

²⁶ *Ibid.*, June 20, 1933.

²⁷ *Ibid.*, June 27, 1933.

²⁸ *Ibid.*, June 28, 1933.

²⁹ *Ibid.*, July 4, 1933.

³⁰ *Journal of the Monetary and Economic Conference*, pp. 202, 209, 220, 243.

and of Australia, Canada, the United States, Mexico, and Peru as the principal producers of silver.

The full text of this agreement, which incorporates the July 20 resolution later adopted by the conference, will be found in Appendix VIII.

In brief, India agreed not to sell more than an average of 35,000,000 fine ounces per year (except for American war-debt purposes), Spain not more than an average of 5,000,000 fine ounces per year, and China none. The producing countries on the other hand, were to purchase or otherwise withdraw from the market 35,000,000 fine ounces per year, and make use of it for currency purposes (coinage or reserves) or otherwise keep it off the market. The agreement, if ratified, was to be in force for four years from January 1, 1934.

On July 26 supplementary agreements were signed by the representatives of the producing countries, allocating the 35,000,000 ounces to be purchased as follows:³¹

	Fine ounces
United States	24,421,410
Australia	652,355
Canada	1,671,802
Mexico	7,159,108
Peru	1,095,325
	<hr/> 35,000,000

No announcement was made as to how these quotas were determined. The share of the United States was about twice as much as its proportional part of the total production of the five countries, and was approximately equal to the country's total production in 1932.

The agreement represented very little self-denial or positive contribution except on the part of the United States. The Indian Government in no way controlled the sale of silver derived from melted ornaments, which might take place if conditions should favor it. The Indian Government itself merely agreed not to sell more than 35,000,000 ounces of its silver annually, a figure which represented about the maximum which it ever had sold; larger sales would be likely to depress the market unduly. The Chinese Government held no stocks of silver and never had sold any; the agreement did nothing to restrict commercial sales and export of Chinese silver coins or sycee by banks or private parties.

³¹ *New York Times*, July 27, 1933; for full texts, see *Silver, Memorandum of Agreement . . .*, Executive Agreements Series, Washington, 1934, pp. 4-11.

In the case of the producing countries, the United States was obligated to purchase an amount equivalent to approximately its total production at current levels, while the other countries had to purchase only about 10 per cent of their current production. Thus, the United States Government, as had happened in the past, bore the principal burden of helping silver.

The agreement was ratified by the Indian Legislative Assembly on November 21, 1933, without opposition.³² It was ratified in effect by the United States by the President's silver-purchase proclamation of December 21, as described below. It was ratified by Australia and Mexico in January, 1934,³³ by Canada on February 27,³⁴ by China (with reservations) on February 28,³⁵ and by Spain in April;³⁶ Peru was reported as unlikely to ratify since her quota of over 1,000,000 ounces was a large part of a greatly reduced production,³⁷ but eventually did so.³⁸

6. Government Gold Purchases

No action was taken with regard to silver by President Roosevelt during the summer and autumn of 1933, and, as Congress was not in session, there was no possibility of action from that quarter. A new policy with regard to gold, however, was established. On August 29 the President issued an executive order authorizing the Treasury to purchase newly-mined American gold and to sell it for use in the arts or for export. The Treasury later issued regulations for carrying out this order,³⁹ and from September 8 to October 24 quoted daily a price, which ranged between \$29.00 and \$32.28 per fine ounce. This enabled domestic gold producers to dispose of their product at the approximate international value of gold, instead of at the mint price of \$20.67, which they previously had been forced to accept.

On Sunday evening, October 22, the President made a radio address in which he stated that he was going to establish a government market for gold and would authorize the Reconstruction Finance Corporation

³² *Commercial and Financial Chronicle*, Vol. 137, Nov. 25, 1933, pp. 3762-63.

³³ *Congressional Record*, Vol. 78, Jan. 26, 1934, p. 1384.

³⁴ *Boston Evening Transcript*, Feb. 28, 1934.

³⁵ *New York Times*, Mar. 1, 1934.

³⁶ *Commercial and Financial Chronicle*, Vol. 138, April 28, 1934, p. 2830.

³⁷ *Ibid.*, Vol. 138, April 14, 1934, p. 2508.

³⁸ See *Silver, Memorandum of Agreement . . .*, pp. 12-13, for dates of receipt of ratifications.

³⁹ *Commercial and Financial Chronicle*, Vol. 137, Sept. 2, 1933, pp. 1678-80; Sept. 9, 1933, pp. 1857-58. See *Annual Report of the Secretary of the Treasury . . . 1934*, pp. 194-205 for material on gold program.

... to buy gold newly mined in the United States at prices to be determined from time to time after consultation with the Secretary of the Treasury and the President. Whenever necessary to the end in view, we shall also buy or sell gold in the world market.⁴⁰

On October 25 he issued an executive order putting this plan into effect, and the Reconstruction Finance Corporation issued regulations and established a price of \$31.36 per ounce. This was raised almost daily until it reached \$33.56 on November 14; thereafter changes were less frequent, and the price remained at \$34.06 from December 18, 1933 to January 15, 1934.

7. *The President's Silver-Purchase Proclamation*

The President took no action on silver until near the end of the year. On Thursday evening, December 21, 1933, after the San Francisco markets had closed, he issued a remarkable proclamation, the full text of which will be found in Appendix IX. He proclaimed that the mints should receive for coinage into silver dollars any silver thereafter mined in the United States; that with the consent of the owner the mint should retain 50 per cent of the silver as seigniorage, and should coin the other 50 per cent into silver dollars to be delivered to the depositor; and that the seigniorage bullion should not be disposed of, except for coining, before December 31, 1937, at which time the operation of the proclamation would expire, unless repealed or modified by act of Congress or by subsequent proclamation; the right was reserved to modify the terms of the plan.

This action of the President raised several interesting points. In the first place, there was the question of his authority. In his preamble he referred to the Thomas amendment and to the London Agreement, and said:

... by virtue of the power vested in me by the act of Congress above cited, the other legislation designated for national recovery, and by virtue of all other authority in me vested; . . .

There would seem, however, to be some ground for questioning the extent of his authority. The Thomas amendment provided for the *unlimited* coinage of gold and silver. The proclamation, on the other hand, limited the coinage to one-half of newly-mined American silver. Again, although the proclamation did not explicitly use the word "ratify" in regard to the London Agreement, the President's explanatory statement did. Thus there would seem to be ground for attack

⁴⁰ *Commercial and Financial Chronicle*, Vol. 137, Oct. 28, 1933, p. 3034.

on the question of whether the proclamation was authorized by the Thomas amendment, and whether the President could "ratify" the London agreement without the advice and consent of the Senate. No serious complaint, however, was heard from any members of Congress; it is probable that the President had sufficient support so that deviations from the strict letter of the law were overlooked.

In the second place, the method was unique. The 50-per-cent seigniorage meant in effect that for every two ounces of fine silver which the producer deposited at the mint, he got back one ounce in the form of standard silver dollars; that is, he was paid \$1.29+ for one ounce; but as he got nothing back for the other ounce, his net return was 64.5+ cents per fine ounce. The proclamation, however, carefully avoided mention of this price or of any ratio between gold and silver. A ratio, of course, would have been difficult to fix while the price of gold per ounce was still subject to change.

In the third place, the cost of the measure to the Government was worth considering. From one point of view, the cost was nil. The Government would merely place its dollar stamp on a piece of silver worth, at the market value on December 21, about 33 cents, and turn it back to the depositor, and at the same time the Government would receive another 33 cents' worth of silver which it could either hold as bullion, or stamp as a dollar and add to revenue. The miner got a silver dollar for 66 cents' worth of silver, or about 50 per cent above the current market. Thus 34 cents profit for the miner, and a potential \$1.00 profit for the Government were created on the basis of every 66 cents' worth of silver to be mined in America. To be sure, this newly-created value would be at the expense of some inflation of the currency, but the amount of that, as discussed below, would not be large.

On the other hand, if it really were desirable to have more silver dollars in the currency system, it would have been cheaper for the Government to buy silver at the market price. Assuming that it remained at the December 21 level, 66 cents' worth of silver could be coined into 2 dollars, giving the Government \$1.34 profit instead of only \$1.00 profit as under the adopted plan. Looking at it from that point of view, and assuming that 100,000,000 ounces might be acquired and coined under the proclamation (actually nearly twice this quantity was purchased in four years and the plan was continued beyond the expiration of the London agreement; see Chapter XXX, Section 7), the Government would be getting only \$65,000,000 profit instead of a possible \$87,000,000; the other \$22,000,000, a bonus to American silver producers, would represent the cost to the Government. In com-

parison with governmental expenditures and deficits measured in billions, this was, however, not a very significant amount, and would have been justified if the measure really had been calculated to aid in recovery from the depression.

In the fourth place, the potential effects on American currency were of interest. Assuming that the operation of the proclamation would be limited to the purchase of the 100,000,000 ounces which would satisfy the London agreement, this would mean at most, if the seigniorage silver were coined into dollars, 129,000,000 silver dollars added to our currency over a period of four years. This would make about a 25-per-cent increase in the country's existing stock of about 540,000,000 silver dollars, which represented the silver acquired between 1878 and 1893; it would also mean the increase of silver currency by about the same average amount per year as in that period. In view of the growth of the country since 1893, this increase would not be great enough to produce a serious inflationary element in the currency. Actually, however, as described in the following chapters, considerably more was purchased under the proclamation, and much greater quantities under the Silver Purchase Act of 1934.

In the fifth place the effect on American production of silver may be considered. In recent years this has been as shown in Table 14.

TABLE 14
UNITED STATES PRODUCTION OF SILVER, 1921-1938

Date	Millions of fine ounces	Date	Millions of fine ounces
1921	53	1931	31
1922	56	1932	24
1923	73	1933	23
1924	65	1934	32
1925	66	1935	46
1926	63	1936	63
1927	60	1937	71
1928	58	1938	62
1929	61	1939	....
1930	51	1940	....

* Pittman-act purchases ended in June.

SOURCE

Merrill, *Summarized Data of Silver Production*, p. 18, supplemented by more recent figures from *Annual Report of the Director of the Mint* and from *Handy & Harman, Annual Review of the Silver Market*.

The production of silver in the United States was cut down during the depression years, not only because of the fall in price of silver, but also because of the decreased demand for base metals such as copper, lead, and zinc, as a by-product of which much American silver is obtained. Thus, the increased price of silver could not be ex-

pected to stimulate the production greatly, except in the case of straight-silver mines. Producers of by-product silver hardly could afford to accumulate large inventories of other metals merely to get the silver. On the other hand, if general prosperity should revive, the demand for these other metals, after excessive stocks were used up, should lead to increased silver production. On the whole there was reason to expect that during the four years the United States would produce at least the 24,000,000 ounces per year needed for the London agreement, and that there might be some increase in that figure. It did not seem likely that what might be called the normal 60,000,000 ounces per year would be reached until the latter part of the period, if then. Production, in fact, increased greatly, because the price of American silver was raised further in 1935, as described in Chapter XXVII, Section 1, and because, with recovery, the production of the associated metals was increasing.

Finally, in the sixth place, it was important to consider the effect of the proclamation and of the London agreement on the world silver market. The price of newly-mined American silver was, of course, stabilized at 64.5+ cents per fine ounce, less transportation to the mint. In fact, the equivalent New York official price for silver, 0.999 fine was set at 64½ cents. The price for foreign silver, or for American silver produced before December 21, 1933, however, was not affected directly by the plan. The ratification, however, of the agreement by the other countries concerned took away from the silver market some of the uncertainty which had been caused by the lack of knowledge as to how rapidly the Government of India would dispose of its stock.

8. Silver at the End of 1933

The price of silver had risen from 24½ cents in January, 1933 to a high of 45 cents per ounce in November, an increase of 84 per cent. The price of gold, however, had been raised during the year from \$20.67 to \$34.06 per ounce, an increase of 65 per cent. There was, therefore, very little change in the ratio between the values of the two metals, which remained in the neighborhood of 80 to 1.

At the end of 1933, then, although Indian sales were to be offset by purchases under the London agreement and although the American silver producers had been given a welcome bonus, the world silver market was in a very uncertain condition. The fact that Indian net absorption of silver had fallen off to almost nothing, the fact that China had exported silver in 1933, and the existence of speculative

stocks amounting to 200,000,000 or 300,000,000 ounces,⁴¹ all pointed to a weakness in the price, if there were no artificial interference with the market. On the other hand, America at last had done something for silver, and it was not impossible that she might do more.

⁴¹ Ladd, "What about our Silver Hoarders?" p. 6.

CHAPTER XXVI

THE SILVER PURCHASE ACT OF 1934

"Cheshire Puss . . . Would you please tell me which way I ought to go from here?"

"That depends a good deal on where you want to get to," said the Cat.

"I don't much care where," said Alice.

"Then it doesn't matter which way you go," said the Cat.

". . . so long as I get *somewhere*," Alice added as an explanation.

"Oh, you're sure to do that," said the Cat, "if you only walk long enough!"

LEWIS CARROLL, *Alice's Adventures in Wonderland*

The Seventy-third Congress assembled for its second session on January 3, 1934. A few days previously, on December 29, 1933, a group of 27 Senators, meeting in Washington, had adopted the following resolution: "We favor bimetallism, the free and unlimited coinage of silver at a ratio to be established by law."¹ During the opening days of the session several silver bills were presented in both houses and were referred to committees. The House Committee on Coinage, Weights, and Measures started hearings on them on January 15.²

1. *The Gold Reserve Act of 1934*

Interest in silver measures, however, was overshadowed temporarily by consideration of action on gold. On January 15, 1934 President Roosevelt sent a message to Congress, recommending that gold coins no longer be used; that the Government take title to the gold reserves of the Federal Reserve Banks against payment in gold certificates; that 60 per cent of the old value be the upper limit for revaluation of the dollar; and that a fund of \$2,000,000,000 from the profits of any revaluation be placed at the disposal of the Secretary of the Treasury for the purchase and sale of gold, foreign exchange, and government securities.³

The President closed the message with some noncommittal remarks on silver (given in Appendix X) which referred to the impor-

¹ *Commercial and Financial Chronicle*, Vol. 137, Dec. 30, 1933, p. 4604.

² *New York Times*, Jan. 14, 1934.

³ *Congressional Record*, Vol. 78, Jan. 15, 1934, pp. 614-615.

tance of silver, to the steps taken in the London agreement and in the President's proclamation of December 21, 1933, and to the prospects for increased use of silver, but expressed the desirability of delaying further action until there was "more knowledge of the results of the London agreement and of other monetary measures."

2. *The Gold Reserve Act and Silver*

During the debate, which continued for a fortnight, on the bill presented by the President to carry out his proposals, several speakers expressed the desire for increased use of silver.⁴ Senator Burton K. Wheeler of Montana, with Senator William H. King of Utah, proposed an amendment directing the purchase of not less than 50,000,000 ounces of silver per month until 1,000,000,000 ounces had been purchased, or until the price of silver had risen to the equivalent of the 16-to-1 ratio.⁵ The silver was to be held by the Treasury and to be represented in circulation by silver certificates, redeemable in silver bullion at the market value, as in the Windom plan described in Chapter VI, Section 3.

This amendment represented in form a considerable modification of Senator Wheeler's earlier attempts to secure free coinage at 16 to 1, and was submitted frankly as a compromise. It would have been much the same in effect, however, as his former bills, because the compulsory purchase of such a large amount of silver would have sent the price up rapidly toward the 16-to-1 ratio. In fact, Senator Wheeler admitted that probably not over 250,000,000 or 300,000,000 ounces would be obtainable.⁶

Senator Joseph T. Robinson of Arkansas, Democratic leader, announced that the President and the Treasury were not in favor of the Wheeler amendment. One of the reasons given was that

... if the amendment should be carried into effect it would result in very violent deflation and probably bring about a silver embargo in China.⁷

The amendment, with the amounts somewhat reduced, was defeated

⁴ *Ibid.*, Vol. 78, Jan. 20 and 22, 1934, pp. 953 (Rep. Arthur H. Greenwood of Indiana); p. 956 (Rep. Andrew Jackson May of Kentucky); pp. 963-967 (Rep. Martin Dies of Texas); p. 970 (Rep. Fletcher B. Swank of Oklahoma); p. 980 (Rep. William Louis Fiesinger of Ohio); pp. 981-983 (Rep. Martin F. Smith of Washington); pp. 987-988 (Rep. Compton White of Idaho); pp. 1018-19 (Rep. Richard M. Duncan of Missouri); p. 1024 (Rep. Ashton C. Shallenberger of Nebraska); pp. 1070-71 (Sen. Burton K. Wheeler of Montana).

⁵ *Ibid.*, Vol. 78, Jan. 26, 1934, pp. 1415-16.

⁶ *Ibid.*, Vol. 78, Jan. 27, 1934, p. 1446.

⁷ *Ibid.*, Vol. 78, Jan. 27, 1934, p. 1463.

by the close vote of 43 to 45,⁸ representing a gain of 10 votes over those supporting Senator Wheeler's 16-to-1 amendment in April, 1933.

One silver amendment, the full text of which is given in Appendix XI, was proposed by Senator Pittman, and was adopted without a record vote. It gave authority to issue silver certificates in lieu of silver dollars to those presenting silver for coinage (that is, under the terms of the proclamation of December 21, 1933, or of any future legislation); this was a wise provision as it obviated the unnecessary coinage of large numbers of silver dollars which were not likely to pass into circulation. The amendment also authorized the President to make different terms for the coinage of foreign and domestic silver; to coin the seigniorage silver; to reduce the weight of the silver dollar in the same percentage as he reduced the weight of the gold dollar; and to reduce the weight of silver subsidiary coins.⁹

The Pittman amendment as originally presented contained the sentence:

The weight of the silver dollar shall not be fixed in any event at more than 60 per cent of its present weight.¹⁰

This sentence, however, was omitted when the amendment finally was presented for a vote. A reduction in the weight of the silver dollar would mean, of course, that American silver producers would get more dollars for the half of their silver which was returned to them in money. The omission of the above sentence left the matter entirely in the President's hands. The whole amendment fundamentally did not increase greatly the power which he already had under the Thomas amendment, but it placed one more piece of legislation about silver on record.

The Gold Reserve Act was passed by Senate and House, and was signed by President Roosevelt on January 30, 1934.¹¹ On January 31 the President issued a proclamation reducing the weight of the gold dollar from 25.8 grains of gold, 0.900 fine (containing 23.22 grains of fine gold) to 15 5/21 grains of gold, 0.900 fine (containing 13 7/8 grains of fine gold). The proclamation explicitly stated:

The weight of the silver dollar is not altered or affected in any manner by reason of this proclamation.¹²

The Secretary of the Treasury issued regulations for the purchase of

⁸ *Ibid.*, Vol. 78, Jan. 27, 1934, pp. 1464-65.

⁹ *Ibid.*, Vol. 78, Jan. 27, 1934, pp. 1474-75.

¹⁰ *Ibid.*, Vol. 78, Jan. 27, 1934, p. 1439.

¹¹ *New York Times*, Jan. 31, 1934.

¹² *Ibid.*, Feb. 1, 1934.

gold at the corresponding price of \$35.00 per fine ounce, less a mint charge of $\frac{1}{4}$ of 1 per cent, and for the sale of gold at \$35.000 per fine ounce, plus $\frac{1}{4}$ of 1 per cent, to those licensed to use it for industrial purposes.¹³

The establishment of the \$35.00 price for gold with no change in the \$1.2929 monetary value of silver, made the American coinage ratio $35.00/1.2929 = 27.07$ to 1 in place of the old 16 to 1.

3. Investigation of Silver Holdings

On February 5 Secretary of the Treasury Henry Morgenthau, Jr. announced an inquiry into the holdings of silver in the United States.¹⁴ On March 20, as a result of a newspaper report, which quoted him as stating that the Treasury investigations into silver holdings showed some advocates of silver legislation to be not entirely disinterested, the Senate passed a resolution calling upon the Secretary of the Treasury to furnish

... a list of the names of hoarders of silver, if such information is available and if the furnishing of such information would not be incompatible with the public interest.¹⁵

In April Secretary Morgenthau sent the Senate lists of silver holders.¹⁶ These lists did not bear out the expectation that many prominent advocates of doing something for silver would be found among the active speculators. The largest holdings were by banks, which found it profitable to buy spot silver and sell forward, and by industrial companies which used silver in their processes. Some publicity was given to the holding of long contracts for 500,000 ounces of silver by Father Coughlin's Radio League of the Little Flower. The treasurer of the league in a public statement quoted an address of Father Coughlin's in which he had referred to President Roosevelt as promising to raise the prices of American commodities to 1926 levels; in view of this, the treasurer considered the silver holding not a speculation, but "an investment in Mr. Roosevelt's word."¹⁷ It was generally admitted, however, that speculation in silver was a legitimate operation for those who believed that the monetary policies of the Administration and of Congress were likely to lead to higher prices of that commodity, whether or not they favored those policies.

¹³ *Ibid.*

¹⁴ *Commercial and Financial Chronicle*, Vol. 138, Feb. 10, 1934, p. 971.

¹⁵ *Congressional Record*, Vol. 78, Mar. 20, 1934, p. 4880.

¹⁶ *Hoarders of Silver*, Parts 1-3; *New York Times*, Apr. 25, 26, 27, 1934.

¹⁷ *New York Times*, Apr. 29, 1934.

4. *Developments in the Silver Situation*

During February advocates of silver legislation were active.¹⁸ On March 10 the House Committee on Coinage, Weights, and Measures reported favorably on two silver bills.¹⁹ Representative William Louis Fiesinger of Ohio presented the first, which provided for the purchase of silver bullion up to 1,500,000,000 ounces, and the issuance of silver certificates to the amount of the cost, redeemable in silver bullion at the current market value, as in the Windom plan, described in Chapter VI, Section 3.

The other bill was proposed by Representative Martin Dies of Texas. This provided for the receipt of silver coin or bullion from foreign buyers, at not more than 25 per cent above the world market price, in exchange for American agricultural products. Silver certificates were to be issued against the silver so received to the amount of the value at which it was taken, and were to be redeemable, at the discretion of the Secretary of the Treasury, in silver bullion at the market value. The amount of the premium to be paid on silver was to be limited to \$400,000,000 per year, and the plan was to be in operation until January 1, 1936.²⁰

5. *The Mission of Professor Rogers to China*

The Dies bill was to be taken up by the House on March 19. That morning, just before Congress assembled, Secretary Morgenthau announced that he was sending Professor James Harvey Rogers of Yale University, one of the President's monetary advisers, to China to study the silver situation there. The Secretary stated:

There seem to be two schools of thought on silver. One is that an increased price for silver will mean greater exports from the United States to China. The other is that if the price of silver is increased, China will have to curtail her imports.

Professor Rogers will find out which school is right. He will see the small business man and farmer as well as people in the banking business and the Government.²¹

This appointment was criticized by members of the silver bloc in the Senate as merely a move to delay action on silver.²² In May it was

¹⁸ *Commercial and Financial Chronicle*, Vol. 138, Feb. 10, 1934, p. 972; Feb. 17, 1934, p. 1137; Mar. 3, 1934, p. 1482.

¹⁹ *New York Times*, Mar. 11, 1934.

²⁰ Full text of the bill is given in *Congressional Record* Vol. 78, Mar. 19, 1934, p. 4844.

²¹ *New York Times*, Mar. 20, 1934.

²² *Congressional Record*, Vol. 78, Mar. 19, 1934, pp. 4814-17.

stated that reports from Professor Rogers were being received and studied by the Administration.²³ Professor Rogers also visited Japan and India.²⁴ In the autumn Secretary Morgenthau announced that it was not likely that any report of his investigation would be made public.²⁵

6. *The Development of a Compromise Silver Bill.*

The Dies bill was brought up in the House on March 19, and after considerable debate was passed by a vote of 258 to 112.²⁶ The division was more on geographical than on party lines, some 38 Democrats, mostly from the East, opposing the bill, and some 20 Republicans, mostly from the West, voting for it.²⁷

On March 27, Senator Pittman proposed a bill for the payment of the soldiers' bonus from the seigniorage on 2,000,000,000 ounces of silver to be purchased and coined over a period of 11 years.²⁸

In the Senate the Dies bill was referred to the Committee on Agriculture and Forestry, which reported on April 10. The committee proposed amendments providing for the nationalization of all domestic silver; for the purchase of 50,000,000 ounces per month after January 1, 1935 until commodity prices should reach the 1926 level, or until silver should reach \$1.29 per ounce; and for the issuance of silver certificates to the full monetary value of the silver purchased, thereby "coining the seigniorage."²⁹

During the next few weeks several conferences were held between the President, or the Secretary of the Treasury, and leaders of the Senate silver bloc, who were determined to press for silver legislation before the session ended.³⁰ The silver leaders were also active in making plans among themselves and in trying to secure support from their colleagues in both houses of Congress.³¹

During these negotiations the President was reported to be opposed to the extremes of the Dies and Fiesinger bills, to be favorable to international action on silver, but to desire that any legislation for

²³ *North China Daily News*, May 20, 1934; *Boston Evening Transcript*, May 18, 1934.

²⁴ *New York Times*, June 5, Aug. 8, 1934.

²⁵ *Ibid.*, Oct. 2, 1934.

²⁶ *Congressional Record*, Vol. 78, Mar. 19, 1934, pp. 4843-63.

²⁷ *New York Times*, Mar. 20, 1934.

²⁸ *Congressional Record*, Vol. 78, Mar. 27, 1934, pp. 5488-94; *New York Times*, Mar. 28, 1934.

²⁹ *Congressional Record*, Vol. 78, April 10, 1934, p. 6291; *New York Times*, Apr. 11, 1934.

³⁰ *New York Times*, Apr. 15, 18, 20, 21, 22, May 6, 9, 10, 17, 1934.

³¹ *Ibid.*, Apr. 16, 24, 29, May 16, 1934.

domestic action be permissive, rather than mandatory. Many members of the silver bloc, however, insisted on mandatory legislation, and planned to make silver an issue in the November elections. Senator Elmer Thomas of Oklahoma proposed a silver amendment to a banking bill,³² but later withdrew it when there seemed to be progress toward a compromise.³³

Finally, on May 16, nine Senators conferred with the President and reached a general agreement, apparently satisfactory even to Senator Borah, who had walked out of an earlier conference with Secretary Morgenthau.³⁴ The President was reported to have promised that he would carry out a silver-purchase program in good faith.³⁵ It was suggested by one writer that the President's compromise with the silver leaders was unnecessary, that he could have prevented legislation to which he was opposed, and that his surrender would lead to further inflationary efforts in the next Congress.³⁶

7. *The Silver Purchase Act of 1934*

On May 22 the President sent to Congress a message on silver, which is given in full in Appendix XII, and the draft of a bill which, as finally passed, is given in Appendix XIII. The bill began with the declaration of policy that the proportion of silver in the monetary stocks should be increased with the ultimate objective of reaching one-fourth of the total of silver and gold together. To reach this end the Secretary of the Treasury was directed to purchase silver until it made up one-fourth of the total, with discretion as to times and terms of purchase, but with the limitation that no silver was to be purchased for more than its monetary value and that no silver situated in the continental United States on May 1, 1934 was to be purchased for more than 50 cents per fine ounce. If the market price of silver should exceed its monetary value, or if the monetary value of the stock of silver should exceed 25 per cent of the total stock of silver and gold, the Secretary of the Treasury could sell silver. He was authorized and directed to issue silver certificates to an amount not less than the cost of the silver purchased; a reserve of silver coin or bullion of equivalent monetary value was to be maintained against the certificates. He also was given authority to regulate the movement of

³² *Congressional Record*, Vol. 78, May 2, 1934, pp. 7909-14; *New York Times*, May 3, 1934.

³³ *Congressional Record*, Vol. 78, May 12, 1934, p. 8717-18.

³⁴ *New York Times*, May 10, 1934.

³⁵ *Ibid.*, May 17, 18, 1934.

³⁶ Arthur Krock in *ibid.*, May 20, 1934.

silver. The President was authorized to nationalize silver, that is, to require its delivery to the mint in return for the payment of its fair value in any United States currency. Profits made on sales of silver were to be taxed 50 per cent.

Senator Pittman introduced the bill in the Senate and gave a long explanation of the steps that had led to the various provisions. The President had accepted the mandatory features when the silver bloc had withdrawn the requirement of purchasing certain quotas each month. The Treasury had secured the right to buy silver with any form of money, but the silver bloc had stipulated that silver certificates must be issued to the full amount of the purchase price.³⁷

Senator Pittman justified the President's desire to be free from obligations to purchase monthly quotas, because it was more important to acquire silver than to run the price up, and because

. . . it is almost as disastrous for a foreign country that uses silver, such as China and India, and even Mexico very suddenly to increase the exchange value of its money as it is suddenly to have it depressed, because frequently contracts are based in those countries on six months' time, and if there shall be a sudden change in the exchange value of their silver money—and a change is always with the price of silver either upward or downward—someone is going to lose. There is no desire on the part of our Government to disrupt the monetary systems of other countries; in fact, we regret and deplore that other governments have taken advantage of their legal rights so suddenly to depreciate the value of their currencies as to disrupt their own commercial transactions in this country and we are all aware that that has happened.³⁸

The Senator called the bill a "magnificent compromise" and said that the silver group had won a victory in getting the President's support, in view of the "antagonism of nearly every one of the Treasury Department economists."³⁹ He added that he was authorized on behalf of the president

. . . to state that, at the time when the question was raised by the Senator from Oklahoma [Mr. THOMAS], that the bill did not make silver primary money; the President expressed his ignorance of what the words "primary money" meant, and that he is willing to give to silver the same position in our monetary reserve system as is given gold; and that is done in section 2. There is no provision for the redemption of silver by gold at the present time, and the other provision, making silver coins legal tender for both private debts and public dues, in the act itself, in addition to other acts, seems to place silver on exactly the same footing with gold.⁴⁰

The bill was not satisfactory to the more extreme members of the

³⁷ *Congressional Record*, Vol. 78, May 22, 1934, pp. 9210-17.

³⁸ *Ibid.*, Vol. 78, May 22, 1934, p. 9215.

³⁹ *Ibid.*

⁴⁰ *Ibid.*

silver bloc. Senator Elmer Thomas of Oklahoma pointed out that it did not change the status of silver, but merely provided for a wider use of it.⁴¹ Senator Huey Long called it "another all-day-sucker":

... this bill is not anything at all but a measure providing that if the President wants to do something which the Treasury Department is willing to have done, the President may do it. We know the Treasury Department does not want anything done for silver, and we know the President is not going to want it done, and we know it is not going to be done, and even if the President did try to do anything, I do not know how he could do it under this bill.

... this is a hearse. This is not a bill, this is a coffin, and silver legislation has been embalmed and encased here with all the disfiguring disguises that can be placed upon it. That is all this thing is. It is not a bill remonetizing silver; it is a bill destroying silver legislation. If any Senator here has no better knowledge of the silver question than not to know it, then he knows less about the subject than I do, and I know no one in the Senate who I think is a member of the silver bloc who has as little information upon the silver question as myself. [Laughter] It is plain enough to me.⁴²

Since the bill contained a tax measure, it had to be considered first by the House in view of the constitutional provision that revenue bills must originate there. After a favorable report by the Democratic majority of the Committee on Ways and Means, with a minority report from the Republican members who claimed that it had been rail-roaded through without adequate consideration,⁴³ it was brought up for debate in Committee of the Whole on May 30. It was supported by Representative Dies and many others, but opposed not only by conservatives who wished no silver legislation, but also by silver men like Representative Fiesinger, who felt that it did not go far enough. Various liberalizing amendments were rejected.⁴⁴ On May 31 the bill came up for vote, after a final shot by Representative John Andrew Martin of Colorado:

I just want to say this, that if this bill becomes a law and the administration of it goes as far as the law, that will be far enough, but if the administration of this law does not go that far, then there will be another Secretary of the Treasury going back to little old New York. [Applause]⁴⁵

The bill was passed by the House by a vote of 263 to 77.⁴⁶

The Senate resumed consideration of the bill on June 6 and debated it for several days. Senator Pittman succeeded in shepherding the bill through the Senate, with no amendments except minor clari-

⁴¹ *Ibid.*, Vol. 78, May 22, 1934, p. 9218.

⁴² *Ibid.*, Vol. 78, May 22, 1934, pp. 9219-20.

⁴³ *Ibid.*, Vol. 78, May 30, 1934, pp. 10001-06.

⁴⁴ *Ibid.*, Vol. 78, May 30, 1934, pp. 10019-32.

⁴⁵ *Ibid.*, Vol. 78, May 31, 1934, p. 10124.

⁴⁶ *Ibid.*, Vol. 78, May 31, 1934, p. 10135.

fications of wording, in spite of attempts by Senators Thomas⁴⁷ and Long⁴⁸ to change it more to their taste.

The bill was passed by the Senate by a vote of 55 to 25 on June 11.⁴⁹ The House agreed to the Senate amendments on June 13.⁵⁰ The President signed the act on June 19, 1934, and on the same day the Treasury issued regulations as to the tax on transfers of silver bullion.⁵¹

8. Treasury Silver-Buying Policy

Since the wording of the act set no time schedule for carrying out purchases of silver, and since this point had been criticized by those in Congress who desired more mandatory silver legislation, the attitude of the Administration was of great importance. Secretary Morgenthau lost no time in making a statement. A Washington dispatch of June 21 to the *New York Times* said:

The Treasury will carry out "enthusiastically" the policy written into the Silver Purchase Act, and will buy at home and abroad when the metal is offered at a reasonable price, said Secretary Morgenthau today. He added that every effort would be made, however, to guard against speculative activities, which might have unfortunate results.

"What we want is a rise in the price of silver, but we don't want a sensational price rise, because the worst thing that could happen would be to have silver go up and then have a collapse," said Mr. Morgenthau.

"As it goes up it will stay there. We don't want a repetition of last summer when there was a tremendous speculation in commodities and a reaction and set the country back six months."⁵²

Secretary Morgenthau also announced that the Treasury had been buying silver abroad through the Stabilization Fund, but did not reveal how much had been bought or at what price. These purchases had been made to steady the world market price until legislation was passed. Beginning June 20, under the operation of the act, purchases would be charged to the General Fund, but there was nothing to prevent further purchases through the Stabilization Fund also, since that could be used wholly at the discretion of the Secretary of the Treasury.⁵³ There might be some grounds for questioning whether the authority of the Secretary of the Treasury, granted by Section 10 (a) of the Gold Reserve Act of 1934,

⁴⁷ *Ibid.*, Vol. 78, June 6, 1934, pp. 10603-16; June 7, 1934, pp. 10678-702.

⁴⁸ *Ibid.*, Vol. 78, June 9, 1934, pp. 10921-33.

⁴⁹ *Ibid.*, Vol. 78, June 11, 1934, p. 11060.

⁵⁰ *Ibid.*, Vol. 78, June 13, 1934, pp. 11397-98.

⁵¹ *New York Times*, June 20, 1934.

⁵² *Ibid.*, June 22, 1934.

⁵³ *Ibid.*

for the account of the fund established in this section, to deal in gold and foreign exchange and such other instruments of credit and securities as he may deem necessary to carry out the purpose of this section,

properly included the right to buy silver bullion. This point was not brought up at the time, however.

On June 28 Secretary Morgenthau, with the approval of the President, issued an order placing an embargo on exports of silver, except under license from the Treasury. This embargo was intended to prevent the export of silver which was physically in the United States on May 1. By the terms of the act, such silver would be purchased at not over 50 cents per ounce and subject to a 50-per-cent tax on profits, and might be nationalized if the President should so order. Holders therefore might consider it worth while to ship their silver abroad and store it there in the hope of selling it eventually for more than 50 cents per ounce. By the embargo such operations would be prevented. The Secretary promised that export licenses would be granted promptly for all legitimate shipments.⁵⁴

While the Treasury made no immediate announcement as to the amount of its purchases under the act, it evidently was buying rapidly, to judge from the figures of the Commodity Exchange, Inc. for stocks of silver held in licensed depositories. These stocks had reached a peak of 115,000,000 ounces on March 1; 23,000,000 ounces were withdrawn between March 1 and May 9, and 37,000,000 ounces more between June 18 and 28, making gross withdrawals of 60,000,000 ounces; meanwhile additional deposits amounting to 10,000,000 ounces had been made, so that the balance on June 28 was 65,000,000 ounces. It was believed that most of the 60,000,000 ounces withdrawn had been purchased by the Treasury.⁵⁵

9. *The Nationalization of Silver*

On August 9, 1934 President Roosevelt issued a proclamation and an executive order requiring the delivery of all silver held in the United States, under the authority given him in the Silver Purchase Act. The full text of these documents is given in Appendix XIV and Appendix XV.

The proclamation provided that the mints should receive silver then situated in the continental United States and return therefor the monetary value at \$1.2929+ per fine ounce, "less a deduction of

⁵⁴ *Ibid.*, June 29, 30, 1934; for full text, see *Annual Report of the Secretary of the Treasury . . . 1934*, pp. 210-212.

⁵⁵ *New York Times*, July 1, 1934.

61 8/25 per cent thereof for seigniorage, brassage, coinage and other mint charges." This was equivalent to a net price of 50.01 cents per fine ounce. The proclamation was to be supplementary to the proclamation of December 21, 1933, for the purchase of newly-mined American silver.

The executive order required the delivery of all silver then situated in the continental United States, with the exception of: silver coins; silver less than 0.800 fine which had not entered into any use; silver mined in the United States after December 21, 1933, which was subject to the earlier proclamation; silver held for industrial use; silver owned by a foreign government or central bank; silver contained in fabricated articles; and silver held under license, according to regulations provided. Delivery was to be made within 90 days. The Secretary of the Treasury was to pay all necessary costs of transportation of the silver, including insurance. Licenses might be issued by the Secretary of the Treasury exempting silver used in the arts, imported for re-export, needed to fulfill outstanding contracts, or, with the approval of the President, exempting silver for other purposes deemed to be in the public interest.

According to the act the 50-per-cent tax applied only to profits on actual sales of silver, not to profits on silver delivered to the Treasury under the nationalization order.

About 109,000,000 fine ounces of silver was received within the original time limit, and some 4,000,000 ounces more before the order was finally rescinded in 1938 (Chapter XXX, Section 9).

10. Movement of the Price of Silver

As may be seen in Chart 2, page 11, the price of silver had fluctuated in the general neighborhood of 45 cents per ounce during the first half of 1934. On August 9 it rose above 49 cents per ounce, and the nationalization price of 50.01 cents per fine ounce (equivalent to 49.96 cents per ounce, 0.999 fine) was therefore only slightly above the market, and represented a fair price at which to take over the silver. In fact, the nationalization order had been prepared in June and held to be issued as soon as the price should approach 50 cents per ounce.⁵⁶

The market price during August and September remained in the neighborhood of 50 cents per ounce, but in October it rose to over 55 cents per ounce, and remained between 53 and 56 cents per ounce during November and December.

⁵⁶ *Ibid.*, Aug. 16, 1934.

11. *Silver Markets*

One result of the nationalization of silver was the end of trading in silver futures at the Commodity Exchange, Inc., in New York, where 2,680,000,000 ounces had been bought and sold since silver trading was begun in New York in 1931.⁵⁷ Contracts were liquidated as of August 9 at the price of 49.96 cents per ounce, 0.999 fine.

During the following weeks there was talk of reviving silver-futures trading in New York, and groups in Toronto and Montreal also made plans for organizing silver markets in those cities. A market finally was opened in Montreal on October 22. The United States Treasury granted licenses to several American brokerage firms to transfer funds to Canada for trading on that exchange.⁵⁸

On May 1, 1935 trading in silver futures was begun in London on the Metal Exchange, for the first time in forty-five years.⁵⁹

It should be noted that although the futures market in New York was suspended, and although futures trading in London was newly begun, the quotations of daily New York and London prices continued without interruption. The New York "official" price is quoted daily by Handy & Harman, and usually is about a quarter of a cent below the actual market. It serves as a basis for settlements between smelting and mining companies. In London a daily meeting of four long-established firms of bullion brokers fixes the price at such a point as will enable them to fill the greatest volume of the orders on their books; two prices are quoted, one for "spot" silver, for delivery within seven days, and one for "forward" silver, for delivery in two months.⁶⁰

12. *The Basis for the Issuance of Silver Certificates*

The different legislative and executive actions on silver had created a variety of conditions for the issue of silver certificates:

1. All silver certificates issued prior to 1933 had been secured by standard silver dollars, containing $371\frac{1}{2}$ grains of fine silver, which, incidentally, with silver at 50 cents per ounce, were worth about 38 cents as metal.

2. Under the Thomas amendment silver certificates were to be issued against silver received on war-debt account to the amount of

⁵⁷ *Ibid.*, Aug. 10, 11, 12, 1934.

⁵⁸ *Ibid.*, Aug. 26, 28, Sept. 5, 10, 11, 15, 19, 21, 27, 29, Oct. 12, 16, 19, 22, 23, 25, 1934.

⁵⁹ *Ibid.*, Mar. 23, 1935; *Boston Evening Transcript*, May 1, 1935.

⁶⁰ See Bratter, *The Silver Market*, for full account.

the price at which the silver had been received. Since the silver was taken at 50 cents per ounce, certificates issued on this basis were backed by 2 ounces of silver to the dollar. They were redeemable only in standard silver dollars, but the surplus bullion left after coining dollars was to be

held in the Treasury for the sole purpose of aiding in maintaining the parity of such certificates as provided in existing law.⁶¹

As mentioned in Chapter XXV, Section 4, \$1,560,000 of silver certificates were issued against 3,120,000 fine ounces of silver early in 1934. The balance of the war-debt silver was not taken into the currency system at that time, but remained as an asset in the General Fund.

3. In the case of newly-mined American silver, the President's proclamation of December 21, 1933 provided that one-half of the silver should be coined into standard silver dollars and returned to the tenderer of the silver bullion. By the Pittman amendment to the Gold Reserve Act of 1934 the President was authorized to give silver certificates in lieu of the silver dollars; apparently it was intended that these would be backed by a reserve of bullion at the rate of $371\frac{1}{2}$ grains of fine silver to the dollar. The other half of the silver acquired under the proclamation was to

. . . be retained as bullion by the Treasury and shall not be disposed of prior to the thirty-first day of December, 1937, except for coining into United States coins.⁶²

This gave the right to coin the seigniorage, and, by a further provision of the Pittman amendment, silver certificates could be issued against any free silver bullion held in the Treasury, so that the seigniorage could enter the monetary system without actual coinage. Actually no silver dollars had been coined and no silver certificates had been issued in acquiring newly-mined American silver; the bullion simply accumulated as silver in the General Fund, and did not enter the monetary system.⁶³

4. Under the Silver Purchase Act of 1934, the silver might be acquired with any money, but silver certificates must be issued to the extent of the cost, and might be issued to the full monetary value, at \$1.29+ per ounce.

With this diversity of conditions for the treatment of silver currency, some standardization was highly desirable. The Treasury took

⁶¹ Thomas amendment, Sec. 45 (e). See Appendix VII for full text.

⁶² See Appendix IX.

⁶³ This is evident from the *Circulation Statement of United States Money* and U. S. Treasury, *Daily Statement*. See Table 17.

steps in this direction immediately after the passage of the Silver Purchase Act of 1934.

On June 21, Secretary Morgenthau announced that, for the time being, silver certificates would be issued only to the amount of the cost of the silver purchased under the act.⁶⁴

On August 10, the day after the nationalization order, the Treasury announced that it would issue silver certificates, at the monetary value of \$1.29+ per ounce, against all free silver bullion held in the Treasury prior to the approval of the Silver Purchase Act of 1934.⁶⁵ This silver amounted to about 62,000,000 ounces, which had cost about \$47,000,000. At \$1.29+ per ounce, this silver would provide the basis for about \$80,000,000 of silver certificates, thus showing a seigniorage profit of \$33,000,000 which would be taken in to the general revenue of the Government.

The high average cost of the silver, about 75 cents per ounce, indicated that in addition to some 22,000,000 ounces of war-debt silver at 50 cents per ounce and some 8,000,000 of newly-mined American silver at 64.5+ cents per ounce, the balance of the 62,000,000 ounces must have been acquired at a much higher price. Presumably some was silver bought several years previously when the market price was higher and some was silver from mutilated subsidiary coins held for recoinage and valued at \$1.38+ per ounce.

In the case of silver acquired under the Silver Purchase Act of 1934, silver certificates would be issued on the basis of \$1.29+ per ounce, but, for the time being, only to the extent of the cost of the silver. This may be illustrated by an example, taking the basis as \$1.25 per ounce, instead of \$1.29+, for convenience of mental arithmetic. If 1,000 ounces of silver were purchased at 50 cents per ounce, costing \$500, certificates to that amount would be issued and 400 ounces of silver at \$1.25 per ounce would be set aside as a reserve against them. The remaining 600 ounces of silver, worth \$300 at the cost price of 50 cents per ounce, would represent the profit, which would be credited to seigniorage revenue, while the bullion would be carried as an asset in the Treasury General Fund, but not as part of the monetary system. It would be possible at any time, if so decided, to issue \$750 more silver certificates, at \$1.25 per ounce, against the 600 ounces, showing an additional seigniorage profit of \$450.

It was stated also that at any time silver held by the Stabiliza-

⁶⁴ *New York Times*, June 23, 1934.

⁶⁵ *Ibid.*, Aug. 11, 12, 1934. For text of the various documents relating to silver certificates, see *Annual Report of the Secretary of the Treasury . . . 1935*, pp. 262-265.

tion Fund might be sold to the General Fund, and then used as a basis for the issuance of silver certificates in the same way as silver acquired under the Silver Purchase Act of 1934.

On October 18 Secretary Morgenthau announced that seigniorage resulting from the issue of silver bullion acquired under the Silver Purchase Act of 1934, whether by purchase or by nationalization, would

... appear on the daily Treasury statement, not under ordinary receipts of general and special funds, but as a separate item under the same classification as trust funds and increment on gold.⁶⁶

Seigniorage on other silver, including that on the 62,000,000 ounces held prior to the passage of the act, and that on newly-mined silver purchased under the President's proclamation of December 21, 1933, would be taken into revenue as an ordinary receipt.

As a result of these various measures, all silver certificates had a reserve against them of silver valued at \$1.29+ per fine ounce; part of this silver was in the form of standard silver dollars and part in the form of bullion. In addition, there was a supply of silver bullion, representing seigniorage, held at cost price among the assets of the Treasury, but not part of the monetary system. Additional seigniorage on this supply was potentially available.

13. *The Extent of Silver Purchases*

Silver has been acquired in several different ways, and complete current information has not been made public by the Treasury as to all the acquisitions and stocks. From various regular official reports, however, it is possible to get a fairly correct monthly record of the progress of the Purchase Act program towards its goal.

The *Annual Report of the Secretary of the Treasury* gives, for each fiscal year ending June 30, the quantity and cost of each category of silver acquired.⁶⁷ These figures are summarized in Table 15, which also includes a computation of the average cost per ounce and of the monetary value at \$1.29+ per ounce. The *Report* also includes a statement of the quantity of silver bullion in the Treasury on June 30. In Table 16 this quantity is shown distributed between the silver certificate reserve and the general fund, together with the book value and monetary value of each part, and the potential seigniorage which

⁶⁶ *Ibid.*, Oct. 19, 1934.

⁶⁷ In the report for fiscal 1934 only the quantity of each class and the total cost were given.

TABLE 15
SILVER PURCHASES BY UNITED STATES TREASURY
FISCAL YEARS 1934 TO 1938

FISCAL YEAR ENDED JUNE 30	QUANTITY	COST		MONETARY VALUE
		Per ounce	Total	
(1)	(2)	(3)	(4)	(5)
	Ounces	Cents	\$	\$
WAR-DEBT SILVER				
1934	22,734,824	50.00	11,367,412	29,394,520
NEWLY-MINED DOMESTIC SILVER				
1934	8,558,161	64.64	5,532,548	11,065,097
1935	30,863,349	65.50	20,214,113	39,904,128
1936	48,784,455	77.16	37,642,417	63,074,851
1937	63,029,665	77.51	48,851,604	81,492,900
1938	68,715,543	74.72	51,341,249	88,844,338
NATIONALIZED SILVER				
1935	112,301,335	50.01	56,162,471	145,197,686
1936	650,452	50.01	325,294	840,988
1937	63,777	50.03	31,911	82,459
1938	17,351	50.01	8,677	22,434
PURCHASE ACT SILVER				
1934	420,684	45.00	189,308	543,915
1935	293,737,702	52.97	155,587,533	379,782,079
1936	553,639,669	63.82	356,540,620	722,281,592
1937	163,030,551	47.51	77,453,735	210,786,975
1938	337,225,185	44.80	151,082,730	436,008,319
SILVER CONTAINED IN GOLD BULLION DEPOSITS, ETC.				
1934	354,826	45.00	159,672	458,765
1935	599,422	51.86	310,834	775,010
1936	411,925	53.94	222,207	532,590
1937	454,301	43.95	199,647	587,379
1938	415,082	43.80	181,807	536,672
TOTAL				
1934	32,068,495	53.79	17,248,940	41,462,297
1935	437,501,808	53.09	232,274,951	565,658,903
1936	608,486,501	64.87	394,730,538	786,730,021
1937	226,578,294	55.85	126,536,897	292,949,713
1938	406,373,161	49.86	202,614,463	525,411,763
Grand total	1,711,008,259	56.89	973,405,789	2,212,212,697

SOURCES

(2) from Annual Report of the Secretary of the Treasury . . . 1934, p. 120; *ibid.*, 1935, p. 135; *ibid.*, 1936, p. 165; *ibid.*, 1937, p. 172; Annual Report of the Director of the Mint . . . 1938, p. 4. Silver received in exchange for Government stamped bars is omitted.

(3) = (4)/(2), except that in fiscal 1934, when cost of each kind of silver is not available, the cost of war-debt and newly-mined silver has been taken at the figures given in the above sources, and the cost of Purchase Act and miscellaneous silver, reported to have been bought at market price, has been taken as 45 cents per ounce, the approximate average for the fiscal year.

(4) from same source as (2), except in fiscal 1934, when it is taken as (2) × (3).

(5) = (2) × \$1.29+.

could be realized if all the silver bullion were placed in the reserve at the rate of \$1.29+ per ounce.

Acquisitions of silver under the President's Proclamation of December 21, 1933 and under his nationalization Proclamation and Executive Order of August 9, 1934 were reported weekly until the end of 1936. No regular reports were made of purchases under the Silver Purchase Act; occasional summary announcements were made by the Treasury at the request of some member of Congress.⁶⁸ On December 12, 1935 Secretary Morgenthau released detailed figures of purchases by periods of four or five weeks ending with the last Friday of each month.⁶⁹ In December, 1936 Secretary Morgenthau, testifying before a subcommittee of the Committee on Appropriations of the House of Representatives on the Treasury appropriation bill for 1938, presented a table of the quantity (but not the cost) of monthly purchases in each category from January, 1934 through October, 1936;⁷⁰ but this table was not extended in the similar hearing the following year. In the autumn of 1937 the Treasury began issuing regular releases each quarter, giving the quantity (but not the cost) of silver purchased in each category during the quarter, and with data extended back to January 1, 1937.⁷¹ Finally, in July, 1938, the Treasury inaugurated the custom of showing the ounceage as well as the dollar value of each class of silver listed in the *Daily Statement of the Treasury*.

In spite of the lack of regular monthly information on silver purchases before 1938, there is important monthly material available in regular Treasury reports. The *Circulation Statement of United States Money* shows the book value in dollars of the silver in the monetary system, which can be converted into ounces at the rate of \$1.29+ per fine ounce for silver dollars and for bullion in the certificate reserve and at the rate of \$1.38+ per fine ounce for subsidiary silver. The *Daily Statement of the Treasury* shows the cost (representing the sum of many transactions at varying prices) of the silver bullion held in the General Fund of the Treasury, and also the seigniorage taken (a small part of which is for non-silver coinage). With the aid of these data, supplemented and checked by the regularly re-

⁶⁸ Through Senator Fletcher, *Congressional Record*, Vol. 79, Mar. 22, 1935, pp. 4303-04; through Senator Pittman, *ibid.*, Apr. 11, 1935, pp. 5403-04; through Senator McCarran, *ibid.*, June 12, 1935, pp. 9085-86; and through Representative Hill, *ibid.*, Aug. 24, 1935, pp. 14633-34.

⁶⁹ *New York Herald Tribune*, Dec. 13, 1935.

⁷⁰ *Treasury Department Appropriation Bill for 1938*, p. 27.

⁷¹ *Commercial and Financial Chronicle*, Vol. 145, Nov. 27, 1937, p. 3425; Vol. 146, Jan. 29, 1938, p. 679; April 30, 1938, p. 2775; Vol. 147, Aug. 6, 1938, p. 825; Oct. 29, 1938, p. 2612.

TABLE 16
SILVER BULLION IN UNITED STATES TREASURY AND POTENTIAL SEIGNIORAGE
THEREON AT END OF EACH FISCAL YEAR, 1933-1938

JUNE 30	QUANTITY			BOOK VALUE			MONETARY VALUE			POTENTIAL SEIGNI- ORAGE
	Cert. Res.	Gen. Fund	Total	Cert. Res.	Gen. Fund	Total	Cert. Res.	Gen. Fund	Total	
	(5) \$1.29+*	(4)-(2)	(4)	(5)	(6)	(5)+(6)	(2) \$1.29+	(3) \$1.29+	(3)+(9)	
(1)	Ounces	Ounces	Ounces	\$	\$	\$	(8)	(9)	(10)	(10)-(7)
1933	.....	27,756,897	27,756,897	.....	.....	25,839,416	.....	35,887,705	35,887,705	10,048,289
1934	3,120,000	56,356,956	59,476,956	1,560,000	45,094,666	47,254,666	4,033,939	72,865,559	76,899,498	29,644,832
1935	242,324,824	240,664,688	482,989,512	313,308,863	134,821,376	448,130,236	313,308,863	311,162,424	624,471,287	176,341,051
1936	547,756,824	529,108,378	1,076,865,202	708,210,842	325,303,885	1,033,514,727	708,210,842	684,099,722	1,392,310,564	358,795,837
1937	645,971,824	637,516,984	1,283,488,808	835,195,892	374,828,531	1,210,024,123	835,195,892	824,264,385	1,659,460,277	449,436,154
1938	802,180,994	876,351,412	1,678,532,406	1,037,163,305	480,900,001	1,518,063,306	1,037,163,303	1,130,060,409	2,170,223,712	652,160,406

* Except in case of 1934, where the division is by \$0.50, because the reserve in that year represented war-debt silver at cost.

SOURCES

- (4) from Annual Report of the Secretary of the Treasury . . . 1933, p. 121; *ibid.*, 1934, p. 121; *ibid.*, 1935, p. 137; *ibid.*, 1936, p. 167; *ibid.*, 1937, p. 173.
- Annual Report of the Director of the Mint . . . 1938, p. 6.
- (5) from Circulation Statement of United States Money.
- (6) from Daily Statement of the Treasury; from 1935 on this represents two items, "Silver bullion at cost" and "Silver bullion at coinage value."

BILLIONS OF DOLLARS

BILLIONS OF FINE OUNCES

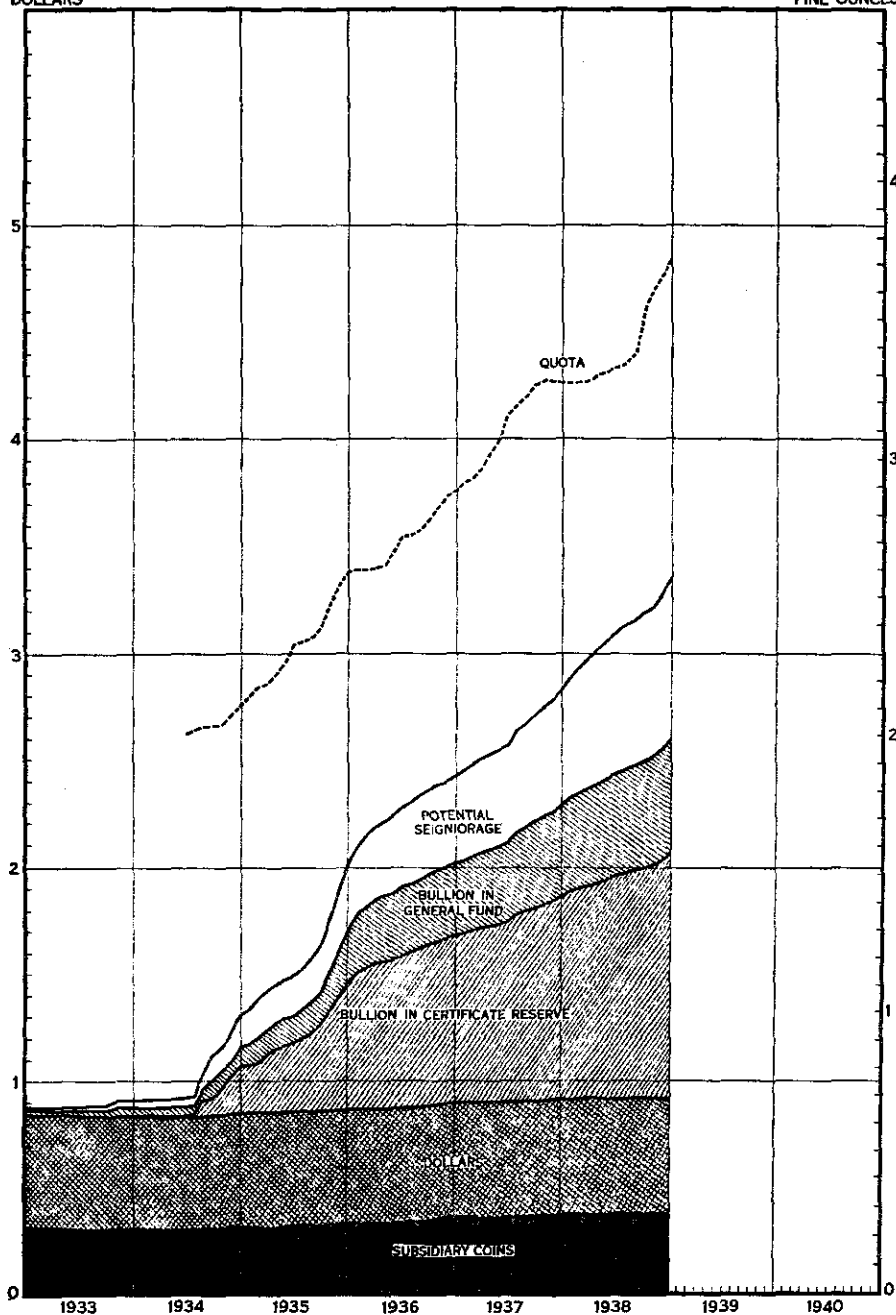


CHART 10.—SILVER ACTUALLY AND POTENTIALLY IN THE UNITED STATES MONETARY SYSTEM, 1933-1938

ported annual figures and by some of the special occasional statements mentioned above, it is possible to piece together a fairly accurate monthly picture of the silver stocks on hand. In this way Table 17 and Chart 10 have been constructed to show at the end of each month the total book value of the silver, including both that in the monetary system and the bullion held outside of the monetary system in the General Fund of the Treasury, the potential seigniorage which could be realized by transferring the latter into the monetary system, the silver-purchase quota, the amount still to buy, and the silver as a percentage of the gold. Prior to July, 1938 the potential seigniorage, and hence the total silver, is an estimate; after that date it is exact, because computed from the ounce figures in *Daily Statement of Treasury*. The silver-purchase-quota is taken as one-third of the gold stock. Strictly it should be figured as one-quarter of the sum of the gold and silver stocks to correspond with the wording of the Silver Purchase Act of 1937. Such a goal could be reached most quickly by disposing of gold at the same time as acquiring silver. Since, however, there has not seemed to be much likelihood of a decrease in the amount of gold, which in fact has been increasing almost continuously since the passage of the act, the silver quota has usually been interpreted as one-third of the gold stock; in fact, a chart kept by the Treasury Department itself is on this basis,⁷² which therefore has been adopted in this table. Purchases required on the basis of one-quarter of the total stock would usually be between 250,000,000 and 300,000,000 ounces less than the figures shown in column (14).⁷³

⁷² *Treasury Department Appropriation Bill for 1938*, p. 30.

⁷³ For a chart similar to Chart 10, but showing the quota figured in both ways, see Leavens, "Five Years of Silver Subsidy."

TABLE 17
SILVER ACTUALLY AND POTENTIALLY IN UNITED STATES MONETARY SYSTEM
1933-1938
(000,000 omitted, except in column 15)

DATE	IN MONETARY SYSTEM				NOT IN MONETARY SYSTEM		TOTAL BOOK VALUE (5)+(6)+(7)	POTENTIAL SEIGNIORAGE (9)	SILVER, GRAND TOTAL (8)+(9)	GOLD, GRAND TOTAL	SILVER-PURCHASE QUOTA			SILVER AS PER CENT OF GOLD (10)/(11)		
	Dollars	Bullion	Subsidiary coin		Bullion in General Fund						Total	Mon. Val. (12)-(10)	Balance to Buy		(10)/(11)	
			@\$1.29+	(2)+(3)+(4)	(4)	(5)							(6)			(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)		
1932																
Dec. 1933	\$540		\$307	\$847	\$18		\$865	\$ 7	\$872	\$4,513				19.32%		
Jan. 1933	540		307	847	18		865	7	872	4,553				19.15		
Feb. 1933	540		307	847	18		865	7	872	4,380				19.91		
Mar. 1933	540		307	847	18		865	7	872	4,282				20.36		
Apr. 1933	540		307	847	18		865	7	872	4,312				20.22		
May 1933	540		301	841	23		864	9	873	4,315				20.23		
June 1933	540		298	838	26		864	10	874	4,318				20.25		
July 1933	540		299	839	27		866	10	876	4,320				20.27		
Aug. 1933	540		299	839	27		866	10	876	4,328				20.24		
Sept. 1933	540		299	839	27		866	10	876	4,324				20.26		
Oct. 1933	540		299	839	27		876	28	904	4,323				20.92		
Nov. 1933	540		300	840	27		877	28	905	4,323				20.92		
Dec. 1933	540		300	840	36		876	28	904	4,323				20.92		
1934																
Jan. 1934	540	1	300	841	36		877	28	905	4,036				22.41		
Feb. 1934	540	2	300	842	35		877	29	906	7,438				12.17		
Mar. 1934	540	2	299	841	37		878	29	907	7,694				11.79		
Apr. 1934	540	2	296	838	41		879	29	908	7,757				11.70		
May 1934	540	2	294	836	45		881	29	910	7,779				11.70		
June 1934	540	2	296	838	45		883	30	913	7,856				11.62		
July 1934	540	2	298	840	47		887	35	922	7,931				11.63		
Aug. 1934	540	67	299	906	62		968	63	1,031	7,978				12.92		
Sept. 1934	540	77	302	919	89	\$17	1,008	106	1,114	7,978				13.97		
Oct. 1934	540	118	305	963	74	\$14	1,047	112	1,159	8,002				14.49		
Nov. 1934	541	160	307	1,008	86	\$11	1,096	122	1,218	8,132				14.97		
Dec. 1934	544	212	309	1,065	86		1,162	139	1,301	8,238				15.79		

TABLE 17 (continued)
SILVER ACTUALLY AND POTENTIALLY IN UNITED STATES MONETARY SYSTEM
1938-1938
(000,000 omitted, except in column 15)

DATE	IN MONETARY SYSTEM		IN MONETARY SYSTEM		TOTAL BOOK VALUE (5)+(6)+(7)	POTENTIAL SEIGNIORAGE (9)	SILVER, GRAND TOTAL (8)+(9)	GOLD, GRAND TOTAL (11)	SILVER-PURCHASE QUOTA		SILVER AS PER CENT OF GOLD (10)/(11)	
	Dollars	Bullion	Subsidiary coin	Total					Total	Mon. Val. (12)-(10)		Quantity (13)/\$1.29
(1)	@\$1.29+	@\$1.29+	@\$1.35+ (2)+(3)+(4)	(6)	(8)	(9)	(10)	(11)	(12)	(18)	(14)	(15)
1935												
Jan.	\$545	\$211	\$310	\$ 99	\$1,174	\$159	\$1,333	\$8,391	\$2,797	\$1,464	1,132 oz.	15.89%
Feb.	546	222	309	117	1,204	180	1,384	8,327	2,842	1,458	1,128	16.23
Mar.	546	263	309	116	1,244	174	1,418	8,567	2,856	1,438	1,112	16.56
Apr.	546	295	310	118	1,278	171	1,449	8,710	2,903	1,454	1,125	16.64
May	546	304	313	123	1,292	174	1,466	8,858	2,953	1,457	1,150	16.55
June	546	313	313	128	1,306	177	1,483	9,116	3,039	1,556	1,203	16.27
July	546	338	315	137	1,340	184	1,524	9,144	3,048	1,524	1,178	16.67
Aug.	546	359	315	154	1,377	192	1,569	9,203	3,068	1,499	1,159	17.05
Sept.	547	393	317	164	1,424	203	1,627	9,368	3,123	1,496	1,156	17.37
Oct.	547	450	320	181	1,516	234	1,750	9,693	3,231	1,481	1,146	18.05
Nov.	547	519	322	229	1,617	259	1,876	9,920	3,307	1,431	1,106	18.92
Dec.	547	577	328	261	1,713	282	1,995	10,125	3,375	1,380	1,068	19.70
1936												
Jan.	547	625	328	285	1,785	306	2,091	10,182	3,394	1,303	1,008	20.53
Feb.	547	650	328	297	1,822	324	2,146	10,167	3,389	1,243	962	21.10
Mar.	547	671	330	307	1,855	333	2,188	10,184	3,395	1,207	934	21.48
Apr.	547	688	330	313	1,883	340	2,223	10,225	3,408	1,195	925	21.64
May	547	689	330	317	1,883	347	2,230	10,402	3,467	1,237	957	21.44
June	547	708	332	324	1,911	359	2,270	10,608	3,536	1,266	980	21.40
July	547	717	335	328	1,927	373	2,300	10,648	3,549	1,249	967	21.60
Aug.	547	729	338	335	1,949	385	2,334	10,716	3,572	1,238	957	21.79
Sept.	547	747	341	339	1,974	386	2,360	10,846	3,615	1,255	971	21.76
Oct.	547	756	346	343	1,990	391	2,381	11,045	3,682	1,301	1,006	21.56
Nov.	547	763	351	343	2,004	395	2,399	11,184	3,728	1,329	1,028	21.45
Dec.	547	776	356	347	2,026	400	2,426	11,268	3,758	1,327	1,026	21.55

TABLE 17 (continued)
SILVER ACTUALLY AND POTENTIALLY IN UNITED STATES MONETARY SYSTEM
1933-1938
(000,000 omitted, except in column 15)

DATE	MONETARY SYSTEM			NOT IN MONETARY SYSTEM		TOTAL BOOK VALUE	POTENTIAL SEIGNIOBAGE	SILVER, GRAND TOTAL	GOLD, GRAND TOTAL	SILVER-PURCHASE QUOTA			SILVER AS PER CENT OF GOLD		
	Dollars	Bullion	Subsid- iary coin	Total	Bullion in General Fund					Total	Mon. Val.	Balance to Buy		Quantity	
End of month	@ \$1.29+	@ \$1.29+	@ \$1.38+	(2)+(3)+(4)	@ Cost	(5)-(6)+(7)	Estimated	(8)+(9)	(11)	(11)/8	(12)	(13)	(14)	(10)/(11)	(15)
1937															
Jan.	\$547	\$785	\$356	\$1,688	\$351	\$2,040	\$409	\$2,449	\$11,358		\$3,786	\$1,337	1,034 oz.	21.56%	
Feb.	547	796	357	1,700	356	2,057	420	2,477	11,436		3,812	1,335	1,033	21.66	
Mar.	547	808	357	1,712	362	2,075	431	2,506	11,574		3,858	1,352	1,046	21.65	
Apr.	547	818	357	1,722	366	2,089	438	2,527	11,799		3,933	1,405	1,088	21.41	
May	547	828	358	1,733	371	2,105	445	2,550	11,990		3,997	1,447	1,119	21.26	
June	547	835	359	1,741	374	2,116	449	2,565	12,318		4,106	1,541	1,192	20.83	
July	547	862	361	1,770	390	2,160	476	2,636	12,446		4,148	1,512	1,170	21.18	
Aug.	547	877	363	1,787	396	2,184	489	2,673	12,567		4,189	1,516	1,173	21.27	
Sept.	547	894	364	1,805	406	2,211	506	2,717	12,742		4,247	1,530	1,183	21.33	
Oct.	547	908	367	1,822	418	2,235	518	2,753	12,893		4,268	1,515	1,172	21.50	
Nov.	547	921	370	1,838	418	2,256	526	2,782	12,774		4,258	1,476	1,141	21.78	
Dec.	547	939	372	1,858	427	2,285	541	2,826	12,760		4,253	1,427	1,104	22.15	
1938															
Jan.	547	962	373	1,882	441	2,323	570	2,893	12,756		4,252	1,359	1,051	22.68	
Feb.	547	979	374	1,900	449	2,349	586	2,935	12,776		4,259	1,324	1,024	22.97	
Mar.	547	993	374	1,914	457	2,371	602	2,973	12,795		4,265	1,292	999	23.24	
Apr.	547	1,007	374	1,928	465	2,394	620	3,014	12,869		4,290	1,276	986	23.42	
May	547	1,023	374	1,944	472	2,417	635	3,052	12,919		4,306	1,254	970	23.62	
June	547	1,037	374	1,958	480	2,439	652	3,091	12,963		4,321	1,230	951	23.84	
July	547	1,049	374	1,970	488	2,459	663	3,122	13,017		4,339	1,217	941	23.99	
Aug.	547	1,061	375	1,983	492	2,475	673	3,148	13,136		4,379	1,221	952	23.97	
Sept.	547	1,071	376	1,994	499	2,493	687	3,180	13,166		4,387	1,407	1,088	23.11	
Oct.	547	1,087	376	2,010	506	2,516	702	3,218	14,064		4,688	1,470	1,137	22.88	
Nov.	547	1,110	376	2,033	518	2,532	726	3,278	14,312		4,771	1,483	1,155	22.90	
Dec.	547	1,137	376	2,060	535	2,556	759	3,354	14,511		4,837	1,483	1,147	23.11	

SOURCES OF TABLE 17

(2), (3), (4) from Circulation Statement of United States Money.

(6), (7) from Daily Statement of the Treasury.

(9) estimated by the writer. Potential seigniorage as of June 30 each year is as shown in Table 16. Figures for other months have been estimated. For the period from January, 1934 to October, 1936, inclusive, use has been made of the data on monthly acquisitions, in ounces, of each kind of silver as given in Treasury Department Appropriation Bill for 1938, p. 27. The cost of newly-mined American and nationalized silver was taken at the prices fixed; that of Purchase Act silver was estimated at the average market price each month and adjusted when necessary to make the total of monthly costs agree with fiscal-year totals as reported by the Secretary of the Treasury (see Table 15). The difference between the monetary value at \$1.29+ per ounce and the cost as above estimated gave the total available seigniorage each month. From this was subtracted the seigniorage actually taken each month, as reported in the Daily Statement of the Treasury (with adjustment for that part pertaining to minor coin, yearly figures for which are given in the Annual Report of the Secretary of the Treasury) to give the potential seigniorage which might still be taken. For the period after October, 1936, the same method was applied to quarterly reports of the quantity of silver purchased, as released by the Treasury from time to time (see footnote 71). Beginning in July, 1938, the Daily Statement of the Treasury gave ounceage for each class of silver; this made it possible to compute the potential seigniorage exactly.

(11) from Circulation Statement of United States Money; this item represents all gold held in the Treasury, including "inactive gold" for the period from December, 1936 to March, 1938, inclusive; and also gold held outside of the Treasury prior to 1934.

In rounding off figures the aim has been to make those in column (8) as exact as possible, even if that involved rounding off an occasional item in the earlier columns one unit high or low.

CHAPTER XXVII

THE EXECUTION OF THE ACT, 1935

The Queen propped her up against a tree and said kindly, "You may rest a little now."

Alice looked around her in great surprise. "Why, I do believe we've been under this tree the whole time! Everything's just as it was!"

"Of course, it is," said the Queen: "What would you have it?"

"Well, in *our* country," said Alice, still panting a little, "you'd generally get to somewhere else—if you ran very fast for a long time, as we've been doing."

"A slow sort of a country!" said the Queen. "Now *here*, you see, it takes all the running *you* can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

"I'd rather not try, please!" said Alice. "I'm quite content to stay here—only I *am* so hot and thirsty!"

LEWIS CARROLL, *Through the Looking-Glass*

The winter of 1934-1935 was uneventful in the silver market. Although the Treasury made no detailed announcements as to its purchases under the act, it was evident from routine reports and from the statistics of silver imports that purchases were being continued on an extensive scale. An exchange of gold for silver with Mexico was reported, and Secretary Morgenthau intimated that he was ready to consider applications from other nations for similar transactions.¹

1. *The Price of Silver in the Spring of 1935*

The 50-per-cent seigniorage established by the President's proclamation of December 21, 1933 had resulted in an effective price of 64.5+ cents per ounce for newly-mined American silver, and had given domestic producers a bonus of about 50 per cent above the then current price of 43 cents per ounce. By the beginning of 1935 the market price of foreign silver had risen to 55 cents per ounce, which was still well below the government price for domestic silver. About the middle of February, however, the market price for foreign silver began to rise, and went up rather steadily until, on April 10, it reached 64½ cents per ounce. Around noon of that day Secretary Morgenthau told reporters that the Government was ready to meet the world

¹ *New York Times*, March 21, 22, 1935.

price of silver, whatever it might be.² That evening the President issued a proclamation which amended that of December 21, 1933 by reducing the seigniorage from 50 to 45 per cent; that is, it increased the effective price for newly-mined domestic silver to 71.11 cents per ounce.³

The chief result of this action was to stimulate the world market price of silver, which rose to 68½ cents in two days, and after a slight reaction reached 71½ cents per ounce on April 24. After a conference with Secretary Morgenthau, the President issued another proclamation, reducing the seigniorage to 40 per cent or raising the effective price to 77.57 cents per fine ounce.⁴ The market price jumped to 77 cents the next day, and to 81 cents on the day after. The two successive official increases apparently gave the silver market the idea that any rise in the price would be matched immediately by the Administration, and opened the way to a vicious upward spiral in the price of silver which would benefit no one but producers and speculators. It is possible that the President realized this, for he did not raise the domestic price further, and for the next few weeks the market price fluctuated between 71 cents and 77 cents per ounce. On the other hand, his restraint may have been caused by the protest of Mexico, described below.

2. *The Effect of the Rising Price of Silver on Mexico*

The rising price of the white metal made the silver coins of Mexico worth melting. As described in Chapter XVIII, Section 5, Mexico had established a bullion parity of \$1.291 per ounce for her silver coins in 1919 to meet the wartime rise in the price of silver. During the world depression, however, she had not been able to maintain the gold standard, and the exchange value of her silver currency had depreciated below the gold par, although not down to the bullion value of the silver coin. From early in 1934 the exchange value of the peso had been maintained at 3.60 pesos to the new American dollar. At that exchange rate, the bullion parity of the peso worked out at 71.9 cents per ounce. As a result, when silver passed 72 cents per ounce there was incentive to melt the silver coins and export them. Mexico thus began to experience a currency situation similar to that which she, and such other countries as the Philippines and the Straits Settle-

² *New York Herald-Tribune*, April 11, 1935.

³ *New York Times*, April 11, 1935; full text in *Annual Report of the Secretary of the Treasury . . . 1935*, pp. 260-261.

⁴ *New York Times*, April 25, 1935; full text in *Annual Report of the Secretary of the Treasury . . . 1935*, p. 261.

ments, had gone through in 1906 and again during the World War. The Mexican Government acted quickly. On April 26 it ordered the surrender of silver coins to the Government in exchange for paper money, just as the American Government had expropriated its citizens' gold two years previously. The export or melting of silver coins was prohibited. A bank holiday was declared over a week end to facilitate adjustments.⁵

Eduardo Suarez, Mexican Finance Minister, flew to Washington and conferred with Secretary Morgenthau on Sunday, April 28. On the same day the Bank of Mexico announced that it would buy and sell dollars without limit at the official rate of 3.60 pesos to the dollar, although market rates had fallen as low as 3.30 pesos during the preceding week.

On Monday, April 29, Secretary Morgenthau announced that his conversations with the Mexican Minister had been satisfactory. The latter made a statement to the effect that Mexico had taken rapid and effective steps to meet the situation caused by the rise of the market price of silver above the bullion parity of her coins; that as a producer of silver she could not but "look favorably upon the revalorization of the metal."

The Mexican banks reopened the same day, and, except for a shortage of small change before new bronze coins could be placed in circulation to replace silver, there was no serious inconvenience.⁶ On May 24 a decree provided for the issuance of new silver coins of lower fine content. By October over 200,000,000 of the old silver coins, representing perhaps 80 per cent of the total existing amount, were held by the Bank of Mexico.⁷

Fundamentally, since Mexico was the largest producer of silver, the rise in its price was to her advantage, because it stimulated the mining industry, with consequent increase of employment, general business activity, and tax revenue. So far as her currency was concerned, although the adjustment caused some inconvenience, she was to receive a substantial seigniorage profit from the decrease in the silver content of the coin.

3. *Effects on Other Countries*

The rising price of silver similarly passed the bullion parities of the silver coins of several other countries, and made it necessary for

⁵ *New York Times*, Apr. 28, 1935.

⁶ *Ibid.*, Apr. 29, 30, 1935.

⁷ *Latin American Financial Notes*, No. 173 June 14, 1935, p. 13; *ibid.*, No. 183, Nov. 14, 1935, p. 17.

their governments to call in silver coins, prohibit melting or exportation, and issue new currency of paper or base metal. Among the countries thus affected were Peru,⁸ Costa Rica,⁹ Guatemala,¹⁰ Colombia,¹¹ Ecuador,¹² Uruguay,¹³ El Salvador,¹⁴ and Bolivia.¹⁵

Italy on May 14 prohibited the export of silver even in the form of jewelry; the bullion parity of her coins had not been reached, but it was expected that large amounts of silver would be needed in connection with the operations in Ethiopia, where the silver Maria Theresa dollar was an important medium of exchange. On June 15 the Government called in all silver coins from circulation. Later it began coining dollars for use in Ethiopia, using, it was reported, an official die purchased from the Vienna mint.¹⁶

On May 20, 1935, as a belated neighborly gesture, the United States Treasury issued an order, approved by the President, prohibiting the importation of foreign silver coin of a monetary value less than 110 per cent of its bullion value, except under license in special circumstances.¹⁷ This applied to the coins of most of the above-mentioned countries, as well as to those of China and Hong Kong. Since the order did not apply to bullion derived from such coins, it was not of great importance; it merely meant that the coins would have to be melted before shipment instead of after arrival in the United States. In fact, throughout 1935 the Treasury undoubtedly purchased in London large quantities of silver derived from Chinese coins smuggled out through Japan or Hong Kong.

The experience of the countries affected by the rise in price resulted in a real setback to the use of silver as subsidiary coinage. As was pointed out in Chapter XVIII the wartime rise in the price resulted in a lessened use of silver money, as reflected in raised bullion parities (shown in Chart 3, page 16) and in the substitution of paper and base-metal currencies. In the following decade, with moderate and low prices of silver, there seemed little danger that bullion parities would be exceeded again by the market price, and there was some revival of the use of the white metal for subsidiary

⁸ *New York Times*, May 5, 1935; *Latin American Financial Notes*, No. 172, May 29, 1935, pp. 12-13; No. 174, June 29, 1935, p. 10.

⁹ *Ibid.*, No. 171, May 14, 1935, pp. 10-11; No. 180, Sept. 29, 1935, p. 8.

¹⁰ *Ibid.*, No. 173, June 14, 1935, pp. 12-13.

¹¹ *Ibid.*, No. 173, June 14, 1935, p. 7; No. 178, Aug. 29, 1935, pp. 8-10.

¹² *Ibid.*, No. 173, June 14, 1935, p. 12.

¹³ *Ibid.*, No. 173, June 14, 1935, p. 18.

¹⁴ *Ibid.*, No. 174, June 29, 1935, p. 11.

¹⁵ *Ibid.*, No. 176, July 29, 1935, p. 2.

¹⁶ *Boston Evening Transcript*, May 14, 1935; *New York Times*, June 16, Sept. 26, Oct. 25, 1935.

¹⁷ For full text, see *Annual Report of the Secretary of the Treasury . . . 1935*, pp. 261-262.

coinage. The 1935 rise, however, as has been seen, endangered the silver coinage of several countries where a depreciation in the exchange value of the monetary unit had lowered the effective bullion parities. A further rise would have threatened the silver coinage of Spain at about 94 cents per ounce, of the Philippines at 97 cents, of Siam at \$1.04, of India, with its enormous rupee circulation, at \$1.08, of Indo-China at \$1.12, of Australia at \$1.17, and of Japan at \$1.26, before the final goal of \$1.29 per ounce was reached.¹⁸ Although the price soon receded from the peak of 81 cents per ounce, the fact of the sharp rise in April could not fail to leave the currency authorities of many countries apprehensive of taking any risk with a metal whose price was so subject to American political influence.

In fact there was very little new coinage of silver throughout the world in 1934 and 1935. A certain amount was coined in Colombia,¹⁹ Venezuela,²⁰ and Cuba,²¹ because of the need of circulating currency or because of the attraction of the handsome seigniorage profit.

In the United States, although only a few silver dollars were coined, the bulk of the purchases being held as bullion, the revival of business and the upward movement of prices, necessitated a heavy coinage of silver subsidiary coins, the stock of which increased from \$294,000,000 on May 31, 1931 to \$372,000,000 on December 31, 1937.²² The progress of this increase may be seen in Table 17, pages 278-280.

4. *Silver in Congress*

The first session of the Seventy-fourth Congress assembled on January 3, and adjourned on August 26, 1935. The silver question was much less prominent at this session than at those of the preceding years.²³ Several silver bills were introduced at the opening, but never got out of committee.²⁴

On March 11 Senator Thomas of Oklahoma proposed an amendment to the joint resolution appropriating \$4,880,000,000 for work relief, which had been under discussion for several weeks. This amendment provided that silver certificates should be issued to the

¹⁸ Leavens, "Silver Coins to the Melting Pot"; see also G. A. Roush, "The Melting Point of Silver Coinage the Resultant of Price and Exchange Rates."

¹⁹ *Latin American Financial Notes*, No. 175, July 14, 1935, p. 5.

²⁰ *Ibid.*, No. 171, May 14, 1935, p. 23.

²¹ *Ibid.*, No. 163, Jan. 14, 1935, p. 8; No. 180, Sept. 29, 1935, p. 9.

²² *Circulation Statement of United States Money, passim; Annual Report of the Director of the Mint, passim.*

²³ For a fuller account of silver at this session, see Leavens, "Silver at the Recent Session of the American Congress."

²⁴ H. R. 2002, 2009, 2011, *Congressional Record*, Vol. 79, Jan. 3, 1935, pp. 49-50; H. R. 2747, *ibid.*, p. 52; H. R. 2799, *ibid.*, p. 54; H. R. 4357, *ibid.*, Jan. 22, 1935, p. 740.

full monetary value of the silver acquired, instead of merely to the extent of the cost; that silver certificates should be kept actively in circulation; that silver purchases should be made at the rate of 50,000,000 ounces per month; that when the price of \$1.29+ per ounce had been reached there should be free coinage of silver; and that the Secretary of the Treasury might, at his discretion, exchange gold for silver, and might accept silver in settlement of any balance due to the United States.²⁵ This amendment was opposed by the Treasury²⁶ and was laid on the table by a vote of 40 to 33.²⁷ Senator Thomas, however, succeeded in persuading the Senate to accept a revised amendment without the provisions for compulsory monthly purchase and for free coinage.²⁸ It was expected that this amendment would be eliminated when the work-relief joint resolution went to conference with the House, as in fact it was.²⁹ Senator Thomas lost no opportunity during the remainder of the session to air his views on silver.³⁰

Senator Patrick A. McCarran of Nevada, on April 4, presented a bill to repeal Sections 6, 7, and 8 of the Silver Purchase Act, which provided respectively for the regulation by the Secretary of the Treasury of all silver transactions, for the nationalization of silver, and for the tax of 50 per cent on profits from silver transactions.³¹ This bill was opposed by the Treasury³² but was reported favorably by the friendly Committee on Agriculture and Forestry.³³ It was accepted as an amendment to the revenue bill on August 15,³⁴ but was rejected in conference.³⁵ In order to prevent a filibuster against the revenue bill, the McCarran bill finally was allowed to pass the Senate as a separate measure on the eve of adjournment.³⁶ When referred to the House at the opening of the second session in January, 1936, it was returned to the Senate, because the House considered the bill out of

²⁵ *Ibid.*, Vol. 79, Mar. 11, 1935, p. 3330, text of amendment; Mar. 22, 1935, pp. 4288-4305, discussion.

²⁶ *Ibid.*, Mar. 22, 1935, pp. 4303-04.

²⁷ *Ibid.*, Mar. 23, 1935, pp. 4348-49.

²⁸ *Ibid.*, Mar. 23, 1935, pp. 4349-53, 4362.

²⁹ *Ibid.*, Mar. 26, 1935, pp. 4465, 4470-71, 4476; Apr. 14, 1935, pp. 5115-16, 5135.

³⁰ *Ibid.*, Apr. 4, 1935, pp. 5006-08; Apr. 5, 1935, pp. 5116-29; May 2, 1935, pp. 6771-73; May 14, 1935, pp. 7449-50; July 26, 1935, pp. 11917-21; August 15, 1935, pp. 13241-43; Aug. 24, 1935, p. 14479; Aug. 24, 1935, pp. 14530-32.

³¹ S. 2507, *ibid.*, Apr. 4, 1935, p. 4983; Apr. 5, 1935, pp. 5093-94; Apr. 9, 1935, pp. 5323-24.

³² *Ibid.*, Apr. 11, 1935, pp. 5412-13; Apr. 16, 1935, pp. 5732-33.

³³ *Ibid.*, Aug. 1, 1935, p. 12244.

³⁴ *Ibid.*, Aug. 15, 1935, p. 13240.

³⁵ Amendment 25 in Conference Report on H. R. 8974, *ibid.*, Aug. 24, 1935, pp. 14627-31, 14633-34.

³⁶ S. 3260, *ibid.*, Aug. 24, 1934, pp. 14480-84.

order, in view of the constitutional provision that all bills concerned with raising revenue must originate in the House.³⁷

On April 12, 1935 newspapers reported that the Senate Committee on Agriculture and Forestry had considered favorably a bill presented by Senator Wheeler of Montana, ordering the purchase of 50,000,000 ounces of silver per month until silver should make up one-fourth of the monetary stocks or until the price should reach a ratio of 16 to 1 as compared with gold.³⁸ This, of course, was even more thoroughgoing than the Thomas bill, since a ratio of 16 to 1 would mean a price of \$2.19 per ounce for silver in comparison with \$35.00 per ounce for gold. No official report on this bill, however, was made by the committee.

Throughout the session Senator Pittman generally showed a more moderate attitude than the extreme members of the silver bloc, and supported the Administration in its execution of the Silver Purchase Act.³⁹ He did, however, go so far as to introduce a bill for paying the soldiers' bonus with silver certificates to be issued against seigniorage silver.⁴⁰

The President, in a letter of July 25 replying to an appeal by 46 Senators for aid to silver, declared that the Silver Purchase Act was being carried out vigorously and in good faith, and

. . . that our duty has been, and will be, discharged in the manner most advantageous to the public interest, as the act itself enjoins, and in pursuit of our common objective of a wider monetary use of silver.⁴¹

After the August drop in the price of silver, described below, both Senators Pittman and Thomas proposed resolutions for the investigation of the administration of and the effects of the Silver Purchase Act.⁴² The more moderate resolution of the former was adopted, and a committee consisting of Senators Pittman, King, Thomas of Oklahoma, Borah, and McNary was appointed.⁴³ No report of this committee has ever been made public.

5. *The Protest of Silver Manufacturers*

Meanwhile, the rapid rise in the price of silver during the spring had alarmed industrial users of the white metal. On May 9 Repre-

³⁷ *Ibid.*, Vol. 80, Jan. 15, 1936, p. 448.

³⁸ *New York Times*, Apr. 12, 1935.

³⁹ *Congressional Record*, Vol. 79, Apr. 11, 1935, pp. 5403-06; July 23, 1935, pp. 11614-15.

⁴⁰ *Ibid.*, May 27, 1935, pp. 8219-20.

⁴¹ *Ibid.*, July 26, 1935, p. 11921.

⁴² *Ibid.*, Aug. 15, 1935, pp. 13198; Aug. 24, 1935, p. 14479.

⁴³ *Ibid.*, Aug. 16, 1935, p. 13391.

sentative Joseph W. Martin, Jr. of Massachusetts addressed the House regarding the ill effects on the silverware industry. He pointed out that for many years the price of silver had averaged around 60 cents per ounce, and that the industry had been able to stand the high war-time price of its raw material only because of the general high prices and prosperity which then prevailed. The current rising price of silver would necessitate an increase in retail prices of silverware and would reduce sales. He stated that 70,000 men, women, and children were directly dependent upon the manufacture of silverware, and that 225,000 people were dependent upon the retail jewelry stores through which the product was distributed.⁴⁴

On June 5 Senator David I. Walsh and Representative Martin of Massachusetts introduced bills in their respective houses to amend the Silver Purchase Act of 1934 by authorizing the Secretary of the Treasury

. . . to set aside and earmark for commercial use in the arts and industries . . . an annual allotment from the Treasury's accumulated stocks of silver from whatever source derived. The annual allotment so earmarked shall be in a total sum of fine ounces equivalent to the total consumption by all such commercial users, and in no event shall . . . exceed 40,000,000 fine ounces in the first year of the operation of this act.⁴⁵

This silver was to be sold to commercial users at 60 cents per ounce, or, if silver were "officially priced" at more than \$1.00 per ounce, then it would be sold at 40 cents less than the official government price.

No action was taken on this bill, and in fact the fall in the price of silver during the summer made the matter less serious for users of the white metal. It is significant, however, that legislation chiefly set up for the benefit of a producing industry should bring its reaction in the request for special favors from a related consuming industry.

6. *The Price of Silver after the Spring of 1935*

After the flurry in April, the price of silver dropped slightly, when it became apparent that the Government was not going to keep on raising the price for newly-mined American silver. It remained above 70 cents per ounce, however, until the end of June, when it began to fall again. From July 13 to August 12, inclusive, it remained steady at $67\frac{3}{4}$ cents per ounce in New York and at the approximate equivalent, around 30 pence per ounce, in London. This pegging

⁴⁴ *Ibid.*, May 9, 1935, pp. 7237-38.

⁴⁵ S. 3000, *ibid.*, June 5, 1935, pp. 8667-68; H. R. 8367, June 5, 1935, p. 8742.

was accomplished by the fact that the American Treasury was ready to take, at that figure, all that was offered in the London market.

In August, however, offerings increased greatly, and the Treasury purchased 25,000,000 ounces on one day, August 14,⁴⁶ but at a lowered price of $65\frac{3}{8}$ cents per ounce. The price was kept pegged at this point, the equivalent in London fluctuating in the neighborhood of 29 to $29\frac{1}{2}$ pence per ounce depending upon the sterling exchange rate, until December 7, in spite of the Chinese abandonment of the silver standard on November 3 to be described in Chapter XXIX.

On Monday, December 9, there was a delay of two hours in setting the London price, because no bid had been entered by the United States Treasury at fixing time. The price was dropped $\frac{7}{16}$ pence in London and $\frac{5}{8}$ cents in New York.⁴⁷ On December 10, for the first time since the World War, no price was set in London, because there was such a flood of selling orders. In the Montreal futures market the price dropped 5 cents and more. In New York the drop was only 1 cent, but the quotation was nominal.⁴⁸ In Bombay the price dropped $7\frac{1}{2}$ rupees per 100 tolas, or the equivalent of $7\frac{1}{2}$ cents per ounce.⁴⁹

During the next fortnight the price dropped rapidly in all markets. The New York price then remained steady at $49\frac{3}{8}$ cents per ounce from December 24, 1935 to January 15, 1936; and at $44\frac{3}{4}$ cents per ounce after January 20 except for occasional minor fluctuations. During the period of adjustment the New York price was not always near parity with the London price, but, after it was finally pegged at $44\frac{3}{4}$ cents per ounce, the London price held close to the parity, which was approximately 20 pence per ounce, fluctuating with the sterling exchange rate.

7. *The Change in the Treasury Purchase Policy*

The reason for the December drop in price was the sudden abandonment by the American Treasury of its former policy of taking all silver offered in London at the equivalent of the New York price of $65\frac{3}{8}$ cents per ounce.

Secretary Morgenthau, however, made public very little information about this action or the reasons for it. On November 7, after the departure of China from the silver standard to be described in Chapter XXIX, he merely stated that developments in China were being followed closely but as yet had brought no change in the American

⁴⁶ *New York Times*, Aug. 15, 1936.

⁴⁷ *Ibid.*, Dec. 10, 1935.

⁴⁸ *Ibid.*, Dec. 11, 1935.

⁴⁹ *Financial News*, Vol. 3, No. 49, Dec. 14, 1935, p. 5.

policy.⁵⁰ On December 10 the Treasury refused to say more than that it was "still fulfilling the provisions of the Silver Purchase Act."⁵¹ On December 12 Mr. Morgenthau stated that he was continuing to carry out the provisions of the act. He said that he bought silver on December 9, 10, and 11, "in different places in addition to the domestic market," but refused to reveal the quantities purchased.⁵² On Thursday, December 19, he stated that the Treasury had purchased silver "every day this week."⁵³ He also stated that the United States was buying silver directly from the Mexican Government and was taking all the Mexican newly-mined silver. He contended that the American silver policy had been successful and was "in the interest of the public."⁵⁴

The Treasury's reticence in explaining its policy naturally led to many attempted explanations on the part of others. Among these were the following:

1. It might be to avoid purchasing at a high price the flood of silver which could be dumped on the market by China and Hong Kong in their abandonment of the silver standard.⁵⁵ These governments both would be in the market for sterling and American dollars to provide support for their managed currencies; and to procure them they might have to sell silver. It would seem reasonable that the United States Treasury, in carrying out a law ostensibly intended to increase the world monetary use of silver, might be loath to aid and abet governments that were abandoning the white metal. The strength of this argument was weakened later when it transpired (Chapter XXX, Section 2) that the Treasury already had purchased 50,000,000 ounces of silver from China at the current price of around 65 cents per ounce. The December action of the Treasury, however, might possibly represent a change of policy after the situation was more fully understood. There were two variants of this reason, beside the obvious one that, with China a seller, the price of silver might be expected to drop and the Treasury could save the taxpayers' money by taking advantage of this. The first variant was that the American Administration wished to punish China for her lack of co-operation in the plan for the world rehabilitation of silver, and to bring pressure on her to restore silver to a monetary status.⁵⁶ The second variant was that it wished to help China, for, by allowing the price to drop, the profit in

⁵⁰ *New York Times*, Nov. 8, 1935.

⁵¹ *Ibid.*, Dec. 11, 1935.

⁵² *Ibid.*, Dec. 13, 1935.

⁵³ *Ibid.*, Dec. 20, 1935.

⁵⁴ *Ibid.*

⁵⁵ *Ibid.*, Dec. 11, 1935; *New York Herald-Tribune*, Dec. 11, 1935.

⁵⁶ *New York Herald-Tribune*, Dec. 11, 1935.

smuggling silver out of China would be largely removed, and the Chinese Government would be aided in carrying out its plans for the nationalization of silver.⁵⁷

2. The heavy purchases of silver during the autumn months might have been intended to keep up the value of the pound sterling at a time when there was a large flow of capital from Europe to America, which otherwise would have tended to strengthen the dollar and weaken the pound; with the cessation of this flow of capital about the beginning of December it was no longer necessary to support the pound.⁵⁸ If, however, the silver-buying program had been intended to support the pound, it seems as if the price of silver would have been allowed to vary and that of the pound kept pegged as closely as possible; whereas in fact the price of silver in New York was pegged at 65½ cents from August 14 to December 7, while the price of the pound varied between \$4.89 and \$4.98 during the same period.

3. Senator Pittman saw in the Treasury's action an attack on the British financial dominance.⁵⁹ Since domestic producers still were receiving 77.57 cents per ounce, his constituents were not injured by the fall in the world price. Senator Thomas of Oklahoma at first took the same view⁶⁰ but later stated that the Treasury had lost money by the drop in price and intimated that the silver bloc would demand an investigation.⁶¹

Whatever the Treasury's reasons may have been, the slowing down of its purchases and the resultant drop in the world price were factors for the ultimate benefit of the Treasury and of the world silver market, upsetting as they were for a time. If the action could have been accepted as the beginning of a policy looking toward the repeal of the Silver Purchase Act, it could have been hailed as a statesman-like move. Unfortunately, however, there was no evidence to show that it was any more than a hastily-conceived temporary expedient, which might be changed by future whims of the Administration.

⁵⁷ *Wall Street Journal*, Dec. 11, 1935.

⁵⁸ *New York Times*, Dec. 11, 1935.

⁵⁹ *Ibid.*; *New York Herald-Tribune*, Dec. 11, 1935.

⁶⁰ *Ibid.*

⁶¹ *Ibid.*, Dec. 13, 1935.

CHAPTER XXVIII

THE EFFECT OF AMERICAN SILVER POLICY ON CHINA, 1934 AND 1935¹

"By-the-by, what became of the baby?" said the Cat. "I'd nearly forgotten to ask."

"It turned into a pig," Alice answered. . .

"I thought it would," said the Cat, and vanished again.

LEWIS CARROLL, *Alice's Adventures in Wonderland*

1. *The Reception of the Silver Purchase Act*

As pointed out in Chapter XXII, Section 5, opinion in China by the end of 1933 generally was against any artificial rise in the price of silver; at the beginning of 1934 there was serious concern over the prospects of American legislation on the subject.

The appointment, in March, 1934, of Professor Rogers (Chapter XXVI, Section 5) to study the silver situation was welcomed in Shanghai as a sign that the American Government would consider the interests of China in this matter. By the time he arrived, however, the activity of the silver proponents in Washington was in full swing, and there was some skepticism in Shanghai as to whether the Administration would be able to defer action on silver until an adequate report on the Chinese aspects of the matter had been received.²

During the spring developments in the silver situation in the American Congress were watched with interest in Shanghai, and there were many expressions of opinion opposing any artificial rise in the price of silver unaccompanied by recovery in the general commodity price level.³ The opposite view was expressed by a few, but without very convincing arguments to support their case.⁴

¹ This chapter follows to some extent the plan and uses at times the wording of the author's paper, "American Silver Policy and China," *Harvard Business Review*, Vol. 14, Autumn, 1935, pp. 45-58.

² *China Press*, April 13, 1934.

³ R. Calder Marshall, Chairman of British Chamber of Commerce, Shanghai, and H. G. W. Woodhead, Chairman of China Association, speaking at joint meeting, *North China Daily News*, April 13, 1934; Chang Kia-ngau, annual report of the Bank of China, *China Press*, Apr. 15, 1934; Chairman of Hankow British Chamber of Commerce in report for 1933, *North China Daily News*, Apr. 27, 1934; *North China Daily News*, editorial, May 16, 1934; H. G. MacEwan, Statistical Secretary of Chinese Customs, *Report on the Foreign Trade of China, 1933*, Vol. 1, p. 2.

⁴ Letter from "Silverite," *China Press*, Apr. 22, 1934; articles by Prof. Paquan S. Hsu, *China Press*, April 24, 25, 1934; letter from "Outport," *Finance & Commerce*, Vol. 23, Mar. 7, 1934, p. 271.

Presumably in order to be prepared in the event of American silver legislation which might tend to draw silver out of China, the Ministry of Finance on April 29, 1934 announced that special permits would be required for the shipment of silver from Shanghai to foreign countries or to outports.⁵ Rumors arose from time to time that the Government was considering an embargo on the export of silver, but these were denied,⁶ and permits were given freely. There was talk also of a reduction of the silver content of the Chinese dollar, but this was not considered a practical measure.⁷

The possibility of some future devaluation of the Chinese silver dollar was recognized, however, when the Municipal Council of the Shanghai International Settlement on May 31, issued C. S. (Chinese Standard) \$7,000,000 of debentures without any such silver clause defining the weight and fineness of the Chinese silver dollar, as had been commonly used in recent years.

The Council explained this action as follows:

In recommending that no further definition of the weight and fineness of the dollar be given than "Chinese Standard Silver Dollars," the Treasurer stated that it would in his opinion be improper to impose a potential burden on the ratepayers in respect to the new loans in having to provide funds for the equivalent of the silver content of the dollar at any time. The Council's credit stood higher than ever before, and he considered that it should not adopt a dangerous principle and potential risk.⁸

In spite of this lack of safeguard for the investor, the loan was oversubscribed three times as soon as the books were opened.⁹

President Roosevelt's silver message of May 22, given in Appendix XII, was received favorably by Chinese bankers. Pei Tsu-ye, manager of the Shanghai Branch of the Bank of China, issued a statement in which he said:

From an immediate standpoint, the possibility of any sharp change in the price of silver, with a consequent disturbing effect on China's economic life, is greatly lessened. This for the following reasons: first, because the U. S. Treasury . . . is not at present prepared to pay a price of more than 50 cents an ounce; secondly, because speculation in silver will be greatly discouraged by the likelihood of practical stability; thirdly, because the proposed tax of 50 per cent on all profits resulting from dealings in silver will further render unattractive silver speculation.

The message is particularly acceptable because it would indicate that in-

⁵ *China Press*, Apr. 30, 1934.

⁶ *Finance & Commerce*, Vol. 23, May 2, 1934, p. 519.

⁷ *Ibid.*, Vol. 23, Feb. 28, 1934, p. 243 (E. Kann).

⁸ *Municipal Gazette*, Shanghai, June 1, 1934.

⁹ *North China Daily News*, June 1, 1934; see also *ibid.*, editorial, May 31, 1934, and letters in the correspondence columns on May 28, 29, 30, 31, and June 8, 1934.

terests other than those purely American have been taken into account, that it is based on international as much as on national considerations.

. . . any policy which aims to give stability to silver must be welcomed by China, the one country whose monetary system is based on that metal, while the immediate move to lift silver from the speculative arena is surely for her good.¹⁰

The reaction of Mr. Pei and of other Shanghai opinion might have been somewhat different if the full text of the bill had been available, instead of brief cabled summaries, which apparently caused misunderstanding of an important point. According to the outline of the bill cabled Shanghai,

. . . it provides no purchases of the white metal shall be made under the following conditions:

1. At prices in excess of the monetary value of silver.
2. Whenever, and for so long as, the monetary value of silver stocks shall be equal to or greater than 25 per cent of the aggregate value of gold and silver stocks.
3. At a price in excess of 50 cents an ounce.¹¹

The first two of these conditions were stated correctly, but the third omitted the important fact that it was to apply only to "silver situated in the continental United States on May 1, 1934." Although this limitation was mentioned in some newspaper accounts, that its full import was not appreciated in Shanghai is evident from other remarks in the newspapers during the ensuing few weeks,¹² until the full text was received by mail.¹³ Even after that, some references indicated that 50 cents per ounce still was thought of as the limit.¹⁴

The general expectation that the price of silver would not rise above 50 cents per ounce had a steady influence. The price re-

¹⁰ *Ibid.*, May 24, 1934.

¹¹ *Ibid.*; the same phraseology was repeated in *ibid.* on June 13, 1934 in describing the passage of the bill.

¹² "So far as the price of domestic metal is concerned it is stipulated that the price of 50 cents shall be the high limit, which was yesterday considered reasonable in Shanghai, seeing that the present price is in the vicinity of 45 cents per ounce." *Shanghai Times*, editorial, May 24, 1934. This, to be sure, recognized that the 50-cent price applied to silver in the country, but the tone of the editorial was that that would be the limit.

"With the present American price for silver at 45-1/4 cents an ounce troy, the decision not to pay more than 50 cents an ounce may have the effect of limiting the movements of the price of the metal within the narrow limits of 4-3/4 cents . . .," *North China Daily News*, editorial, May 25, 1934.

¹³ The full text of the bill appeared in the *North China Daily News* of June 21, 1934.

¹⁴ "Purchases of silver . . . may be made at home or abroad at prices not exceeding 50 cents an ounce." *Finance & Commerce*, Vol. 23, June 27, p. 742.

" . . . seeing that the new act only sanctions Government purchases up to a limit of 50 cents an ounce . . ." *Ibid.*, Vol. 24, July 4, 1934, p. 10.

"Under the terms of the new Silver Act the limit of price for Government purchases is 50 cents an ounce." *Ibid.*, Vol. 25, July 11, 1934, p. 35.

mained in the neighborhood of 46 cents per ounce during June and July. In August, silver in America was nationalized as described in Chapter XXVI, Section 9, and the price rose to the neighborhood of 50 cents per ounce, where it remained during August and September. By that time it was understood in China that the limit was \$1.29+, not 50 cents per ounce, and the anxiety, which had been lulled for a time by the steady price, was revived.¹⁵

2. *The Export of Silver from China*

During the first five months of 1934 there had been comparatively small movements of silver into or out of China, except in April when some 10,000,000 taels in sycee were shipped to Bombay for the coinage of British dollars for Hong Kong.¹⁶ In June and July, however, silver exports amounted to C. S. \$13,000,000 and C. S. \$24,000,000, respectively, and in August rose to C. S. \$79,000,000. The following contemporary comment expressed the complications of the situation:

It is not, perhaps, a matter for surprise that, in the circumstances, speculators felt convinced that the Government must take immediate steps to check this drainage of silver from China. How this might be effected was not the point—the nervousness they unanimously displayed was rooted in the belief that the situation called for urgent action. Those who have the interests of China at heart cannot but sympathise with her Government in the dilemma with which it is faced. Is she to stand by helpless and watch a continually increasing export of silver with all its attendant evils, or is she to take a step which is tantamount to debasing her currency and can only lead to possibly irreparable damage to her credit? That the latter is a step which she still has no intention of taking we are assured by those who alone are in a position to know. It would indeed be a disaster of the first magnitude if her new-born attempt to establish her currency on a sound footing were to be frustrated by circumstances beyond her control. On the other hand, the existing position is one of extreme difficulty and danger. That it has been created entirely by the steps taken in another country to satisfy, from political motives, a craving for experiment, makes it no easier to bear.¹⁷

About August 20 an official statement was issued by Dr. H. H. Kung, Minister of Finance, that the Central Government was not contemplating the imposition of restrictions on the export of silver.¹⁸

¹⁵ *Ibid.*, Vol. 24, August 22, 1934, p. 204.

¹⁶ According to *ibid.*, Vol. 23, Apr. 4, 1934, p. 406, this shipment was made March 27, but Customs statistics indicate that it was recorded as of April. Presumably this discrepancy is due to the fact that the customs statistical month closes before the end of the corresponding calendar month, in order to allow prompt tabulation of returns.

¹⁷ *Ibid.*, Vol. 24, Aug. 22, 1934, p. 204.

¹⁸ *Ibid.*, Vol. 24, Aug. 22, 1934, p. 199.

Dr. Kung also suggested that the export of silver was merely a normal phase of the adjustment of China's balance of payments. A truer explanation would seem to be that silver was exported because of the possibility of an embargo later, and because the disparity of exchange rates made it a profitable operation.¹⁹

On September 8 the Ministry of Finance issued this order:

Until further notice purchases or sales of foreign exchange shall be prohibited except for the purpose of financing:

1. Legitimate and normal business requirements.
2. Contracts entered into on or before September 8, 1934.
3. Reasonable travelling or other personal requirements.²⁰

At the same time an order was issued forbidding setting off gold-bar transactions against foreign currency, in order that operations of the Shanghai Gold Stock Exchange might not have repercussions in the exchange market. These measures were intended to check excessive speculation, but were difficult of application because of the lack of adequate definition of speculative and nonspeculative transactions.²¹

3. Correspondence with the United States Government

On September 28, Dr. Kung announced that an exchange of views with the American Government had been taking place for some time in an effort to point out to the United States the hardships to China brought about by fluctuations in exchange and particularly by the drain of silver.²² Following is a summary of correspondence prior to and subsequent to that announcement, as later made public.

On August 19, 1934, Dr. Kung sent a message to the President of the United States, stating that China had signed the London Silver Agreement

. . . with the understanding that it was designed primarily to assure the stability of the price of silver which was thought to be menaced by the holdings of large surplus stocks on the part of the Governments of India and Spain. . . .

Under the Silver Purchase Act of 1934 it would now appear that the stability of the silver price and China's interests are menaced as much as they were by the previous situation of potential sellers. In order that China may properly safeguard her currency, which has recently been flowing out of the country to a degree that is potentially alarming, China would appreciate an indication of the probable policy of the United States in the future purchase of silver.²³

The United States Government, on September 22, 1934, replied

¹⁹ *Ibid.*, Vol. 24, Sept. 26, 1934, p. 346.

²⁰ *North China Herald*, Vol. 192, Sept. 12, 1934, p. 393.

²¹ *Finance & Commerce*, Vol. 24, Sept. 19, 1934, p. 312.

²² *North China Herald*, Vol. 193, Oct. 3, 1934, p. 19.

²³ China, the Maritime Customs, *The Trade of China, 1934*, Vol. 1, p. 6.

that under the act the Secretary of the Treasury was required to purchase silver until it amounted to one-fourth of the total monetary stocks. The Government believed that by such an increase in the monetary use of silver it was furthering the purpose of the London Conference *resolution* (approved by all 66 nations, and distinct from the *agreement* signed by 8 nations) which recommended to all governments to substitute silver coins for low-value paper currency.

Incidentally, it seems very doubtful whether many of the other nations at the conference would have considered "low value" to go as high as \$1.00. In fact, the United States note admitted that the silver would be represented in circulation by silver certificates. The experience of half a century has shown that only very few actual silver dollars can be absorbed into circulation in the United States.

The note concluded:

The Government of the United States appreciates that the greatest care must be exercised in carrying out the policy. . . It recognizes the unfortunate effects on its own currency and that of other nations which an excessively high price of silver would have. . . .

In making purchases . . . the United States is desirous of avoiding any action which would hamper the action which any other Government might take relative to protecting silver and to prevent the flight or destruction thereof. Should the Government of China at any time find it necessary in order to protect its coinage to adopt a policy of discouraging the export of silver this Government will be glad to receive the view of the Chinese Government of the manner in which the purchasing program may be carried forward in co-ordination with such policy of the Chinese Government.²⁴

This message was delayed in transmission and was not received until October 2 by Dr. Kung, who meanwhile had sent another telegram to Washington on September 23, 1934. On October 2 Dr. Kung replied to the American delayed message of September 22:

American co-operation to prevent a further rise in the price of silver and to maintain stability as contemplated in the London agreement is particularly vital to China. In this connection it may be pointed out that the rise of silver discourages the export of commodities and thereby impairs China's purchasing power for imports. . . .

With respect to discouraging the export of silver from China it may be explained that this condition results largely from artificial stimulation of the price of silver abroad and that restrictive measures would create difficulty here which the Government has striven to avoid, particularly because restrictions would probably create severe breaks in exchange detrimental to trade, and, it is feared, would aggravate the present difficulty in the local financial market.

Could not the American Government for the present restrict its purchases to silver already in America to avoid further promoting the drain from China?²⁵

²⁴ *Ibid.*, p. 7.

²⁵ *New York Times*, Oct. 15, 1934.

On October 12 Secretary of State Hull replied that the silver-purchase program was embodied in an act of Congress which was mandatory, as to its general objective, upon the Executive.

The ways and means to be used for carrying out this objective are left within the discretion of the Executive, but, of course, must be consistent with the achievement of that objective.

This Government is desirous of so carrying out the program as to produce the general benefit that would result from the enhancement and stabilization of the price of silver, and to avoid so far as may be possible disturbances to the economy and public finances of China. Therefore, in conducting operations under the Silver Purchase Act this Government, while necessarily keeping within the general purposes of enactment, will give the closest possible attention to the possibilities of so arranging the time, the place and the quantity of its purchases as will keep in view the considerations put forward by the Chinese Government in its communication.²⁶

4. *The Chinese Export Duty on Silver*

On receipt of this communication, the Chinese Government apparently decided that it could hope for nothing more than kind words from the American Government, and immediately took action of its own. Following a twenty-four hour conference with his advisers, Minister Kung on Sunday, October 14, 1934, issued the following order:

In view of the undue rise of silver out of relation to the level of general commodity prices, the National Government, in order to safeguard China's economic interests and protect its currency, has fixed the customs duty on exports of silver, effective October 15, as follows:

On silver dollars and mint bars, 10 per cent, less 2 1/4 per cent minting charges paid, i. e., 7 3/4 per cent net.

On other forms of silver, 10 per cent (in lieu of 2 1/4 per cent).

In addition, an equalization charge will be imposed on exports of silver, equal to the deficiency, if any, existing between the theoretical parity of London silver and a rate of exchange officially fixed by the Central Bank of China, after making allowance for the export duty.²⁷

Dr. Kung also issued the following statement:

There is no reason to expect the forces which have been stimulating the price of silver abroad will soon cease to operate. Therefore, the Government, out of regard for the economic welfare of the people of China, have taken this measure as necessary to safeguard China's currency from a potentially dangerous strain on the country's reserves and to place a check upon the harsh deflationary forces which have been reflected in falling internal prices.

The measure has been determined upon after most careful consideration of various proposals for meeting the emergency, and after full consultation with

²⁶ *Ibid.*

²⁷ *North China Herald*, Vol. 193, Oct. 17, 1934, p. 82.

leaders of business and finance. Among these proposals an embargo has most frequently been suggested. The Government considers, however, that an embargo should not be imposed. It prefers a flexible duty that will restrain the exports of silver within limits actually required by the balance of payments.²⁸

Shanghai press reports added the following information:

The measure had been determined upon, said Dr. Kung, after most careful consideration of various proposals for meeting the emergency, and after full consultation with leaders of business and finance. . . .

Dr. Kung expressed assurance that the measure would allay misgivings that have lately disturbed the markets and by stabilizing the situation permit legitimate business to proceed with renewed confidence.

Dr. Kung, when asked concerning rumours about the possibility of reduction of the silver content of the dollar, stated that this subject had never been mentioned at any of the conferences and that he would not even consider such a proposal if made.²⁹

The Central Bank of China announced that it would

. . . notify to the Customs at 11:30 A.M. on every business day, beginning October 15, 1934, its official rate for determining the deficiency between the theoretical parity of London silver and the rate on London in Shanghai, in accordance with the terms of the Government order fixing the duty and imposing an equalization charge on exports of silver.³⁰

5. *The Computation of the Equalization Charge*

Since the London silver quotation is based on the standard ounce of 480 grains, 0.925 fine, it is in effect for 444 grains of fine silver. The Chinese standard dollar, 412 grains, 0.880 fine, contained 362.56 grains of fine silver. Therefore, the Chinese standard dollar contained $362.56/444 = 0.8166$ standard ounces. This figure was the theoretical parity constant.

The computation of the equalization charge may be illustrated by the following example:³¹ If on a certain day the price of silver in London were 25 pence per ounce, the silver in a Chinese standard dollar would be worth 0.8166×25 pence = 20.41 pence. This would be the day's parity of exchange, Shanghai on London, with no allowance for charges. The actual rate might be above or below parity, within the range set by shipping and other costs. Assuming that the exchange rate on the same day was 18 pence per Chinese dollar, we have the following computation:

²⁸ *New York Times*, Oct. 15, 1934.

²⁹ *North China Herald*, Vol. 193, Oct. 17, 1934, p. 82.

³⁰ *Ibid.*

³¹ The method is taken from E. Kann's example in *Finance & Commerce*, Vol. 24, Oct. 17, 1934, p. 428, but round numbers have been used for simplicity.

Theoretical parity of exchange	20.41 pence
Actual market rate of exchange	18.00 pence
Difference	<u>2.41 pence</u>
This difference, expressed as a percent- age of the market rate, was	13.39 per cent
Subtract export duty	<u>7.75 per cent</u>
Equalization charge was set at	5.64 per cent.

That is, the exporter had to pay a total duty of 7.75 per cent + 5.64 per cent = 13.39 per cent. If he exported C. S. \$1000., the total outlay was C. S. \$1,133.90, with no allowance for shipping and other costs. In return for this he got 1000×20.41 pence = 20,410 pence in London (provided he had fixed the price by a forward sale of silver by cable). On the other hand, he could have used his C. S. \$1,133.90 to buy a telegraphic transfer on London at the rate of 18.0 pence to the dollar, realizing exactly the same amount, 20,410 pence. By shipping silver, he would have lost exactly the amount of the various shipping and other costs, which, as pointed out in Chapter XXI, Section 9, amounted to at least 5 per cent.

The equalization charge, therefore, was a device which, in effect, put the export of silver dollars on the same basis as if the exchange rate were always exactly at parity with the London silver price; such a basis made the export of silver unprofitable to the extent of the costs involved. In the case of silver in forms other than standard silver dollars, there was the additional $2\frac{1}{4}$ -per-cent duty.

6. *The Effects of the Silver Export Duty*

The announcement of this plan upset the Shanghai exchange market, and rates dropped over 10 per cent in a few days.³² Thereafter, however, they became steadier, on a level from 10 to 15 per cent below the parity with the London or New York price of silver. Large sales of exchange by the Central Bank of China assisted in easing the situation.

The export duty on silver may be said to have taken China off the silver standard, although not to the same extent that American action had taken the United States off the gold standard. Silver still was obtainable for bank notes within China, but the lack of a free movement of the white metal between China and the rest of the world divorced the value of Chinese dollar from the world price of silver.

³² *Ibid.*, Vol. 24, Oct. 24, 1934, p. 458.

The next step taken by the Chinese Government was the appointment of an exchange stabilization committee, to be supplied with an equalization fund of C. S. \$100,000,000 with which to operate in order to keep exchange rates at the desired level.³³ This committee was composed of one representative each from the Central Bank of China, the Bank of China, and the Bank of Communications. It had the duty of fixing the daily equalization charge, and received the proceeds of that charge as a fund for its operations. It was authorized to make transactions in foreign exchange and bullion through the Central Bank of China, and to export and import bullion.

As pointed out above, the equalization charge applied as planned would have made the export of silver unprofitable. For the first few days this policy was carried out, but thereafter it was relaxed.³⁴ For example, the market opening rates of exchange on London were about 22 per cent below parity during the last week in October, which would have indicated an equalization charge of about 14 per cent. Actually it was set at about 8 per cent; this left a 6-per-cent margin, just about sufficient to cover shipping and other costs.³⁵

7. *The Export of Silver*

After the imposition of the duty and equalization charge, exports of silver fell off sharply. In October they amounted to C. S. \$57,000,000 but dropped to about C. S. \$12,000,000 per month in November and December. The year ended with a recorded net total of C. S. \$260,000,000 exported from China. Of this C. S. \$221,000,000 came from the foreign banks, reducing their stocks to C. S. \$55,000,000, the lowest level in ten years. It would seem, therefore, that the movement must have liquidated to a very large extent the excess balances which had accumulated in these banks pending more certainty about silver prospects.

After the beginning of 1935 recorded exports of silver practically ceased. In February the Ministry of Finance decreed that silver might be imported in consignments of not less than 500,000 ounces, under arrangements whereby it might be re-exported free of duty (except for the regular $2\frac{1}{4}$ per cent) and equalization charge.³⁶ It was hoped that this might encourage imports of silver which would

³³ *North China Herald*, Vol. 193, Oct. 24, 1934, p. 138; also, Oct. 31, 1934.

³⁴ *Finance & Commerce*, Vol. 24, Nov. 7, 1934, pp. 507 (E. Kann), 513; Nov. 14, 1934, p. 540.

³⁵ Computations by the writer.

³⁶ *North China Herald*, Vol. 194, Feb. 20, 1935, p. 290; *Finance & Commerce*, Vol. 25, Feb. 20, 1935, pp. 197-198.

ease the monetary situation. Actually about C. S. \$11,000,000 of silver was imported during 1935.

In April the Ministry of Finance announced that it had secured the co-operation of the Chinese and foreign banks for the stabilization of the monetary situation.³⁷ This "gentlemen's agreement" thereafter was the chief factor in preventing exports of silver, which, during the first eleven months of 1935, amounted to only some C. S. \$3,000,000 according to the Customs returns. The equalization charge was set at a nominal figure, which in itself would not have prevented exports. It was, however, to the interest of all the banks to avoid exports of the white metal, because of the effects on the money market and general business confidence.

Annual net exports of silver, including those recorded by the Customs and estimates of smuggling, are shown in Table 18; and the recorded monthly figures are given in Appendix XVI. The recorded exports after 1934 were almost entirely on government account.

TABLE 18
NET EXPORTS OF SILVER FROM CHINA, 1933-1938

	Recorded	Smuggled (estimate)	Total	Total
	Millions of Chinese dollars			Millions of fine ounces
(1)	(2)	(3)	(4)	(5)
1933	14	.....	14	11
1934	260	20	280	211
1935	59	230	289	218
1936	250	40	290	219
1937	398	.....	398	300
1938 (10 mos.)	80	.....	80	60
1939	.....	.....	.....	.....
1940	.....	.....	.....	.....

SOURCES

(2) China, *The Maritime Customs, The Trade of China, 1937, Vol. I (Part 1)*, p. 193; 1938 figures from monthly Customs reports as reprinted in *Finance & Commerce*.

(3) 1934, 1935: Bank of China, Report for 1935, in *Finance & Commerce, Vol. 27, Apr. 8, 1936, p. 392*; 1936, Bank of China, Report for 1936, in *ibid., Vol. 29, Apr. 7, 1937, p. 369*. Estimates by Eduard Kann are \$80,000,000 lower for 1935 and \$10,000,000 lower for 1936; he considers that there was no smuggling worth considering in 1937 because it would not have been profitable (*ibid., Vol. 31, Feb. 23, 1938, p. 149*).

(4) = Sum of (2) and (3).

(5) = (4) × 0.755 fine ounces, the silver content of the Chinese dollar.

8. *Smuggling of Silver out of China*

The great spread between the value of silver in China and its world value, discussed below, made it highly profitable to smuggle the

³⁷ *North China Herald, Vol. 195, May 1, 1935, p. 166; Finance & Commerce, Vol. 25, Apr. 24, 1935, p. 472.*

white metal out of the country. Abnormal movements of silver from Shanghai to southern coast ports obviously were intended for smuggling across to Hong Kong. In the North it was comparatively easy to take silver to Japan by steamer or to Manchoukuo by rail. Estimates of silver smuggled from China during 1935 range from C. S. \$150,000,000 to C. S. \$230,000,000 or from 112,000,000 fine ounces to 172,000,000 fine ounces.³⁸

To prevent smuggling, the Government took various measures. The Ministry of Finance issued regulations restricting the movement of silver within the country except under permit.³⁹ Various restrictions were placed by provincial governments.⁴⁰ Travellers and crews of foreign ships were also subject to limitations. In May the Executive Yuan imposed penalties on smuggling, according to degree of the offense, ranging from imprisonment for not less than 5 years to death.⁴¹

The prevention of smuggling was made difficult, however, by the fact that it could be carried on with impunity by Japanese subjects, including Koreans, who were not subject to Chinese law. Numerous cases of this kind were reported,⁴² and probably far more cases were undetected. In December, 1935, however, the Japanese authorities began to take action to prevent their nationals from engaging in this traffic, both in North China and in Shanghai.⁴³

9. *The Exchange Value of the Chinese Dollar*

Table 19 and Chart 11 show the course of Chinese exchange compared with the price of silver before and after the imposition of the export tax, and also the Shanghai export price index number.

The scale at the left of Chart 11 represents the price of silver, in cents per ounce, or the index number of export prices with 1926 = 100. Since the Chinese standard silver dollar (and its predecessors, such as the Mexican dollar and various Chinese issues) contained approximately three-quarters of an ounce of fine silver, its parity was approximately 0.75 times the price of silver. The scale at the right-

³⁸ *Finance & Commerce*, Vol. 27, Apr. 1, 1936, p. 359 (E. Kann); Apr. 8, 1936, p. 392 (Bank of China).

³⁹ *North China Herald*, Vol. 194, Jan. 2, 1935, p. 2; *Finance & Commerce*, Vol. 24, Dec. 26, 1934, p. 704.

⁴⁰ *North China Herald*, Vol. 193, Oct. 31, Nov. 21, Dec. 12, 1934; Vol. 195, May, 8, 1935.

⁴¹ *Finance & Commerce*, Vol. 25, May 29, 1935, p. 613.

⁴² *North China Herald*, Vol. 196, July 17, 1935, p. 94; Aug. 21, 1935, p. 298; Vol. 197, Oct. 9, 1935, p. 53; Nov. 27, 1935, p. 353.

⁴³ *Ibid.*, Vol. 197, Dec. 4, 1935, pp. 390, 395; Dec. 11, 1935, p. 438; Dec. 18, 1935, pp. 465, 477.

TABLE 19

PRICE OF SILVER, EXCHANGE RATE, AND SHANGHAI EXPORT PRICES

Date	Price of Silver	Shanghai Export Prices	Date	Price of Silver	Exchange Rate	Shanghai Export Prices
	U.S. Cents per oz.	1926=100		U.S. Cents per oz.	U.S. Cents	1926=100
(1)	(2)	(4)	(1)	(2)	(3)	(4)
1901	59.7	-----	1934			
1902	52.8	-----	Jan.	44.2	33.6	71.8
1903	54.2	-----	Feb.	45.2	34.0	74.2
1904	57.8	-----	Mar.	45.9	34.3	71.3
1905	61.0	-----	Apr.	45.2	34.0	68.2
			May	44.2	32.2	69.7
1906	67.4	-----	June	45.2	32.8	71.8
1907	66.0	-----	July	46.3	33.7	70.9
1908	53.5	-----	Aug.	49.0	34.7	74.2
1909	52.2	-----	Sept.	49.5	35.3	71.5
1910	54.2	-----	Oct.	52.4	34.4	70.3
			Nov.	54.3	33.0	72.0
1911	54.0	-----	Dec.	54.4	33.7	75.3
1912	62.0	-----				
1913	61.2	-----	1935			
1914	56.3	-----	Jan.	54.4	34.5	77.2
1915	51.1	-----	Feb.	54.6	36.1	78.0
			Mar.	59.0	38.0	74.9
1916	67.2	-----	Apr.	67.8	38.5	74.7
1917	84.0	-----	May	74.4	41.0	75.0
1918	98.4	-----	June	71.9	40.4	70.4
1919	112.1	-----	July	68.2	38.8	71.0
1920	101.9	-----	Aug.	66.4	36.5	74.7
			Sept.	65.4	36.9	75.4
1921	63.1	-----	Oct.	65.4	35.5	80.6
1922	67.9	-----	Nov.	65.4	29.6	89.6
1923	65.2	-----	Dec.	58.4	29.5	90.0
1924	67.1	-----				
1925	69.4	-----	1936			
			Jan.	47.3	29.5	90.8
1926	62.4	100.0	Feb.	44.8	29.9	90.2
1927	56.7	106.1	Mar.	44.8	29.9	92.4
1928	58.5	104.5	Apr.	44.9	29.8	97.3
1929	53.3	105.2	May	44.9	29.8	94.5
1930	38.5	108.3	June	44.8	29.8	97.5
			July	44.8	29.8	100.7
1931	29.0	107.5	Aug.	44.8	29.9	97.6
1932	28.2	90.4	Sept.	44.8	29.9	95.9
1933	35.0	82.0	Oct.	44.8	29.5	96.1
			Nov.	45.4	29.5	97.1
			Dec.	45.4	29.4	102.9

SOURCES

(2) Annual figures from Annual Report of the Director of the Mint . . . 1937, p. 86; monthly figures from Handy & Harman, Review of the Silver Market, 1934, p. 45; *ibid.*, 1935, p. 54; *ibid.*, 1936, p. 34.

(3) Bank of China, Financial and Commercial Monthly Bulletin, various issues.

(4) Prices and Price Indexes in Shanghai, various issues.

hand side has been constructed on this basis: that is, the mark for 100, representing cents per ounce is labelled 75, representing cents per Chinese standard silver dollar, and so on.

The solid line shows the price of silver in New York, and may be read in cents per ounce from the left-hand scale; or it may be taken to represent the parity of exchange of the Chinese dollar, if read from the right-hand scale. No attempt is made to show the actual exchange rates for the period prior to 1934, because they were usually very close to the parity. From the beginning of 1934 the dotted line, which should be read from the right-hand scale, shows the actual exchange rate in Shanghai on New York. Since the chart is drawn on a ratio grid, the percentage by which the exchange rate falls below

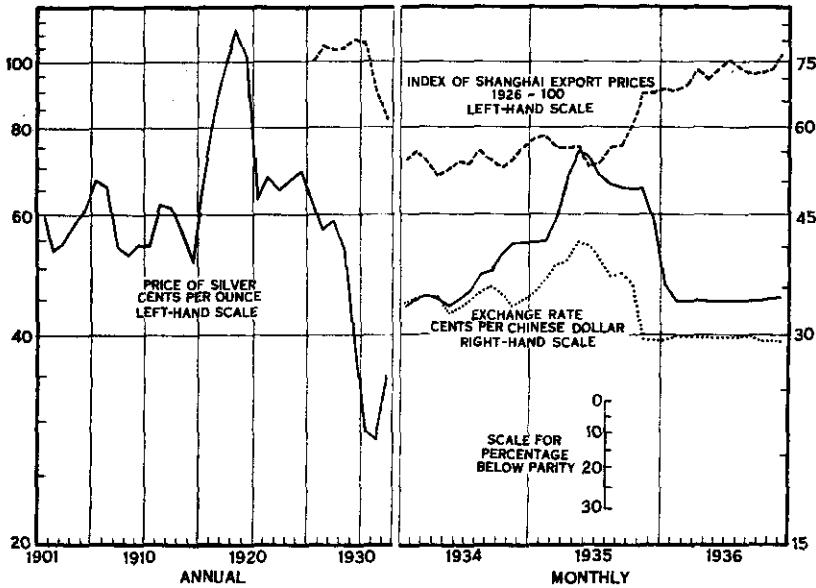


CHART 11.—PRICE OF SILVER, EXCHANGE RATE OF CHINESE DOLLAR, AND INDEX OF SHANGHAI EXPORT PRICES, 1901-1936

parity is equal to the distance between the two curves, regardless of the level of the parity curve, and may be read against the scale provided.

It is evident from the chart that the exchange rate fell below parity in the summer of 1934 by about 5 per cent, enough to balance shipping costs and make export of the white metal possible. In the autumn the discount increased after the imposition of the duty and equalization charge. The gap gradually narrowed during the winter, but with the rapid rise of silver in the spring of 1935, the exchange rate dropped to about 25 per cent below parity. The equalization charge was not set high enough to correspond to this discount, and exports of silver were prevented only by the co-operation of the banks.

10. Money Stringency in Shanghai

The great drain of silver from Shanghai left the financial center of China with an inadequate supply of cash upon which to base its credit structure. During the years of large silver stocks, credit had been easy to obtain and interest rates had been low, but in the latter part of 1934 interest rates rose rapidly and moreover bank loans were difficult to secure at almost any price.

The increase in the exchange value of the Chinese dollar and the potential further increase acted to lessen the value of Shanghai real estate, because there was always a tendency, especially among foreigners, to think of real-estate prices in terms of American dollars or sterling. Since most banks had loaned rather heavily on real estate, they were anxious to reduce old loans and unwilling to make new ones. There were no purchasers, so that banks and individuals found themselves with frozen assets on their hands. The failures of several Chinese banks and of an American bank and associated real-estate companies in the spring of 1935 were precipitated by the financial stringency. Fundamentally, however, these institutions probably had not taken adequate precautions against the adverse effects of rising exchange, which at least had been a possibility to be considered for many months before the American legislation was passed. In the case of the American bank and its affiliates, the subsequent trial and conviction of two of its officers brought out evidence of fraud.⁴⁴

The rise of the price of silver in the spring of 1935 accentuated

⁴⁴ For Chinese bank difficulties see the following references in 1935: *North China Herald*, Vol. 195, May 29, p. 338; June 5, p. 394; June 12, p. 428; June 19, p. 484; June 26, pp. 512, 527; Vol. 196, July 3, p. 11; July 10, p. 67; Aug. 7, p. 230; Sept. 11, p. 416; Sept. 18, pp. 460, 462, 472; Vol. 197, Oct. 16, pp. 103, 105; Oct. 23, p. 153; Oct. 30, p. 194.

The failure of the American-Oriental Banking Corporation and associated companies is only incidentally connected with the subject of silver money. For those who are interested in tracing the history of a very regrettable incident in American business in China, the following references to investigations and court proceedings are given: In 1935, *North China Herald*, Vol. 195, May 29, p. 338; June 5, pp. 372, 375, 394, 398; June 12, pp. 420, 428, 436, 441; June 19, pp. 462, 485, 488; June 26, pp. 506, 527, 530; Vol. 196, July 3, pp. 1, 16; July 10, p. 54; July 24, pp. 129, 139; July 31, pp. 169, 179; Aug. 7, p. 221; Aug. 21, p. 304; Aug. 28, pp. 341, 358; Sept. 4, pp. 383, 392; Sept. 11, pp. 423, 433; Sept. 18, p. 463; Sept. 25, p. 512; Vol. 197, Oct. 2, pp. 16, 24, 31; Oct. 23, p. 162, 163; Oct. 30, pp. 202, 210; Nov. 6, p. 248; Dec. 4, p. 409.

Also in 1936, Vol. 198, Jan. 1, p. 28; Jan. 8, pp. 55, 65, 66; Jan. 15, pp. 106-108; Jan. 22, pp. 149-151; Jan. 29, pp. 190-192; Feb. 5, pp. 209, 233-236; Feb. 12, pp. 280, 281; Feb. 19, pp. 311, 323; Feb. 26, p. 365; Mar. 11, pp. 441, 448, 455; Mar. 18, p. 500; Vol. 199, April 1, p. 32; Apr. 22, p. 161; May 6, pp. 224, 234, 237; May 13, p. 291; May 20, p. 339; May 27, p. 381; June 10, p. 465; June 17, p. 492; Vol. 200, July 1, p. 33; Aug. 5, p. 243; Aug. 12, p. 287; Vol. 201, Oct. 14, p. 60; Dec. 2, p. 363; Dec. 16, pp. 448, 462.

Also in 1937, Vol. 202, Jan. 13, p. 73; Mar. 3, p. 378; Mar. 24, p. 503; Vol. 203, May 26, p. 333; Vol. 204, Sept. 8, p. 383.

the difficulties of the situation, but these were somewhat relieved when Chinese exchange turned downward after May, as shown in Chart 11. The effects of the actual and the possibilities of a further rise in the price of silver, however, were beginning to turn informed opinion in favor of some measure of devaluation, which had been looked at askance a year before.⁴⁵ It had become more a question of the best method of bringing about a change in the currency standard, rather than whether there should be a change.

11 *The Course of Export Prices*

The Chinese Government, in accord with general banking and commercial opinion, objected to the artificial rise in silver and exchange because of the deflationary effect which it was expected to have on the Chinese price structure and on the export trade. All Chinese price index numbers had declined from about the middle of 1931 to about the middle of 1934, by an average of around 25 per cent. For the next year, however, they did not show any decided movement in either direction, but fluctuated in the neighborhood of the 1934 average.

The Shanghai index number of export prices, shown in Table 19 and Chart 11, had, if anything, a slight upward tendency for nearly a year after the passage of the Silver Purchase Act. With world commodity prices showing only a slight improvement, and with Chinese exchange showing a rise of about 20 per cent in the same period, Chinese export prices might have been expected to drop at least 10 or 15 per cent. That they did not may have been the result of special forces of demand for some Chinese commodities, which caused their world prices to rise above the general level. For example, in January, 1935 exports of peanuts and sesamum seed to the United States increased greatly, because of the demand for oils due to the AAA policy which had reduced the production of lard and cottonseed oil.⁴⁶

The maintenance of the price level, however, was possible only because the Chinese dollar, except in May and June, was held below 40 cents, U. S. currency, or about 25 per cent below parity with the world price of silver. If the Chinese dollar had been allowed to rise to parity, undoubtedly commodity prices would have fallen. The export tax on silver was at best a temporary makeshift, but it served to protect China from the worst consequences of a rising price of silver.

⁴⁵ *Finance & Commerce*, Vol. 25, Apr. 17, 1935, p. 437; May 29, 1935, pp. 605-606.

⁴⁶ *Ibid.*, Vol. 25, March 6, 1935, p. 257.

12. Governmental Monetary Policy

From time to time during the year following October, 1934 rumors arose that further action concerning silver was contemplated by the Chinese Government, such as nationalization of silver or devaluation of the silver dollar. All such rumors led to official denials.

At the end of December, 1934, in an interview in Shanghai, Mr. Wang Ching-wei, chairman of the Executive Yuan and Minister of Foreign Affairs, stated that such rumors came from speculators or from ignorant persons. He pointed out that, since the great bulk of the silver in China was in the hands of the public, there was nothing to be gained by nationalization or by decreasing the content of the dollar, and that the Government would on no account consider such impracticable measures.⁴⁷

On February 2, 1935 the Government appointed a Monetary Advisory Committee of some fifteen prominent bankers to advise the National Government on the currency situation, the stabilization of exchange, the improvement of China's balance of international payments, the financing of internal trade and industry, and other matters.⁴⁸

In his address to the first meeting of this committee, Dr. Kung said it was necessary

. . . to ensure that the structure we propose to create shall be suited to the foundations from which we must work. A blind imitation of the plans and devices adopted in other countries will not serve our purpose, because conditions in China vary so greatly from those existing elsewhere, and because we have still so much to do in constructing and strengthening the basis of our economic organization, . . .

Responsible leaders of the National Government have recently, on more than one occasion, indicated in their public pronouncements that they place no reliance on cheap remedies as a means of solving the fundamental problems with which our country is now faced, and we have no wish to adopt extreme measures that may undermine public confidence and create a situation in which the country's economic reconstruction and development would be retarded. At the same time we recognize that there is room for considerable improvement in the currency and financial organization of China. Trade within the country is still handicapped by the difficulties of financing and making payments to producers and merchants in different parts of the country.

It is necessary that we should improve the system of note issue so as to secure a more uniform and stable currency over a wider area. In addition, we must develop banking facilities by establishing better machinery for the financing of internal trade, through the provision of adequate storage accommodation

⁴⁷ *North China Herald*, Vol. 193, Dec. 26, 1934; *Finance & Commerce*, Vol. 24, Dec. 26, 1934, p. 701.

⁴⁸ *North China Herald*, Vol. 194, Feb. 6, 1935, p. 202; *Finance & Commerce*, Vol. 25, Feb. 6, 1935, p. 142.

for agricultural products and the development of the system of discounting trade bills.⁴⁹

At about the same time the Government attempted to attract miscellaneous old silver jewelry, ornaments, and utensils, by arranging with the Central Bank to redeem these at their full value in standard silver dollars.⁵⁰ Unlike the market for old gold in England, India, and the United States, this offered no particular premium to the holders of the white metal, but merely assured them its full value without any deduction which a silversmith might make. Accordingly it was not expected that it would attract any great quantity of the white metal, but it was considered a worth-while experiment.⁵¹

On March 1, in an interview at Hankow, Dr. Kung again denied that there was any change in the Government's policy regarding China's monetary problems. He made a similar denial on March 7.⁵²

On March 2 the Executive Yuan presented a petition to the Central Political Council for a definition of the Government's policy concerning the monetary standard. The petition suggested that to maintain the monetary standard three fundamentals must be assured; free convertibility of paper currency, free coinage of standard currency, and free import and export of silver. Without these, the existing standard would have to be abandoned.⁵³

In March there were rumors of a loan to China by Great Britain, or by a group of nations. Various noncommittal official statements were issued.⁵⁴ Apparently there had been some negotiations between China and other governments. The publicity represented trial balloons, of which little more was heard.

In April the Government took steps for the reorganization of the three principal banks. The government ownership in the Bank of China was increased from a minority to 60 per cent and there were to be four government appointees among the seven members of the standing committee of the board of directors.⁵⁵ In the Bank of Communications government ownership was increased from 20 to 60 per cent, and government directors added.⁵⁶ Additions were made to the

⁴⁹ *North China Herald*, Vol. 194, Feb. 20, 1935, p. 290; *Finance & Commerce*, Vol. 25, Feb. 20, 1935, p. 197.

⁵⁰ *North China Herald*, Vol. 194, Feb. 20, 1935, p. 302.

⁵¹ *Finance & Commerce*, Vol. 25, Feb. 20, 1935, p. 199.

⁵² *North China Herald*, Vol. 194, Mar. 6, 1935, p. 378; Mar. 13, 1935, p. 419.

⁵³ *Ibid.*, Vol. 194, Mar. 6, 1935, p. 378; *Finance & Commerce*, Vol. 25, Mar. 6, 1935, p. 259.

⁵⁴ *North China Herald*, Vol. 194, Mar. 13, 1935, p. 402; *Finance & Commerce*, Vol. 25, Mar. 13, 1935, p. 286.

⁵⁵ *North China Herald*, Vol. 195, Apr. 3, 1935, p. 2; *Finance & Commerce*, Vol. 25, Apr. 3, 1935, p. 382.

⁵⁶ *North China Herald*, Vol. 195, Apr. 24, 1935, p. 126.

directorates and to the capital of the Central Bank of China, of which the Government remained sole owner.⁵⁷

These changes were ostensibly to ensure the fullest co-operation between the three banks and the Government.⁵⁸ Mr. T. V. Soong, former Finance Minister, who became chairman of the board of directors of the Bank of China, stated:

It is the purpose of the Government to make the Central Bank a "banker's bank," the Bank of China a foreign trade bank, and the Bank of Communications a bank specializing in industrialization. It will be the aim of the Bank of China to avoid competition with the Central Bank of China, so far as Government business is concerned. The Bank of China will direct its attention entirely towards business, devoting itself especially to the assistance of the export trade.⁵⁹

13. *The Mission of Sir Frederick Leith-Ross*

In June, 1935 it was announced in London that Sir Frederick Leith-Ross, Chief Economic Adviser to the British Government, would leave for China in August to inquire into all relevant questions affecting the Chinese financial situation. It was intimated that he might go via America, and Secretary of State Cordell Hull issued a statement which might be taken as an invitation to him to confer at Washington.⁶⁰

The proposed visit gave rise to numerous rumors in China, but it was reiterated that it was merely a mission of investigation.⁶¹ Sir Frederick did not go to Washington, but stopped in Japan where he had an interview with the Foreign Minister.⁶²

Sir Frederick arrived in Shanghai on September 21.⁶³ In welcoming him Dr. Kung stated that a visit from a French financial expert was expected, and that he hoped that Japan, the United States, and other friendly powers would send similar experts to study Chinese problems.⁶⁴

A fresh crop of rumors sprang up after his arrival, but Sir Frederick limited his public utterances to generalities, stating that China needed peace, stability, and trade, and that an efficient administration would restore prosperity to the country.⁶⁵

⁵⁷ *Ibid.*, Vol. 195, Apr. 3, 1935, p. 2.

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*, Vol. 195, Apr. 17, 1935, p. 98.

⁶⁰ *Ibid.*, Vol. 196, July 3, 1935, p. 10; *New York Times*, June 28, 29, 1935.

⁶¹ *North China Herald*, Vol. 196, Aug. 14, 1935, p. 249; Sept. 11, 1935, p. 413.

⁶² *Ibid.*, Vol. 196, Sept. 11, 1935, p. 419; Sept. 18, 1935, p. 458.

⁶³ *Ibid.*, Vol. 196, Sept. 25, 1935, p. 509.

⁶⁴ *Ibid.*, Vol. 197, Oct. 2, 1935, p. 15.

⁶⁵ *Ibid.*, Vol. 197, Oct. 9, 1935, p. 59; Oct. 16, 1935, p. 93.

14. *The Shanghai Exchange Market in the Autumn of 1935*

During the summer of 1935 the Shanghai exchange market showed uncertainty, which was reflected in the wide difference between rates for cash and for forward delivery, or the equivalent of very high interest rates for funds employed in legitimate hedging operations in the course of ordinary business. The Central Bank at one time attempted to cut down this spread, but found its resources insufficient.⁶⁶

There was also a political element in the exchange market. Persistent rumors of government action affected the rates. There was a "political group" of speculators, who were reputed to have inside information, and who in any event were making money.⁶⁷ By the beginning of October it appeared that this group was expecting lower rates.⁶⁸

A speech by Dr. Kung on October 10, the Chinese National Holiday, emphasized the evils of the current high exchange, and gave the impression that the Government was working towards some plan of lowering it.⁶⁹ Rates continued to drop, with minor reactions.⁷⁰ Differences between cash and forward exchange rates were equivalent to as high as 35 per cent per annum.⁷¹ Everyone was buying foreign exchange, few wanted to sell. Rumors of Government plans increased.⁷² The situation during the latter half of October was upsetting to regular business, where exchange contracts had to be made in ordinary course. The exchange rate on New York dropped from 37 $\frac{5}{16}$ cents on October 1 to 30 $\frac{1}{4}$ cents on October 31 and on London from 1s. 6 $\frac{1}{4}$ d. to 1s. 2 $\frac{3}{4}$ d. during the same period.

By the beginning of November the market was demoralized and the time was ripe for action.

⁶⁶ *Finance & Commerce*, Vol. 26, Aug. 7, 1935, p. 147.

⁶⁷ *Ibid.*, Vol. 26, Aug. 21, 1935, p. 196.

⁶⁸ *Ibid.*, Vol. 26, Oct. 2, 1935, p. 354.

⁶⁹ *Ibid.*, Vol. 26, Oct. 16, 1935, p. 403.

⁷⁰ *Ibid.*, Vol. 26, Oct. 23, 1935, pp. 436-437.

⁷¹ *Ibid.*, Vol. 26, Oct. 30, 1935, p. 462 (E. Kann).

⁷² *Ibid.*, Vol. 26, Oct. 30, 1935, p. 464.

CHAPTER XXIX

THE ABANDONMENT OF THE SILVER STANDARD BY CHINA

With all my will, but much against my heart,
We two now part,
My Very Dear,
Our solace is, the sad road lies so clear.
COVENTRY PATMORE, *A Farewell*

1. *The Chinese Currency Reform of November 4, 1935*

On Sunday, November 3, 1935, Dr. H. H. Kung, Minister of Finance, made the following announcement:

In order to conserve the currency reserves of the country and to effect lasting measures of currency and banking reform, the Government, following the precedent of many countries in recent years, has decreed, with effect from November 4, 1935, as follows:

1. The banknotes issued by the three Government banks, i.e., The Central Bank of China, The Bank of China, and The Bank of Communications, shall be full legal tender, and the banknote reserves of the three banks shall be placed under a unified control. The notes of all other issuing banks will continue in circulation, but will gradually be withdrawn and replaced by notes of The Central Bank. No new notes are to be issued by these banks and all their unissued notes, as well as their bank note reserves are to be deposited with the Central Bank.

2. All debts expressed in terms of silver shall be discharged by the payment in legal tender notes of the nominal amount due.

3. All holders of silver are required to exchange their silver for legal tender notes.

4. The exchange value of the Chinese dollar will be kept stable at its present level, and for this purpose the Government banks will buy and sell foreign exchange in unlimited quantities.

The Government-owned Central Bank is to be reorganized as the Central Reserve Bank of China and will be owned principally by banks and the general public, thus becoming an independent institution, devoting itself chiefly to maintaining the stability of the nation's currency. The Central Reserve Bank of China will hold the reserves of the banking system and act as depository of all public funds and will provide centralized rediscount facilities for the other banks. The Central Reserve Bank of China will not undertake general commercial business, and after a period of two years will enjoy the sole right of note issue.¹

The announcement also stated that plans were being made for

¹ *North China Herald*, Vol. 197, Nov. 6, 1935, p. 222; *Finance & Commerce*, Vol. 26, Nov. 6, 1935, p. 487.

strengthening the commercial banking system, and for balancing the national budget within a period of eighteen months in order to avoid the danger of inflation. A Currency Reserve Board was to be created to control the issue and retirement of legal-tender bank notes and to have custody of the reserves. To carry out the purpose of keeping exchange stable at its current level the three government banks would buy and sell foreign exchange in unlimited quantities.²

2. Reception of the Reform

The announcement met with general approval in both Chinese and foreign circles in Shanghai.³ Two years of uncertainty over the silver situation, with price deflation, export of silver, and great monetary stringency, had brought to China its full experience of the world depression. These conditions had led gradually to a widespread desire for reform of some kind. In 1934 it had seemed doubtful whether a devaluation of the currency was either practicable or desirable. By the autumn of 1935, however, opinion was swinging more in that direction. While there might be some doubts as to the success of the announced plan, it seemed more promising than inaction.

Therefore it is not surprising that the mercantile and financial community, both Chinese and foreign, welcomed the action of the Government. As described below, British merchants informally and the British Consul-General officially approved the use of legal-tender paper in lieu of silver money. The immediate foreign willingness to co-operate with the Chinese Government was almost unprecedented in Sino-foreign relations.

The one exception was the attitude of the Japanese Government. Apparently it was taken by surprise by the sudden promulgation of the plan, and saw therein a deep British plot, engendered by Sir Frederick Leith-Ross, to extend British financial control in China to the detriment of Japan.⁴ In December the Japanese Commercial Association of Shanghai, comprising the small and medium-sized Japanese shops, voted to adopt the yen currency for their transactions.⁵ A Japanese credit union also decided to collect rents in yen.⁶ Although such action involved chiefly transactions among Japanese nationals, they aroused protests from Chinese who considered it an interference

² *North China Herald*, Vol. 197, Nov. 6, 1935, p. 242.

³ *Ibid.*, Vol. 197, Nov. 6, 1935, pp. 225, 235; Dec. 11, 1935, p. 443; *China Press*, Nov. 4, 1935; *Finance & Commerce*, Vol. 27, Nov. 6, 1935, pp. 485-86.

⁴ *North China Herald*, Vol. 197, Nov. 27, 1935, p. 349.

⁵ *Ibid.*, Vol. 197, Dec. 18, 1935, p. 479.

⁶ *Ibid.*, p. 482.

with the unification of Chinese currency.⁷ Eventually, however, the Japanese accepted the new conditions.

3. *The Mechanism of the New Currency System*

The new system was essentially a managed currency, with the Chinese dollar unit no longer based on silver, but to be kept fixed in terms of foreign exchange. The rate announced was 1s. 2 $\frac{3}{4}$ d. sterling or 29.5 cents U. S. currency. It was not made clear whether the Chinese dollar was to be pegged to sterling or to the American dollar; after the adoption of the reform, however, the cross rate between New York and London fluctuated within limits narrow enough so that the Chinese Government did not have to decide which currency to follow.

To keep the exchange value of the currency up to the pegged value, the government banks had to be always able and ready to sell foreign exchange at close to the fixed rate in return for their own notes. Fortunately the Central Bank was able to take over large amounts of foreign exchange which had been overbought by speculators during October, and so accumulated a fund of around £10,000,000 in foreign currencies against which it could sell exchange.⁸ Moreover, it could realize further sums at any time by the sale of silver abroad, so long as the United States should continue to support the market.

To keep the exchange value of the currency down to the fixed rate, the banks had only to be ready to buy foreign exchange when it was offered. This could always be done by the issuance of new notes, since the exchange itself would be ample reserve.

The notes of the government banks had been backed by a reserve of 60 per cent in silver and 40 per cent in securities. The current price of silver was 65 $\frac{3}{8}$ cents U. S. currency per ounce, a level which had been maintained since August and which had come to be looked on as fairly stable; at least there was little expectation that the American Treasury could allow it to drop without vigorous protests from the silver bloc. At that price, the Chinese silver dollar of about 0.76 fine ounces had a bullion value of about 50 cents U. S. currency. The 60-per-cent metallic reserve against a \$1.00 note was, therefore, worth 0.60×50 cents = 30 cents U. S. currency, or approximately the level at which exchange was pegged. Thus the metallic reserve was raised automatically from 60 per cent to 100 per cent, while the remaining 40-per-cent reserve in securities was an extra safeguard. China, in effect, made a considerable book profit in the revaluation of her cur-

⁷ *Ibid.*, Vol. 198, Jan. 8, 1936, p. 57.

⁸ *Finance & Commerce*, Vol. 26, Nov. 20, 1935, p. 548; Dec. 11, 1935, p. 635.

rency, just as the United States did in reducing the gold content of the dollar.

4. *Regulations Regarding Silver*

The Government later in November issued regulations governing the exchange of silver for legal-tender notes. These ordered the delivery of all silver, except that required for use in arts or manufactures under special regulations, ancient or rare silver coins, and silverware or silver ornaments made or owned before the promulgation of the regulations. Blackmail of holders of silver and paying of premium for silver dollars were made punishable offenses.⁹

At the same time regulations were issued governing the use of the white metal for silverware. Silversmiths were to be limited to using silver 0.300 fine in their manufactures. They were to purchase silver from the government banks and were to be allowed a quota of only 30 per cent of the average quantity sold for the past three years. They were to make regular reports of inventory.¹⁰

The silversmiths held a meeting to protest against these regulations. Their former standard had been 0.880 fine, and they pointed out that silverware only 0.300 fine would be easily breakable, and that it would be impossible to carve it. They asked the Chinese General Chamber of Commerce to petition the Ministry of Finance to reconsider the matter.¹¹ Eventually, on May 17, 1936, Dr. Kung announced the removal of these restrictions.¹²

5. *Effects of the Fall in the Price of Silver in December and January*

The cessation of American support of the price of silver in December gave rise to rumors that the Chinese government banks were making large sales of the white metal in London. A government spokesman denied that such sales had been made or that any part of the silver stocks had been shipped abroad.¹³

On December 20, however, a shipment of about 10,000,000 ounces was made to the United States and a similar one followed on December 23. It was stated that this represented a sale by the government banks to the Chase National Bank and the National City Bank of New York to provide additional reserves for exchange stabilization.¹⁴

⁹ *North China Herald*, Vol. 197, Nov. 20, 1935, p. 323.

¹⁰ *Ibid.*

¹¹ *Ibid.*, Vol. 197, Nov. 27, 1935, p. 353.

¹² *Finance & Commerce*, Vol. 27, May 20, 1936, p. 562.

¹³ *North China Herald*, Vol. 197, Dec. 18, 1935, p. 488.

¹⁴ *Ibid.*, Vol. 197, Dec. 25, 1935, p. 526.

These banks, of course, were purchasing for the United States Treasury. Another shipment left on January 7, 1936.¹⁵

The United States Treasury at first refused to confirm that it had purchased silver from the Chinese Government,¹⁶ although it later admitted that it had purchased 50,000,000 ounces.¹⁷ These shipments gave rise to exaggerated rumors that the United States had purchased 500,000,000 ounces. Dr. Kung denied this, but stated that during the first 11 months of 1935 (presumably in November) the United States had purchased 20,000,000 ounces, and in December an additional 30,000,000 ounces.¹⁸

The fall in the price of silver of about 30 per cent between December 9, 1935 and January 20, 1936 caused the Chinese Government, which controlled perhaps 500,000,000 ounces of silver, a paper loss of about \$100,000,000 U. S. currency, by reducing to that extent the value of the silver reserve behind the bank notes, and destroyed any hopes that it may have had of disposing of the whole stock at the higher price.

Nevertheless, China got the benefit of the 65-cent price on the 50,000,000 ounces sold to the American Treasury. The proceeds of this sale, together with earlier acquisitions of foreign exchange, were sufficient for the immediate needs of an exchange fund.

Moreover, since the new level of the silver price, 45 cents per ounce, was only a little above the 40-cent-per-ounce bullion parity of the 30-cent exchange rate, the margin of profit on smuggling the white metal out of China was reduced greatly. Thus the program of nationalizing silver was facilitated, and if there should be any subsequent rise in the price, the Government might have a greater stock of silver on which to profit.

6. *Progress of the Nationalization of Silver*

To nationalize silver in China naturally was a much more difficult undertaking than to nationalize gold in the United States, where most of the gold was already in the banks and the Treasury. In China, considerably more than half of the silver was in circulation among the people, some of it hoarded. Although notes had come to circulate over an increasing area during recent years, experience in almost every region at some time with depreciated notes created a certain prejudice in favor of hard silver for hoarding purposes. For over a year

¹⁵ *Ibid.*, Vol. 198, Jan. 8, 1936, p. 60.

¹⁶ *Ibid.*

¹⁷ *New York Times*, Feb. 14, 1936.

¹⁸ *North China Herald*, Vol. 198, Jan. 22, 1936, p. 146.

in the coast provinces it had been profitable to smuggle silver out to Hong Kong or Japan. Nevertheless, a serious attempt was made to enforce the nationalization order, and supplies of the white metal gradually dribbled in to the banks.¹⁹

A Customs notification of December 11, 1935 allowed domestic shipment of silver only by the three government banks. Another notification imposed the 10-per-cent duty, plus equalization charge, on silverware and silver articles exported abroad.²⁰

In Canton, where the circulation consisted of 20-cent pieces, instead of dollars, a 20-per-cent premium was offered to encourage the exchange of coins for bank notes. This caused a considerable inflow, but at the same time smuggling was still profitable, and strict measures of search were instituted. These could not, however, be enforced against Japanese, by whom, it was alleged, considerable smuggling was being done.²¹ Control of the currency was to remain in the hands of the provincial authorities until the province had made the transition from a currency based on 20-cent pieces to one based on the national dollar.²²

Important progress was made in January, 1936, when the foreign banks in Shanghai, with the exception of the Japanese ones, agreed to turn over their silver holdings to the government banks. This was done under an arrangement by which the government banks would pay interest to the foreign banks for two years; it gave the latter the equivalent of a slight premium over the current exchange value of the Chinese dollar. It was not until March, 1937 that the Japanese banks consented to a similar arrangement.²³

The time limit for turning in silver by the public without penalty had been set originally at three months, expiring February 3, 1936; because of the belief that considerable silver had not been turned in and because of the lack of sufficient notes to replace silver, this limit was extended.²⁴

It is probable that there is a very considerable quantity of silver scattered through the country in small "hoards," a few dollars here, a few hundred there, which will gradually come on the market over a period of years.

¹⁹ *Ibid.*, Vol. 197, Nov. 27, 1935, p. 350, Kaifeng correspondence; Nov. 27, 1935, p. 351, Canton correspondence; Dec. 4, 1935, p. 394, Shaoshing correspondence.

²⁰ *Ibid.*, Vol. 197, Dec. 18, 1935, p. 471.

²¹ *Ibid.*, Vol. 197, Dec. 11, 1935, p. 433; Dec. 18, 1935, p. 478.

²² *Ibid.*, Vol. 198, Jan. 1, 1936, p. 9.

²³ *Ibid.*, Vol. 198, Jan. 15, 1936, p. 99; Vol. 203, Apr. 7, 1937, p. 19; Apr. 21, 1937, p. 98.

²⁴ *Ibid.*, Vol. 198, Jan. 22, 1936, p. 144.

7. *Exports of Silver*

As noted in Section 5 above, the Chinese Government sold the United States Treasury 50,000,000 fine ounces of silver in November, 1935. Further similar sales were arranged from time to time as described in Chapter XXX, Section 3. It was generally believed that in return the Chinese Government agreed not to dump silver on the world market and so depress the price.

Net annual exports are shown in Table 18, page 303, and monthly figures are given in Appendix XVI. The large exports since 1935 have not all been taken by the United States; part of them have gone to London for safekeeping pending future disposition.²⁵

8. *Reorganization of Central Bank of China*

On January 15, 1936, the Central Political Council approved a change in the organization of the Central Bank of China. This originally was wholly owned by the Government. At first it was planned to increase the capital and allow 40 per cent to be owned by commercial interests. Under the final arrangements it was provided that not over 60 per cent of the capital might be held by Chinese banks, provincial and municipal governments, and citizens.²⁶ Detailed regulations were issued later, providing for a total capitalization of 1,000,000 shares of \$100 each, of which 400,000 shares were to be subscribed by the National Government, 50,000 by provincial and municipal governments, 350,000 by Chinese banks and money exchanges, and 200,000 by private individuals.²⁷

9. *New Subsidiary Coinage*

Rumors of a reorganization of the subsidiary coinage, to replace the system of depreciated silver and copper coins, circulating at fluctuating values, had been heard for some years. In July, 1935 it had been announced that such a plan had been recommended by the Currency Commission of the Ministry of Finance.²⁸ On August 9 Dr. Kung announced that the plan was under consideration, and warned that it must not be construed as an inflationary step.²⁹ On December 3 it was announced that the minting of new subsidiary coins was un-

²⁵ China, *The Maritime Customs, The Trade of China*, 1937, p. 103.

²⁶ *North China Herald*, Vol. 198, Jan. 22, 1936, p. 144.

²⁷ *Ibid.*, Vol. 198, Feb. 12, 1936, p. 273.

²⁸ *Ibid.*, Vol. 196, July 31, 1935, p. 166.

²⁹ *Ibid.*, Vol. 196, Aug. 14, 1935, p. 271.

der way.³⁰ Later all provincial mints were ordered to ship to Nanking the dies for minting the old copper and silver coins, so that no more of these might be issued and placed in circulation.³¹

On January 9, 1936 draft regulations concerning subsidiary coinage were accepted by the Finance Committee of the Legislative Yuan. These provided for the minting by the Central Mint and issuance by the Central Bank of China of nickel coins of 20, 10, and 5 cents, and copper coins of 1, and $\frac{1}{2}$ cents, the use of nickel and copper coins to be limited to \$20 and \$5 respectively in one payment, and for the withdrawal of subsidiary silver coins from circulation.³² This was confirmed by a mandate issued by the National Government on January 19.³³

The new coins were placed in circulation in Shanghai on February 10, 1936.³⁴ The nickel coins had the head of Dr. Sun Yat-sen on the obverse, while the copper coins had a 12-pointed star. All varieties had on the reverse a design of the ancient Chinese spade coin.³⁵ Down to the end of June, 1937 the Central Mint produced and delivered to the Central Bank 814,770,000 pieces of the new coins of a total value of nearly C. S. \$26,190,000.³⁶ The work of the Central Mint was interrupted by the Japanese attack on Shanghai in the following summer, but some of the provincial mints were reopened to manufacture subsidiary coins.

On May 17, 1936, in announcing that an agreement for the sale of silver to the United States Government had been concluded, as will be described in Chapter XXX, Section 3, Minister Kung stated that silver coins of 50-cent and \$1.00 denominations would be issued with a silver content below that of the former standard.³⁷ It looked at the time as if this were merely a verbal sop to American silver interests, and it seemed doubtful if anything would be done about it. Nothing more was heard of it for two years, until a Treasury press release announced that the San Francisco mint had coined 345,032 one-dollar silver pieces and 3,240,000 half-dollar silver pieces for China during May, 1938.³⁸ No information was given as the weight and fineness of these coins. It seems unlikely that they will come into circulation under war conditions.

³⁰ *Ibid.*, Vol. 197, Dec. 11, 1935, p. 446.

³¹ *Ibid.*, Vol. 198, Jan. 1, 1936, p. 2.

³² *Ibid.*, Vol. 198, Jan. 15, 1936, p. 99.

³³ *Ibid.*, Vol. 198, Jan. 22, 1936, p. 144.

³⁴ *Ibid.*, Vol. 198, Feb. 12, 1936, p. 266.

³⁵ *Ibid.*, Vol. 198, Feb. 5, 1936, p. 219.

³⁶ *Finance & Commerce*, Vol. 30, Aug. 11, 1937, p. 137 (E. Kann).

³⁷ *Ibid.*, Vol. 27, May 20, 1936, p. 562 (E. Kann).

³⁸ *New York Times*, June 2, 1938.

10. *The Silver Clause in Contracts*

The Chinese order of November 3, 1935 definitely took China off the silver standard and made debts expressed in silver dollars payable in legal-tender notes, regardless of any silver clauses which had been included in some contracts.

Since Americans, Britons, Japanese, and several other nationalities in China were still under the extraterritorial jurisdiction of their own officials and subject to their own national laws, it was doubtful whether the Chinese order of November 3 could be enforced against them. In view of this condition, the British Ambassador, acting under authority vested in him, early on November 4 issued King's Regulations forbidding British subjects to make payments in silver, under penalty of imprisonment for a period of not exceeding three months, or a fine not exceeding £50, or both.³⁹ Other governments having extraterritorial jurisdiction in China did not follow the British example; but so far as everyday transactions were concerned their nationals had little choice but to acquiesce in the general inconvertibility of bank notes and deposits.

Soon after the promulgation of the Chinese order, a meeting of representatives of British companies and banks was held to consider the question of silver obligations. A resolution was passed that:

. . . without prejudice to any question of law, payment of obligations expressed in terms of Mexican or Chinese standard dollars should be made and accepted by British subjects in Chinese legal tender notes to the same nominal amount.⁴⁰

This resolution, of course, had no legal force, but probably represented the general feeling of the British community at the time.

In December, in contemplation of interest payments due at the end of the month, the directors of Central Properties, Ltd., a British company, called a meeting of its debenture holders. The debentures of this company, issued in March, 1934, contained a clause which provided for the payment of principal and interest in the defined silver dollar, or in legal tender for the amount of the cost of equivalent silver bars, with adjustment for coinage fee. The chairman of the company argued that, while the clause probably was legally enforceable, it was not intended to be punitive to the company, but merely to protect creditors against any possible hardship due to inflation; and that the reduction in the exchange value of the Chinese dollar was not real inflation, but merely a restoration of the *status quo*, and had not harmed the debenture holders. Opposite opinions were expressed by

³⁹ *North China Herald*, Vol. 197, Nov. 6, 1935, p. 222.

⁴⁰ *Finance & Commerce*, Vol. 26, Nov. 20, 1935, p. 541.

some, but holders representing a large majority of the issue voted to accept interest due December 31, 1936 in legal-tender notes without prejudice to their rights in regard to future payments. Similar action was taken from time to time as successive interest payments became due; debenture holders of other companies acted similarly. In general, it seemed to be recognized that, with the Chinese dollar at 30 cents U. S. currency, creditors were not suffering any real loss, and there was no disposition to go to the expense of bringing the case into court, where, in view of American and European decisions on the gold clause, there was some doubt as to whether the silver clause would be upheld. Moreover, in view of the extraterritorial status of many foreigners in China, suits in every case would have to be brought in the court of the defendant's country, and, where parties of more than one nationality were concerned, there would be complications.⁴¹

In January, 1937 the British Ambassador, with the approval of the Secretary of State for Foreign Affairs, issued new King's Regulations, which, although ambiguously worded, seemed to set aside arbitrarily the effect of silver clauses, without leaving creditors the recourse to the courts which they had in the case of gold clauses in England.⁴² Since the matter has not, at the present writing, come up before British courts, it is impossible to know the final legal status of the silver clause.

During 1936 and 1937, while the exchange value of the Chinese dollar was kept very steady, the matter of the silver clause was not of great importance. In the spring of 1937 the Shanghai Power Company (an American corporation), desiring to avoid any possible future legal complications, made an exchange offer to the holders of its 5½-per-cent First Mortgage Debentures, of which some C. S. \$88,000,000 were outstanding. Holders could surrender the old debentures, containing the silver clause, to be stamped payable in Chinese legal tender, and would receive in addition a 3-per-cent cash bonus. Holders of large blocks, amounting to over half the issue, accepted this offer in advance of the public announcement; and it was very generally taken up by the remaining holders.⁴³

The inauguration of exchange control in the spring of 1938 and the resultant drop in the exchange value of the Chinese dollar made the status of the silver clause more important, but it is questionable whether it would be expedient to attempt to enforce it in wartime.

⁴¹ For a more detailed discussion of the silver clause, with full reference to contemporary news reports, see Leavens, "The Silver Clause in China."

⁴² *Finance & Commerce*, Vol. 29, Jan. 6, 1937, p. 3; Jan. 13, 1937, pp. 25-26.

⁴³ *Ibid.*, Vol. 29, Apr. 21, 1937, pp. 415, 419; Apr. 28, 1937, pp. 439, 443; *North China Herald*, Vol. 203, Apr. 21, 1937, p. 93; Apr. 28, 1937, p. 159.

11. *The Struggle with Japan*⁴⁴

Contrary to the misgivings of many, the new currency system was eminently successful and during 1936 and 1937 China enjoyed an exchange rate as stable as that of any country in the world. At the same time there was general recovery from the depression, the result partly of the currency stabilization and the ensuing confidence and partly of the world-wide recovery. During the first half of 1937 there were many evidences of economic advance; the columns of *Finance & Commerce* reflected a spirit of optimism on the part not only of Chinese but also of resident foreigners, who often have tended to be skeptical of Chinese progress. There were even signs of Sino-Japanese co-operation: a Japanese trade mission visited Shanghai and was well received.⁴⁵ To be sure, the issue of the paper which spoke hopefully of this event also recorded a regulation of the Chinese Municipality of Greater Shanghai which required that all new buildings costing more than C.S. \$30,000 must be provided with bomb-proof shelters;⁴⁶ but this might be considered to mean only that China was following the European fashion of the year.

The bright prospects of the first half of 1937 were rudely shattered when Japan attacked in North China in July and in Shanghai in August and began the long-drawn-out struggle. The story of the undeclared war is outside the scope of this book, except for brief mention of its effect on the currency.

On Sunday, August 15, the Ministry of Finance issued regulations restricting withdrawals from deposits in Chinese banks to 5 per cent each week and to a maximum of C.S. \$150 per person at one time. The Chinese banks agreed on further regulations, which were approved by the Ministry. These amounted to making all bank paper and existing deposit accounts equivalent to "*wei wah*" or transfer money, which could be used for transactions between accounts in the same or different banks, but was not exchangeable for legal tender or for foreign exchange. New deposits would be recorded as "legal tender" or "*wei wah*" according to the form of payment made and might be withdrawn only in the same form.⁴⁷ *Wei wah* was at a discount fluctuating around 1 to 3 per cent as compared with legal tender, but it was always possible to obtain legal tender, so that the system did not work much hardship once the first adjustments were made.

⁴⁴ This section is based on the contemporary news in the *North China Herald* and *Finance & Commerce*. Since it concerns silver only indirectly, few detailed references are given.

⁴⁵ *Finance & Commerce*, Vol. 29, Mar. 24, 1937, pp. 305-306.

⁴⁶ *Ibid.*, p. 306.

⁴⁷ *Ibid.*, Vol. 30, Sept. 1, 1937, p. 160.

During the autumn of 1937 the government banks maintained the exchange rate, and, with the co-operation of the foreign banks, exchange was made available for legitimate needs, although speculation and the export of capital were discouraged.⁴⁸

In March, 1938 the Japanese authorities in North China organized a reserve bank, which was to issue irredeemable notes and force their use instead of the national legal-tender notes. This might have led to acquisition by the Japanese of large amounts of legal tender, which they could use to obtain foreign exchange and so weaken the National Government's reserves abroad. To prevent such a drain the Ministry of Finance on March 13 issued regulations centralizing the sale of foreign exchange in the hands of the Central Bank of China "at the seat of Government," then Hankow.⁴⁹ Although it soon was recognized that such control was needed and did not necessarily imply a depreciating currency, it naturally caused apprehensions at first. Moreover, the weekly allotments of exchange were insufficient to meet the demand. The rate fell from around 29.5 cents, U.S. currency, per Chinese dollar, at which it had been pegged for more than two years, to less than 24 cents in a few days. In April it recovered to around 27 cents, but in May began to fall again. In June and July it held at around 18 cents, and for the rest of the year was in the neighborhood of 16 or 17 cents.

Meanwhile, as shown by Appendix XVI, the National Government of China had exported in 1937 and 1938 large quantities of the white metal, which in part were sold to the United States Treasury and in part were held in safekeeping abroad. In this way it built up ample supplies of foreign currency, which, if held as reserves against the legal-tender notes, meant that there was no real depreciation. If, however, these funds were "borrowed" for financing the purchase of munitions, there was a real weakening of the currency. The lack of explicit financial reports by the Government makes an opinion on the matter impossible when this is written.

12. Hong Kong Currency

As pointed out in Chapter XI, Section 8, the currency of the British colony of Hong Kong consisted of paper notes backed by silver dollars and bullion, but usually at a premium above the Shanghai dollar, which contained nearly the same quantity of silver. When China imposed the export tax on silver in October, 1934, the Shanghai exchange rate on London dropped below parity. The Hong Kong rate,

⁴⁸ *Ibid.*, Vol. 31, Jan. 5, 1938, p. 4.

⁴⁹ For regulations see *ibid.*, Vol. 31, Mar. 16, 1938, p. 205.

however, remained in approximately its former relation to the world price of silver. As a result the premium of the Hong Kong exchange rate over the Shanghai exchange rate increased from its normal level of about 10 per cent, and for a year varied between 23 and 42 per cent.

This situation was inconvenient, because Hong Kong's business was almost entirely as an intermediary between England and other foreign countries on the one hand, and China on the other. The trade was accustomed to a fluctuating exchange rate between the Hong Kong dollar and foreign currency, but to a fairly fixed exchange rate between it and Chinese currency. To have both relationships fluctuate complicated the situation. Until China's currency future was more settled, however, there was little that Hong Kong could do. Occasional rumors of devaluation plans during 1935 were denied.⁵⁰

After China's action of November 3, 1935, however, with the prospects of a certain degree of stability in Chinese exchange, it was possible for Hong Kong to take action. On December 5 the Legislative Council ordered the surrender of all silver coin or bullion of a value of more than ten dollars, the establishment of an exchange fund, and the continuance of bank notes as legal tender. Since very little silver circulated, the order for the surrender of silver affected chiefly the banks, which were required to turn over the reserves held against their notes in exchange for government certificates of the same face value. The silver would be held by the Colonial Treasurer as an exchange fund, and would be used to regulate the exchange value of the currency. It would be managed by the Treasurer in consultation with an advisory committee consisting of a representative of the banks and a representative of the British Treasury.⁵¹

The Government already had been issuing one-dollar notes and cupro-nickel 5-cent and 10-cent pieces, and had withdrawn 40 to 50 per cent of the small silver from circulation.⁵²

Later in December the Hong Kong Treasury shipped some Hk. \$20,000,000 of silver to London.⁵³ A similar shipment was made on January 11, 1936.⁵⁴ In January Hk. \$20,000,000 was shipped to Bombay.⁵⁵ Until the Colonial Government took control of the situation, banks for a time had made considerable profit in shipping silver.⁵⁶ The Government allowed the premium over Shanghai to drop to the normal 10 per cent by the beginning of 1936. By adopting a policy of manag-

⁵⁰ *North China Herald*, Vol. 195, May 1, 1935, p. 186.

⁵¹ *Ibid.*, Vol. 197, Dec. 11, 1935, p. 433.

⁵² *Ibid.*, Vol. 197, Dec. 11, 1935, p. 436.

⁵³ *Ibid.*, Vol. 197, Dec. 18, 1935, p. 490.

⁵⁴ *Ibid.*, Vol. 198, Jan. 15, 1936, p. 98.

⁵⁵ *Ibid.*, Vol. 198, Jan. 22, 1936, p. 144.

⁵⁶ *Finance & Commerce*, Vol. 27, Feb. 12, 1936, p. 168.

ing the currency, it gradually reduced the premium to about 5 per cent at the end of 1936.

During 1937 and 1938 the exchange value of the Hong Kong dollar was held in the neighborhood of 30 or 31 cents, U.S. currency, and no attempt was made to depreciate it to match the Chinese dollar.

Much of the silver exported from China went first to Hong Kong and thence to England, so that the recorded movements of treasure into and out of Hong Kong were very large. Exports generally exceeded imports, indicating that the Colonial Government was disposing of some of its supplies.

13. Summary and Conclusions

The abandonment of the silver standard by China, which had been talked of for years, and which the plans of Jenks, Vissering, and Kemmerer had recommended as the ultimate goal, was finally brought about as a result of the critical situation caused by the American policy of raising the price of the white metal. The preparations made for this important step were adequate, and, in spite of fears, the adoption of a managed currency was entirely successful, not only during a year and a half of peace, but during the first months of the war.

China definitely cut herself loose from both the advantages and the disadvantages of the silver standard. By adopting a managed currency, with apparently sufficient financial reserves to facilitate the management under not too abnormal conditions, she placed herself in a position to join the international monetary game. She undoubtedly hoped to be able to play her modest hand to her greatest advantage in case the other players of the game should make it necessary for her to make any readjustments in her exchange rate.

The conflict with Japan has naturally interfered at last with the management of the exchange, and it is not possible to predict the future.

As regards the world silver situation, the action of China removed what for many years has been one of the largest elements on the demand side. Since 1933 China has been a supplier of silver rather than a taker, and has exported over 1,000,000,000 fine ounces out of the 2,500,000,000 fine ounces which she was estimated to have had at that time in monetary and nonmonetary use.

CHAPTER XXX

DEVELOPMENTS IN THE SILVER SITUATION, 1936-1939

"But what good came of it at last?"

Quoth little Peterkin.

"Why that I cannot tell," said he;

"But 't was a famous victory."

ROBERT SOUTHEY, *The Battle of Blenheim*

1. Arrangements with Mexico and Canada

The year 1936 opened with the price of silver still falling until it became stabilized after January 20. Meanwhile Mexico, which had been alarmed at the rise in the price of silver in April, 1935, was now dismayed by the fall. The adjustment to the high price had been carried out successfully by calling in silver coin and replacing it in circulation by paper money and by silver of lesser content. The Government had been profiting by taxes on silver at the high price, and by the increased general prosperity consequent upon mining operations. The December drop in the price threatened to decrease tax revenue, to interfere with the prosperity of the mining regions, and possibly to destroy confidence in the currency because of the lowered value of the reserves, which still consisted chiefly of silver.

At the end of December, 1935 the Finance Minister of Mexico, Eduardo Suarez, came to the United States, ostensibly on other business, but it was announced that he would confer with Secretary Morgenthau in regard to silver.¹ Conferences were held beginning December 31. Secretary Morgenthau made no announcement of the details of the "mutually satisfactory" agreement which was reached, but referred to the President's silver message of May 22, 1934 (see Appendix XII) as having pointed the way to conferences on silver with neighboring nations. It was believed that the agreement stipulated that the Treasury would continue to buy all the Mexican newly-mined silver which might be offered, provided Mexico did not dump its silver reserves on the world market.²

On March 4, 1936 Secretary Morgenthau announced that he had authorized the Federal Reserve Bank of New York to purchase for the

¹ *New York Times*, Dec. 29, 1935.

² *Ibid.*, Jan. 1, 3, 7, 8, 1936.

Treasury through the Bank of Canada newly-mined Canadian silver; it was expected that practically the whole of the production of that country would be taken.³ Nothing was announced about the price in the case of either Mexico or Canada.

The production of the United States, Mexico, and Canada in 1935 had amounted to about 138,000,000 fine ounces or over 60 per cent of the world production of 220,000,000 fine ounces.⁴ Thus, if the United States Treasury took all production of the three countries, there would be left about 80,000,000 fine ounces, which would be more than enough to supply the industrial and subsidiary-coinage demand of the Western world, and perhaps the demand for ornaments in India, even if no old silver came on the market.

In December, 1937 Minister Suarez again visited Washington and conferred with Secretary Morgenthau. On December 28 the Treasury announced that the policy of buying silver from Mexico had been on a month-to-month basis during 1937, and would be continued at least through January, 1938, subject to further negotiation as to the future.⁵ This neighborly action of the Treasury Department was taken at the very time the State Department was seeking assurances from the Mexican Government that it would slow down its policy of Mexicanization of industry, which was adversely affecting American interests.⁶

A few days later Secretary Morgenthau announced at a press conference that a similar extension of the agreement with Canada would be made. The quantity of silver each country could offer was a fixed, but undisclosed, percentage of its production, and the price was to be fixed by the Treasury. The Secretary also stated that the only other understanding with a foreign nation on silver was with China, and that it had been extended to July 1, 1938.⁷

Having gotten the silver agreement continued for at least a month, Mexico promptly abrogated another agreement on oil and announced that United States producers of petroleum in Mexico could hold their concessions only by paying royalties.⁸ A few days later, Minister Suarez announced that the United States Treasury had agreed to buy 5,000,000 fine ounces of silver per month *for a year*, and, in addition, to buy 35,000,000 fine ounces, representing the quantity which Mexico had purchased under the London Silver Agreement during the preceding four years; since Mexico's quota was 7,159,108 fine

³ *Ibid.*, Mar. 5, 1936.

⁴ *Annual Report of the Director of the Mint . . . 1937*, pp. 101-103.

⁵ *New York Times*, Dec. 29, 1937.

⁶ *Ibid.*, Dec. 27, 1937.

⁷ *Ibid.*, Dec. 31, 1937.

⁸ *Ibid.*, Jan. 3, 1938.

ounces per year, this quantity was somewhat greater than the quota.* Secretary Morgenthau confirmed this statement, but pointed out that the agreement to take 5,000,000 fine ounces per month was on a month-to-month basis. He also disclosed that the monthly quantity to be purchased from Canada was 2,000,000 fine ounces.¹⁰

Later in January, 1938, when Mexico placed very high duties on imports, Secretary Morgenthau said that that action would not interfere with the silver understanding,¹¹ and at the end of the month he announced that the agreements with Mexico and Canada had been extended through February.¹²

In March, however, when the Mexican Government seized foreign oil properties, Secretary Morgenthau announced that the United States would buy no more silver from Mexico after April 1 until further notice.¹³ President Lazaro Cardenas immediately issued a proclamation announcing the action of the United States and requesting his countrymen "to judge it with the necessary serenity and justice," and stated that Mexican silver would be sold on the world market.¹⁴

The immediate result was a weakening in the London price of silver, and the United States Treasury on March 28 reduced its buying price for foreign silver by 1 cent, the first reduction since January 20, 1936; on March 29 it reduced it another cent to 43 cents per fine ounce, making the New York official price 42 $\frac{3}{4}$ cents per ounce, 0.999 fine, the lowest since May 4, 1934.¹⁵ The Treasury, however, continued to buy all the silver that was necessary to support the price at the new level, and asked no questions as to the ultimate source. The only effect on Mexico, therefore, was to make her dispose of her silver through the New York market and receive a price lower by 2 cents and by whatever additional expenses she incurred under the new plan.¹⁶

2. Purchase from China

On February 13, 1936 Secretary Morgenthau announced that the Treasury had purchased 50,000,000 fine ounces of silver from China. This was not news, for the fact had been known in China when the silver was shipped in December, as described in Chapter XXIX, Sec-

⁹ *Ibid.*, Jan. 9, 1938.

¹⁰ *Ibid.*, Jan. 11, 1938.

¹¹ *Ibid.*, Jan. 25, 1938.

¹² *Ibid.*, Feb. 1, 1938.

¹³ *Ibid.*, Mar. 28, 1938.

¹⁴ *Ibid.*

¹⁵ *Ibid.*, Mar. 29, 30, 1938.

¹⁶ *Ibid.*, Apr. 15, 16, 22, 1938.

tion 5. Although no details were made public, it was understood that this purchase had taken place between November 3, when China departed from the silver standard, and December 9, when the Treasury ceased supporting the silver market, and that it had been made at 65 cents per ounce. The proceeds to China amounted to \$32,500,000, which the Chinese Government at first kept on deposit in New York; later it had \$10,000,000 of gold earmarked there.¹⁷

As pointed out in Chapter XXVII, Section 7, it seemed rather strange that the Treasury should make this deal and then shortly after let the price drop in the world markets. If the Treasury intended to let the price drop, this purchase was simply a gift to China of 20 cents extra per ounce. Various explanations were suggested at the time. It may have been "conscience money" to make up for the havoc already wrought with Chinese currency. It may have been done on the basis of a secret agreement by which China, in return for this sale at a good price, promised not to dump the remainder of her silver, a step which might have precipitated a price decline even below the 45 cents reached in January. It may have been a clever deal put over by the Chinese upon a guileless American Treasury which had not realized the full implications of China's departure from the silver standard, and which later decided that it was hopeless to maintain the price at 65 cents per ounce. In any case, China would seem to have been the gainer in the transaction.

3. *Agreements with China*

In April, 1936 a Chinese Government mission, headed by K. P. Chen, a leading Shanghai banker, arrived in Washington at the invitation of Secretary Morgenthau to "exchange information on mutual monetary policies."¹⁸ Conversations extended over a period of several weeks. Finally, on May 18, it was announced that an agreement had been concluded by which the United States would make substantial purchases of silver from China. It was stated that most of the proceeds would be kept in New York in the form of earmarked gold, and held for the stabilization of Chinese currency. The purchases were to be made at the world market price.

Secretary Morgenthau issued no official statement, but gave out the news in a press conference. He declined to indicate how much silver would be bought.

The Chinese delegation released an official statement emanating

¹⁷ *Ibid.*, Feb. 14, 1936.

¹⁸ *Ibid.*, Apr. 8, 1936.

from the Minister of Finance to the effect that the Chinese Government would keep adequate reserves against note issues,

. . . consisting of gold, foreign exchange, and silver, the silver portion of the reserves to have a value equivalent to at least 25 per cent of the note circulation;

2. For the purpose of completing the reform of the Chinese coinage system the Government will issue silver coins of fifty cents and one dollar denominations;

3. For the purpose of further strengthening the position of the Chinese currency definite arrangements have been made to increase the gold and foreign exchange portion of the note issue reserve.

The Minister expresses the firm belief that these supplementary measures of monetary reform and the arrangements made will assure the continued maintenance of an independent currency system not linked to any foreign monetary unit and the permanent stability of the Chinese currency, which will inevitably lead to greater economic improvement and prosperity of the Chinese people.¹⁹

This agreement very likely contained a stipulation on the Chinese part not to dump silver on the world market, but to confine its sales to the American Treasury. In this way, the Treasury probably hoped to avoid any serious drop in the price, which might re-arouse the silver bloc to bring pressure.

In July, 1937 Dr. H. H. Kung, Chinese Minister of Finance, who was travelling in the United States, conferred with Secretary Morgenthau, and a new agreement was reached. A joint announcement called this "further progress in monetary co-operation between the two countries in pursuit of the understanding reached a year ago." The United States Treasury was to purchase from the Chinese Government additional quantities of silver, and to supply it with "a substantial amount of gold." No figures were released as to the quantities of the two metals involved. It was stated later that the agreement also provided for the extension of loans to China on security of gold or silver on deposit here, without actual purchase of the metal.²⁰

In June, 1938 Treasury Department officials stated that in all there had been four agreements with China, and that the total quantity of silver taken from 1936 up to July 15, 1938 would amount to more than 250,000,000 fine ounces. On July 14 Secretary Morgenthau announced that the arrangements had been extended indefinitely.²¹

4. *Silver in Congress, 1936*

The Second Session of the Seventy-fourth Congress, which sat from January 3 to June 20, 1936, gave very little consideration to silver.

¹⁹ *Ibid.*, May 19, 1936.

²⁰ *Ibid.*, July, 10, 13, 1937.

²¹ *Ibid.*, June 2, July 15, 1938.

In the debate on the soldiers' bonus bill that doughty inflationist, Senator Elmer Thomas of Oklahoma, proposed an amendment providing for financing the bonus, among other ways, by means of the seigniorage to be gained by issuing silver certificates to the full monetary value of the silver acquired by the Treasury. This would have provided several hundred million dollars, as may be seen from Table 17 and Chart 10, pages 276-281. This action probably will have to be taken some day if the full implications of the Silver Purchase Act are to be satisfied. The Treasury, however, although it has carried out the purchase policy with some "enthusiasm," has conservatively refrained from taking this step, which would be at least mildly inflationary. The Senate also acted conservatively, and rejected the Thomas proposal by a vote of 64 to 27 on January 18, 1936.²²

Undaunted, Senator Thomas on March 10 introduced a bill for the retirement of United States notes, that is, the \$346,000,000 of greenbacks remaining from the Civil War issues, by means of silver certificates to be issued against the *profits* on an *additional* supply of silver to be purchased entirely outside of the purchases under existing legislation. This plan would have involved the acquisition of about 400,000,000 additional ounces of the white metal. This bill, however, never got outside committee.²³

A minor phase of silver legislation was the large number of bills passed in this session for coining special 50-cent pieces in commemoration of various national and local anniversaries. These coins were to be issued at par value to local committees, and sold by them at a premium, usually for \$1.00 apiece, to raise funds for the celebration. The first such coin was the Columbian half dollar of 1892 and 1893; only two or three other varieties were issued until the 1920's, when an average of one or two were authorized annually. After 1933 the flood of such requests increased. The Treasury protested against such issues, because they complicated the system of currency outstanding; it recommended that medals be struck instead of coins. Local pressure, however, was strong on Congressmen to push bills for their own localities, and no one liked to incur the resentment of a colleague by opposing his pet bill. More than thirty such measures were proposed during the session, and about half of them were passed.²⁴ The Senate

²² *Congressional Record*, Vol. 80, Jan. 9, 1936, p. 210; Jan. 18, 1936, pp. 648-650, 669-671.

²³ *Ibid.*, Vol. 80, Mar. 10, 1936, p. 3473.

²⁴ See *Annual Report of the Director of the Mint . . . 1936*, p. 6, for a list of the 15 coins authorized at this session, to the total amount of \$665,000; the plate opposite p. 5 shows the not unattractive designs of three coins authorized at earlier sessions.

did have the courage to alter some of them to provide for medals instead of coins.

On May 25, 1936 the Economists' National Committee on Monetary Policy issued a statement to the press recommending to Congress that purchases under the Silver Purchase Act be stopped and the act repealed; that purchases under the President's proclamation of December 21, 1933 be stopped and notice given to the other signers of the London agreement; that all authority given to the President to re-establish bimetalism or otherwise to aid the silver industry be repealed; and that the silver held by the Treasury be disposed of as advantageously as possible over a period of eight years.²⁵

Apparently this appeal never was presented officially to Congress. Its appearance in the press, however, drew from Senator Pittman a lengthy speech, which contained a mixture of fact and fancy and a number of misleading conclusions. He spoke of the great benefit to China from the Treasury's stepping in and buying silver from her. His argument seemed to be that if a pedestrian is badly injured by a motor car, he should give thanks that the motorist is kind enough to drive him to the hospital and so prolong his life.

The Senator also made the amazing misstatement that there was a dollar's worth of silver back of every silver certificate at the market price, and that

. . . the silver can be sold anywhere in the world, and every certificate redeemed, dollar for dollar.²⁶

While it was true that the Treasury held silver which cost one dollar for every dollar of silver certificates issued, the market value at the time the Senator spoke, namely 45 cents per ounce, was considerably below the average cost of the silver, as may readily be seen from a study of Table 15, page 273, so that there would have been a loss even if the silver could have been disposed of at the market price. Actually, of course, if the United States should turn seller, the price of silver would drop much further. Our enormous hoard of silver probably never can be sold without a loss, even if the operation should be spread over many years. The Chinese market has been entirely destroyed, and the Indian demand has not continued even at the low price.

In his closing lines Senator Pittman made reference to the Senate Silver Committee appointed in August, 1935. So far, no report has been made public by this committee, and it will be interesting to see whether it ever does publish one, and if so, whether it has found any

²⁵ *New York Times*, May 26, 1936.

²⁶ *Congressional Record*, Vol. 80, May 25, 1936, p. 7876.

stronger arguments than the ones made by its chairman not only in the above speech, but also in many previous ones.²⁷

A bill introduced by Representative Robert L. Bacon of New York for the repeal of the Silver Purchase Act²⁸ did not get out of Committee. Neither did a bill proposed by Senator Borah on the last day of the session, for a monetary authority which should purchase at least 1,000,000,000 fine ounces of silver within five years, subject to a maximum price of \$1.29 per ounce, and to a total holding of silver not to exceed 25 per cent of its gold holdings.²⁹

5. *Silver in the Presidential Campaign of 1936*

The tentative Republican platform, brought to the Cleveland convention in June, 1936, by William Allen White, included a plank for a return to the gold standard and the repeal of the silver-purchase program.³⁰ The platform, as adopted, however, although it advocated "a sound currency to be preserved at all hazards," did not mention either gold or silver. The presidential candidate, Alf M. Landon, nevertheless telegraphed the convention stating that he stood for a return to the gold standard when conditions justified it,³¹ but made no reference to silver. A few days later at Denver he side-stepped a reporter's question as to where he stood on silver.³² Chairman John D. M. Hamilton, speaking in Salt Lake City, intimated that a return to the gold standard did not "preclude a favorable consideration of silver."³³

The Democratic platform also declared for a "sound currency" without mentioning either of the precious metals.³⁴ Candidate Roosevelt, in a speech at Denver, said:

When we laid the ghost of the old gold parity of the dollar, when we purchased gold and purchased silver, you in the mountains felt the old thrill of the search for precious metal. Old developments became profitable, new developments sprang up. Mining became again an industry where men could find jobs.

The great bullion reserves now in the United States Treasury—and you in Denver know something about them—are sufficient to redeem every dollar of our currency far more than 100 per cent. And yet people for partisan purposes are willing to spread the gospel of a fear that our currency is not on a sound founda-

²⁷ For text of speech, see *ibid.*, pp. 7874-77; for a full discussion, with excerpts, see Leavens, "Silver at the Second Session of the Seventy-fourth Congress."

²⁸ *Congressional Record*, Vol. 80, May 28, 1936, p. 8278.

²⁹ *Ibid.*, Vol. 80, June 20, 1936, p. 10364-65.

³⁰ *New York Times*, June 7, 1936.

³¹ *Ibid.*, June 12, 1936.

³² *Ibid.*, June 26, 1936.

³³ *Ibid.*, Aug. 8, 1936.

³⁴ *Ibid.*, June 26, 1936.

ation. I tell you, and you know, that our monetary system is the soundest in the world today.³⁵

Senators Pittman and Wheeler, who accompanied the President to Denver, both spoke enthusiastically of the prospects of silver.³⁶

Aside from a few references like the above to silver in campaign speeches in the mining states, both parties kept very silent on the subject. The Democrats realized that they had no case which would stand scrutiny. The Republicans, on the other hand, did not dare raise a comparatively minor issue which might have lost them votes in the mining states and among farmers who might still believe that the silver policy had useful inflationary effects.

6. *Silver in Congress, 1937*³⁷

The First Session of the Seventy-fifth Congress, with the overwhelming Democratic majority which accompanied President Roosevelt into his second term, assembled on January 5 and adjourned on August 21, 1937. Silver received very little attention. Bills to repeal the Silver Purchase Act of 1934 were introduced by Representative Robert L. Bacon³⁸ of New York and by Senator John G. Townsend, Jr.³⁹ of Delaware, but never got out of committee.

The former proponents of doing something for the white metal made little noise during the session, although others at times took occasion to criticize the silver policy.⁴⁰

In August Senator Townsend proposed a Senate Joint Resolution to terminate the power of the President to authorize the unlimited coinage of silver,⁴¹ and another resolution for an investigation of the Administration's silver policy and the general problem of silver.⁴² Neither of these resolutions got out of committee.

The commemorative-coin racket, which had gained such headway in the preceding Congress, grew by its success, and bills were proposed for some sixty different issues, most of them for occasions of very local historical interest. An article in a popular magazine informed the public of the evils of these issues.⁴³ The House Committee

³⁵ *Denver Rocky Mountain News*, Oct. 13, 1936.

³⁶ *Ibid.*

³⁷ For a fuller account, see Leavens, "Silver at the First Session of the Seventy-fifth Congress."

³⁸ *Congressional Record*, Vol. 21, Jan. 18, 1937, p. 356.

³⁹ *Ibid.*, Aug. 4, 1937, pp. 8163-64.

⁴⁰ *Ibid.*, Feb. 18, 1937, pp. 1385-86 (Dirksen); Apr. 28, 1937, pp. 3919-20 (Taber); Apr. 29, 1937, pp. 3933-34 (Vandenberg).

⁴¹ *Ibid.*, Aug. 4, 1937, p. 8164.

⁴² *Ibid.*

⁴³ Arnold Nicholson, "Money on the Make."

on Coinage, Weights, and Measures held hearings on some of the bills and was agreed on the undesirability of the custom. Finally three bills which represented proposals practically approved by the preceding Congress were passed with the understanding that no more would be recommended by the Committee.⁴⁴

The Second Session met from November 15 to December 21, 1937. Since the London Silver Agreement and the President's silver-purchase proclamation of December 21, 1933 (as later amended) were to expire on December 31, Senator Pittman, on Nov. 22, made a lengthy speech arguing that it was no time to discontinue the purchase of American newly-mined silver. He claimed that this policy had taken 400,000 men and women off relief.⁴⁵ Others such as Senator William H. King of Utah,⁴⁶ Representative Compton I. White of Idaho,⁴⁷ and Senator Elmer Thomas of Oklahoma⁴⁸ also spoke at various times in favor of the policy. No legislation on the subject was even considered.

7. Reduction of Domestic Price

The operation of both the London Silver Agreement and the President's silver-purchase proclamation of December 21, 1933 was to expire on December 31, 1937. There was so little likelihood of any foreign interest in renewal of the agreement that silver supporters in this country made no attempt to arrange that. They were anxious, however, as mentioned in the previous section, that the purchase of American newly-mined silver should be continued. There was considerable discussion as to what President Roosevelt would do.

At a press conference on December 6 Secretary Morgenthau said that the President would issue a new silver proclamation.⁴⁹ No hint of the price was given, however. During December the London price of silver declined more than a penny; for a few days Handy & Harman set a special price for industrial users based on the London price rather than on the official price which was maintained at 44 $\frac{3}{4}$ cents by Treasury buying. This industrial price fell as low as 42 cents.⁵⁰

The President kept his own counsel, and did not issue his proclamation until after the close of business on New Year's Eve. Some-

⁴⁴ *Congressional Record*, Vol. 81, June 21, 1937, pp. 6059-60, 6073.

⁴⁵ *Ibid.*, Vol. 82, Nov. 22, 1937, pp. 219-224. See also *ibid.*, Dec. 6, 1937, pp. 922-925.

⁴⁶ *Ibid.*, Nov. 22, 1937, pp. 224-228.

⁴⁷ *Ibid.*, pp. 236-240.

⁴⁸ *Ibid.*, Dec. 1, 1937, p. 596.

⁴⁹ *New York Times*, Dec. 7, 1937.

⁵⁰ *Ibid.*, Dec. 23, 29, 1937.

what to the surprise of observers, he took the courageous step of raising the seigniorage to 50 per cent, that is, reducing the effective price to 64.5+ cents.⁵¹ Members of Congress from the silver states expressed disappointment at this,⁵² but probably inwardly were thankful that the President had compromised, instead of going the whole way and removing the subsidy to American producers entirely.

8. *Silver in Congress, 1938*

The Third Session of the Seventy-fifth Congress met from January 3 to June 16, 1938. Early in the session the Treasury Department appropriation bill for the fiscal year 1939 was under consideration. This included various items of expense in connection with carrying out the Silver Purchase Act. Representative John Taber of New York took the occasion to discuss the evils of the silver policy and to move to strike out these items one by one as they came up. His various amendments were all defeated, but at least he had the satisfaction of bringing the subject to the attention of his colleagues and of securing about 20 votes on his side.⁵³

Some remarks were made on buying Mexican silver at the time that country imposed high tariffs;⁵⁴ Senator Arthur H. Vandenberg proposed a Senate Resolution asking the President for information regarding the purchase of silver from Mexico, but this was not adopted.⁵⁵

Representative Bruce Barton of New York, who had entered Congress with the avowed intention of trying to get much obsolete or undesirable existing legislation repealed, included the Silver Purchase Act in his program, but without results.⁵⁶

9. *Miscellaneous Developments*

The huge accumulations of silver belonging to the Treasury presented a storage problem. Much of it was stored in rented vaults in New York.⁵⁷ In hearings on Treasury Department appropriation bill for the fiscal year 1938 Mrs. Nellie Tayloe Ross, Director of the Mint, stated that plans were under way for establishing a silver de-

⁵¹ *Ibid.*, Jan. 1, 1938.

⁵² *Ibid.*

⁵³ *Congressional Record*, Vol. 83, Jan. 15, 1938, pp. 592, 598, 602-603; Jan. 17, 1938, pp. 644-648, 653-654.

⁵⁴ *Ibid.*, Jan. 24, 1938, pp. 1027-28.

⁵⁵ *Ibid.*, Mar. 25, 1938, p. 4069.

⁵⁶ *Ibid.*, Jan. 19, 1938, p. 810.

⁵⁷ *Boston Evening Transcript*, Jan. 21, 1936.

pository, similar to, but of course of much larger capacity on account of the greater bulk of the white metal, the gold depository at Fort Knox, Kentucky.⁵⁸ In August, 1937 Congress passed legislation providing for such a vault on the military reservation at West Point, New York. This was completed in the spring of 1938, and in July the transportation of about 1,000,000,000 fine ounces from New York to West Point by truck began.⁵⁹

On April 28 President Roosevelt signed an order suspending the regulations adopted in connection with his silver nationalization proclamation and executive order of August 9, 1934 (see Appendixes XIV and XV).⁶⁰ As is evident from Table 15, page 273, over 112,000,000 fine ounces of silver were received during the fiscal year ending June 30, 1935, some 600,000,000 fine ounces in the following year, and only negligible quantities thereafter. The action of April 28, therefore, merely recognized that the nationalization program had been completed.

The undiscourageable Senator Pittman came out in September, 1938, with an amazing proposal to dispose of the country's large surplus of cotton at the rate of 10 pounds of cotton for 1 ounce of foreign silver. The silver would then be coined into silver dollars to pay the cotton farmers at the rate of 12.9 cents per pound. The Senator blithely remarked:

The Government neither makes nor loses anything on the transaction. It simply conducts the trade and coins the monetary metal into legal-tender certificates, under existing law.⁶¹

The price of cotton was about 8 cents per pound and that of silver 43 cents per ounce. Thus the foreigner would get 80 cents' worth of cotton for 43 cents, at a profit of 37 cents; the American farmer would get \$1.29 for 80 cents' worth of cotton, at a profit of 49 cents. The total gain for both would be 86 cents, or exactly the profit which the Government could realize by purchasing the silver for itself and taking the seigniorage, the difference between the monetary value, \$1.29, and the cost, 43 cents, of an ounce of silver. The silver-purchase policy, with all its faults, is certainly better than handing out windfalls so freely to foreigners and natives. The Senator's proposal was criticized vigorously.⁶²

⁵⁸ U. S. Congress, *Treasury Department Appropriation Bill for 1938*, p. 337.

⁵⁹ *New York Times*, May 3, June 5, 14, 19 (pictures in rotogravure section), July 1, 6, 7, 1938.

⁶⁰ *Ibid.*, Apr. 29, 1938.

⁶¹ *Ibid.*, Sept. 29, 1938.

⁶² *Ibid.*, Oct. 1, 2, 1938.

In October, 1938 the committee on finance and currency of the New York State Chamber of Commerce passed a resolution pointing out that the silver-buying experiment had been a costly failure and asking repeal of the Silver Purchase Act of 1934 and halting of further purchases.⁶³

A feature of 1938 was the considerable increase in the quantity of demonetized silver coming on the market, in addition to that from China. This amounted to nearly 100,000,000 fine ounces, including the Mexican 35,000,000 ounces sold to the United States Treasury (Section 1 of this chapter), 40,000,000 ounces from Spain, and 22,000,000 ounces from Siam.⁶⁴

One of the few hopeful signs in the whole silver situation is the fact that the American Silver Producers' Association, evidently recognizing that much of the former monetary demand for the white metal has been destroyed and that American Government support cannot be continued forever, has inaugurated an active program of research to find new uses for the product. The Association has sponsored a number of research projects in American universities and research institutions, and at the National Bureau of Standards. Among the promising uses investigated are as a bearing metal for airplane parts, as the lining of vessels used in industrial chemistry and in food manufacture, as the lining of containers for food and for beer, as a bactericide and fungicide for purifying drinking water and the water in fish hatcheries, as electrical contacts and brushes, and other uses.⁶⁵

10. Continuation of Domestic Price

As the end of 1938 approached and the period for which the President had set a price for newly-mined domestic silver was about to expire, there was a general expectation that he would keep the price at 64.5+ cents.⁶⁶ Some mining interests petitioned for a higher price,⁶⁷ but probably without much expectation of success.

As in 1937, the President waited until after the close of business on December 31, 1938, and then issued a proclamation, extending the 50-per-cent seigniorage, that is, the effective price of 64.5+ cents per fine ounce, for newly-mined domestic silver "delivered to a United States coinage mint not later than June 30, 1939."⁶⁸ This date was

⁶³ *Ibid.*, Oct. 31, 1938.

⁶⁴ Handy & Harman, *Annual Review of the Silver Market, 1938*, p. 28.

⁶⁵ *New York Times*, Nov. 27, 1937, Feb. 26, Apr. 8, 1938.

⁶⁶ *Ibid.*, Dec. 20, 30, 1938.

⁶⁷ *Colorado Springs Gazette*, Dec. 10, 1938; *New York Times*, Dec. 31, 1938.

⁶⁸ *New York Times*, Jan. 1, 1939.

set because it was the date of expiry of the President's power to re-value the gold dollar and to coin silver, as originally given in the Thomas amendment to the Agricultural Adjustment Act of 1933 (see Appendix VII) and amended by the Pittman amendment to the Gold Reserve Act of 1934 (see Appendix XI).⁶⁹

It should be pointed out that, although the authority of the President to issue his original silver-purchase proclamation of December 21, 1933 was doubtful, as mentioned in Chapter XXV, Section 7, his action was made legal by Section 13 of the Gold Reserve Act of 1934, which explicitly confirmed all actions taken under Sections 43 and 45 of the Thomas amendment.⁷⁰ Moreover, the Pittman amendment to the Gold Reserve Act of 1934 (see Appendix XI, paragraph 4) explicitly authorized the President

. . . to prescribe different terms and conditions and to make different charges, or to collect different seigniorage, for the coinage of silver of foreign production than for the coinage of silver produced in the United States or its dependencies.

Thus his silver-purchase proclamations subsequent to the first were fully authorized at the time they were made.

By Treasury regulations announced on January 16, 1939 it was provided that "delivery" on or before June 30, 1939 could be accomplished by the acceptance by the mint of a duly executed instrument of transfer. This made possible the inclusion of silver mined practically up to that date, even though it might be several months before it passed through the smelting operations and was physically delivered at the mint.⁷¹

Any extension of a special price for newly-mined domestic silver beyond June 30, 1939 will depend upon action at the First Session of the Seventy-sixth Congress.

11. *Silver at the Beginning of 1939*

Table 20 and Chart 12 show the distribution of the world's silver on January 1, 1933 and on January 1, 1939. The figures for the former date are repeated from Table 13, p. 240, and the left-hand column in Chart 12 is identical with the right-hand column in Chart 9, page 241, and is drawn with the same area scale as the middle part of Chart 1, page 9. The changes during the 6-year period, shown

⁶⁹ By the Gold Reserve Act of 1934 these powers expired on January 30, 1936, but were extended by the President (under authority given in the act) to January 30, 1937, and by Congress to June 30, 1939 (see *Annual Report of the Secretary of the Treasury . . . 1936*, pp. 269-270; *ibid.*, 1937, pp. 262-263).

⁷⁰ *Ibid.*, 1934, p. 193.

⁷¹ *New York Times*, Jan. 17, 1939.

in column (3) of Table 20, represent the sum of the annual estimates of Handy & Harman, rounded off to the nearest 10,000,000 fine ounces; these estimates may differ slightly from corresponding figures, based on official sources, which are given for some of the items elsewhere in this book.

One of the ostensible purposes of the United States silver policy, if it may be called a policy, has been to increase the world monetary use of the white metal. This has been accomplished to the extent of 665,000,000 fine ounces, or approximately one-half of the new production during the period. But this increase has not been universal: the United States has piled up an enormous hoard equal to one and one-half times the total new production, while China has gotten rid of two-thirds of her monetary stock, and India and other countries have also reduced their use of the white metal for currency. Nonmonetary uses in Western countries have taken normal quantities, but the Indian demand has been much below normal and has not fulfilled the promise of 1936 when it reached pre-depression magnitude.

TABLE 20
DISTRIBUTION OF THE WORLD'S SILVER ON JANUARY 1, 1933 AND JANUARY 1, 1939
(Millions of fine ounces)

	Jan. 1, 1933	Net change in 6 years	Jan. 1, 1939
(1)	(2)	(3)	(4)
<i>A. Monetary</i>			
United States	640	+1,935*	2,575
China	1,700	-1,120	580
India	1,050	-110	940†
Other countries	1,550	-40	1,510
Total monetary	4,940	+665	5,605
<i>B. Nonmonetary</i>			
United States	1,000	+160	1,160
China	800	.....	800
India	3,300	+210	3,510
Other countries	1,500	+150	1,650
Total nonmonetary	6,600	+520	7,120
<i>C. Permanently lost or destroyed, or unaccounted</i>	3,946	+175	+4,121
Grand total production since 1493	15,486	+1,360	16,846

* This figure includes a small quantity of silver bullion held in the General Fund of the Treasury on Jan. 1, 1933 and is also adjusted to give the correct final quantity on Jan. 1, 1939. It therefore is slightly larger than the sum of Handy & Harman's annual estimates, and the unaccounted item is reduced correspondingly.

† Includes silver taken out of the monetary system and held by the Government for sale.

SOURCES

(2) from Table 13, page 240.

(3) From Handy & Harman, *Annual Review of the Silver Market*, accumulation of the annual figures for the 6 years, 1933-1938.

(4) = (2) + (3).

12. *Silver at the First Session of the Seventy-Sixth Congress*

The First Session of the Seventy-sixth Congress opened on January 3, 1939. The November elections had brought in a strong Republican minority and a number of Democrats who were not very sympathetic to the Administration, and opened up the possibility of some effective opposition to New Deal measures.

On January 4 Senator John G. Townsend, Jr. of Delaware introduced Senate Joint Resolution No. 1 for the appointment of a special joint committee to investigate the silver problem. In the preamble to this he enumerated no less than 52 objections to the silver policy. The

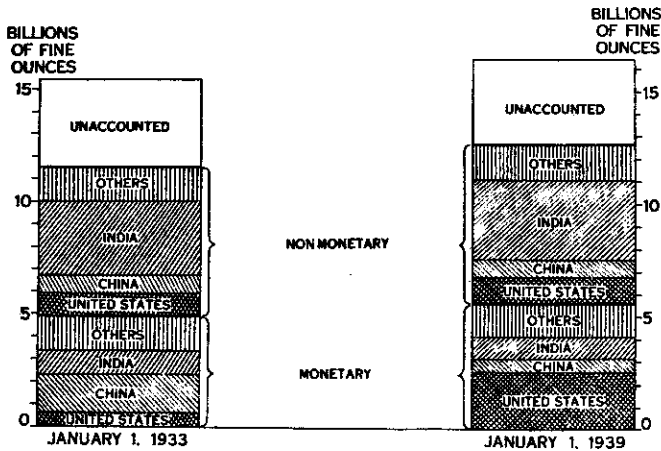


CHART 12.—DISTRIBUTION OF THE WORLD'S SILVER, 1933 AND 1939

resolution called for a committee of 5 from each House and provided that pending the submission of their recommendations the further purchase of foreign silver by the Treasury should be suspended.⁷² This proposal received favorable comment.⁷³

Evidently to forestall action on this resolution Senator Pittman on January 16 induced the Senate to add Mr. Townsend and three others (Senators George L. Radcliffe of Maryland, Edwin C. Johnson of Colorado, and Henrik Shipstead of Minnesota) to the Senate Special Silver Committee appointed in the summer of 1935 (Chapter XXVII, Section 4). He also stated that this committee would soon hold hearings.⁷⁴ On the same day his colleague, Senator McCarran, intro-

⁷² 76th Congress, 1st Session, *S.J.Res. 1*, Jan. 4, 1939, 8 pp.

⁷³ Excerpts from letters received by Senator Townsend appeared in *Congressional Record* (daily edition), Vol. 84, Jan. 19, 1939, pp. 765-766; Jan. 23, 1939, pp. 946-947.

⁷⁴ *Ibid.*, Jan. 16, 1939, p. 499. Hearings began on Feb. 7, 1939.

duced a bill (S. 625) to limit purchases under the Silver Purchase Act of 1934 to domestically-mined metal and to fix a minimum price for such purchases.⁷⁵

Senator Townsend countered the next day by introducing a bill (S. 785) to repeal the Silver Purchase Act of 1934 and to authorize and direct the Secretary of the Treasury to dispose of surplus stocks of silver at such prices as he might deem best. The bill also would remove the President's discretionary power as to silver. In order to stimulate the expansion of the industrial market for the white metal it provided for an appropriation of \$250,000 for research by the Bureau of Standards.⁷⁶

Senator Pittman replied to this on January 19 with a bill (S.800) to amend the act completely, eliminating the 50-per-cent tax on profits, setting the price for domestic silver at \$1.29+ per ounce, and limiting the acquisition of foreign silver to payment for exports of United States products. This was, in effect, to implement such schemes as that for cotton described in Section 9 above. He secured reference of the bill to the Committee on Agriculture and Forestry, which he doubtless expected would be more favorable than the Committee on Banking and Currency, to which it logically should have gone.⁷⁷

The above proposals are therefore in the hands of committees as this book goes to press. It remains to be seen whether either the advocates of silver or their opponents can secure enough support to have the problem reconsidered.

⁷⁵ *Ibid.*, p. 496.

⁷⁶ *Ibid.*, Jan. 17, 1939, p. 587; *New York Times*, Jan. 18, 1939.

⁷⁷ *Congressional Record* (daily edition), Vol. 84, Jan. 19, 1939, p. 679; *Colorado Springs Gazette*, Jan. 20, 1939.

CHAPTER XXXI

SUMMARY AND CONCLUSIONS

We've trod the maze of error round,
Long wandering in the winding glade;
And now the torch of truth is found,
It only shows us where we strayed.

GEORGE CRABBE, *Late Wisdom*

Prior to the middle of the nineteenth century silver was necessarily the chief element in the world's monetary systems. Since the discovery of America its production had averaged between 30 and 40 times that of gold by weight. As the value ratio had remained fairly steady in the neighborhood of 15 or 16 to 1, the total value of the silver production was between 2 and 3 times that of the gold. Because there was not enough gold to go around for monetary purposes, extensive use had to be made of silver. With England on the gold standard, France and the United States on bimetallic standards, and Asia and parts of Europe on silver standards, the distribution of the two metals was to a large extent automatic, and their relative value fluctuated but little.

The large gold discoveries in the middle of the nineteenth century reduced the production ratio to less than 6 to 1, and provided in two decades what appeared to be an ample supply of gold, so that the international conference of 1867 was almost unanimous in favoring the gold standard. Soon after that there began the shift to gold which in itself would have tended to lower the demand for silver. When the change of standard was combined with large sales of silver by Germany, with a sharp increase in the production of silver, and with a slight decline in the production of gold, it was inevitable that the price of silver should fall and that bimetallic countries should have to close their mints to the free coinage of silver if they were to avoid becoming silver countries.

It was naturally hard for even the unbiased observer to become adjusted at once to the sudden change in the status of silver, and for those whose pocketbooks were affected it was still more difficult. Moreover, gold production did not increase during a period of considerable technical development and economic expansion, and the world experienced through more than two decades a declining price level with the

consequent hardships to debtors and to producers of raw materials. The arguments for an expansion of the metallic monetary base were of considerable validity, and it was not surprising that the silver question was prominent for nearly a generation.

The United States was then the largest producer of silver, and also had a large agricultural population affected by the declining commodity price level. Remonetization of silver thus obtained considerable political support in the West, but was opposed by more conservative eastern opinion. The Bland-Allison act of 1878 and the Sherman act of 1890 were compromises which accomplished nothing toward restoring silver to a place in the world's monetary systems, and yet loaded the Treasury with some 570,000,000 silver dollars, usually worth less than half that amount as metal, and entering into circulation chiefly in the form of silver certificates. The weakness of the plan led to the repeal of the Sherman act in 1893, and in 1896 the decisive defeat of Bryan apparently settled the silver question permanently.

During the same period the movement for international bimetallism had received support from many able economists and public men. There was much to be said in its favor if it could have been adopted before the decline of silver had proceeded too far. Whatever its theoretical advantages, however, the conferences and other negotiations on the subject showed that it was not practical politics. The interests of different nations were too diverse to secure agreement; if agreement could have been secured it might not have stood the strain of war or serious depression.

By the beginning of this century gold had won almost universal acceptance, in the form either of gold-coin or of gold-exchange standards. The increasing production of gold in South Africa provided an ample and even excessive supply of the yellow metal. Nations which could not maintain the gold standard lapsed to "inconvertible paper" (the term "managed currency" had not then been invented). India, which had abandoned the silver standard in 1893, continued to absorb large quantities of the white metal for coinage and still larger quantities for women's ornaments. Only China and a few other countries, not important in world trade, remained on the silver standard.

Even in the United States the silver question dropped out of the public eye as a new generation grew up which knew not 16 to 1. American silver production had changed in character, becoming predominantly by-product silver instead of the straight silver (and gold) ore of the Comstock-lode type. The silver interests no longer were a power in American politics.

The World War created a demand for silver subsidiary coinage everywhere, for enormous rupee coinage in India, and for silver in settlement of China's balances. At the same time production declined because of civil war in Mexico. As a result, the price of silver rose even above pre-1873 levels and for a time silver hardly could be found at any price. The Government of India was obliged to raise the exchange value of the rupee to keep the coins from being melted for their silver content. By the end of 1919 the silver coins of most countries were in danger of the melting pot; in many countries they disappeared from circulation. One nation after another in postwar currency reforms reduced the silver content of its coins or replaced silver by cheaper metals.

The sale of American silver dollars in 1918 to relieve a serious situation in India had been made, by the Pittman act, into a piece of special legislation to favor American silver producers. Assured of a good market for about three years after the price of silver elsewhere had slumped to prewar levels, they grew by what they fed on and asked for more. For ten years, however, all attempts at special legislation were ineffective.

Meanwhile silver had fallen sharply in price in 1920, and adjusted itself for the next few years to a level slightly above prewar. The Pittman act kept American silver off the market until the middle of 1923, but world production increased and supplies of demonetized European silver also were available. China and India, however, took all that was not absorbed by the arts and coinage in Western countries. In China, the silver went directly into the monetary system; in India, it was used largely for ornaments, the Government buying practically none for coinage after 1920. The price dropped about 10 per cent to a new level in 1926 when India was considering the adoption of a gold-bullion standard which would involve the sale of a large quantity of silver over a period of ten years.

The great decline in the price of silver began in 1929 and to some extent preceded the fall of other commodity prices. It was greater than the fall of the United States Bureau of Labor Statistics index number of wholesale prices, but not as great as the fall in price of many individual commodities. The two facts, the fall in the price of silver and the world depression, were seized upon by silver supporters and other inflationists to argue that the former was the cause of the latter, and that something ought to be done for the white metal in order to cure all our ills. A sounder view would seem to be that the fall in the price of silver was to a large extent a result of the worldwide fall in commodity prices, which caused an adjustment between

the commodity price level in terms of silver in China and the commodity price level in terms of gold (or paper) elsewhere. This adjustment took place more readily by a decrease in the price of silver than by a decrease in commodity prices in China.

The arguments for doing something for silver have not been convincing to those who understood the facts and who were loath to see undue experimentation with the sensitive monetary structure. The argument for increasing the purchasing power of a large portion of the world's population was unsound, because only China was on a silver standard, because the deflationary effect of an increased value of her money would have outweighed any temporary stimulation to some import lines, and because in any case her trade was an almost insignificant fraction of total world trade. All this was pointed out by several writers, and would seem to be confirmed by the vigorous protests against the American silver-purchase policy which came from China and by the experience of that country when the price was raised. The argument for broadening the metallic base of the world's currency rested on the controversial premise of an insufficient gold supply; moreover, the addition of all available silver would have made a much smaller increase than was generally realized. The argument for inflation by means of silver was based on the likewise controversial premise that inflation was needed, and it was weakened by the arguments for inflation by other methods.

Increasing agitation on the part of the silver supporters failed to secure any legislation under President Hoover's administration, but in 1933 there began to be a new deal for silver. The World Economic Conference of 66 nations at London labored, under the ministrations of Senator Pittman, and brought forth the silver agreement. In December President Roosevelt ratified this, and gave American silver producers a bonus of about 50 per cent above the current market price. This satisfied for a time those interested primarily in domestic silver prices, but the silver inflationists kept up their demands, and, after various attempts to stall them off, the President finally gave in and allowed the compromise Silver Purchase Act of 1934 to be passed.

The passage of the act was temporarily satisfying. The most rabid silver supporters, however, continued to some extent to press their views. Nevertheless, the fact that the effects upon China were quite opposite to those predicted by the silver leaders, and the increasing public enlightenment as to the uselessness and wastefulness of the silver-purchase policy, have to a considerable extent quieted the voices of former supporters. The Treasury has carried out the provisions

of the act with considerable faithfulness to the spirit in which it was passed, and rather more energetically than required by the strict letter of the law. It can hardly be thought, however, that the Treasury is really "enthusiastic" about the silver policy. It is in the position of having to buy enormous quantities of silver merely to support the price, for any considerable drop would stir up the now quiescent silver bloc. Meanwhile, with the great inflow of gold into the country, the purchases of silver, large as they are, bring the silver reserves only very slowly toward the goal of one-third of the gold.

The addition of the large amount of silver to the country's currency has had no serious ill effects as yet. It is of minor importance as an inflationary factor compared with other forces which might lead to real inflation. In fact, it may be argued that if we had not purchased silver, our balance of international payments would have had to be settled with even more gold than we have received, with the accompanying dangers to us and to other nations. Nevertheless, the silver is piling up in the Treasury; it can never be pushed into circulation to any extent; there is very little chance that it can ever be disposed of to other nations, and if it could be, the silver bloc doubtless would revive and insist on some repurchase arrangement, similar to that of the Pittman act; and some day, if the flow of gold should be reversed, it may be a serious inconvenience to have such a large part of the country's monetary base in a nonliquid form.

In China, the early effects of the world depression were mitigated, because the falling price of silver in 1930-1932 made it unnecessary for Chinese export prices to fall in order to compete in world trade. China, or at least Shanghai, experienced prosperity while the rest of the world felt the depression. The devaluation of sterling in 1931 interrupted this, and the devaluation of the American dollar and the raising of the price of silver brought to China the full force of the depression in 1934 and 1935. Temporary measures were inadequate and in November, 1935 China was forced to the momentous step of abandoning the silver standard and adopting a managed currency. In spite of the misgivings of observers, this proved eminently successful for over two years, until it was interfered with by war conditions. Meanwhile the Chinese Government had exported large quantities of silver and built up reserves abroad; with a stabilized exchange the country was able to share in the world recovery of 1936 and 1937 and to make rapid economic progress. China for a generation had been discussing abandonment of the silver standard. To be forced to do so by American politics was a temporary hardship, but perhaps on balance has been a good thing. Certainly the Chinese Government was

strengthened to meet the war emergency by having a considerable part of its currency reserves abroad.

American silver producers, to whose efforts the adoption of the Administration's silver policy has been, at least in part, due, must view their success with mixed feelings. Since 1933 they have received for their product a considerable bonus over the world price (and the world price itself, much of the time, has been kept well above its natural level by Treasury purchases). This bonus must have been a great help in depression years. But the future is not so bright. It is hardly to be expected that the country will be willing to keep silver permanently on relief. When it has to support itself again, it will find its best customer, China, out of the market.

It is interesting to speculate on what might have happened to silver if it had been let alone. If the Administration and Congress had resolutely turned down all plans for aiding the white metal, it is undeniable that the silver market would have been greatly upset. It would have been hopeless to expect the world to absorb new production plus the 300,000,000 fine ounces of speculative stocks that existed at the beginning of 1934. Undoubtedly the price would have dropped considerably; just how far, it is difficult to say. Speculators and producers would have suffered together. It is a question, however, whether they would have suffered more than did other speculators and producers of other commodities not so kindly treated by the Government. On the other hand, a drop in the price probably would have stimulated Indian purchases for the ornament trade. The number of ounces of silver, if not the value, taken by China would have increased. That country in all probability would have remained on the silver standard. These compensatory forces of increased demand, combined with the decreased world production which would have followed a low price, would have tended to bring about a new equilibrium, perhaps at a lower price than in the past, but still at one which producers could view with equanimity.

But this was not to be. Silver obtained assistance for a time. That time must come to an end, and the readjustment promises to be much more painful than if the price had been allowed to reach an equilibrium without interference. With China out of the market, the industry must find new users for its product. Its research into industrial uses is promising; even at present prices, however, silver costs more per ounce than most competing metals do per pound, so it is obvious that industrial uses will be limited, except where silver shows unusual superiority, unless the price drops much below the present level.

At the beginning of this century silver was in much the position of Humpty Dumpty after his fall. Its warmest friends had come to realize reluctantly that the efforts of all the King's horses and all the King's men could not restore it to its proud position of old. The World War lifted it once more to a dizzy height, from which it crashed again. In recent years the efforts of its friends have had only a temporary success; the future is unpromising. The unprejudiced bystander will feel that there is no use trying to patch up broken eggs, even such a good egg as Humpty Dumpty.

APPENDIXES

APPENDIX I

SOURCES OF DATA FOR CHART 1

World Production of Gold

1493-1927: Ridgway, *Summarized Data of Gold Production*, large table.

1928-1937: *Annual Report of the Director of the Mint*, summarized from detailed figures given each year.

1938: *Engineering and Mining Journal*, Vol. 140, February, 1939, supplemented by estimates for classifications not given.

N.B. U. S. production includes Philippine Islands from 1907.

World Production of Silver

1493-1927: Merrill, *Summarized Data of Silver Production*, large table.

1928-1937: *Annual Report of the Director of the Mint*, summarized from detailed figures given each year.

1938: Handy & Harman, *Annual Review of the Silver Market, 1938*, p. 28, supplemented by estimates for classifications not given.

Other Supplies of Gold and Silver

See Tables A, B, and C.

TABLE A
UNUSUAL SUPPLIES OF GOLD COMING ON THE MARKET, 1931-1938
(Millions of fine ounces)

Year	United States	United Kingdom	India	China	Total
(1)	(2)	(3)	(4)	(5)	(6)
1931	4.6	0.5	5.1
1932	2.5	9.5	1.1	13.1
1933	6.1	0.7	6.8
1934	0.7	.....	6.6	0.5	7.8
1935	0.2	.....	4.5	0.4	5.1
1936	3.5	0.4	3.9
1937	1.8	0.5	2.3
1938	1.6	.....	1.6
1939
1940

SOURCES

(2) These represent excess of old gold coming on the market over a "normal" figure taken as the average for the 10 years, 1920 to 1929 inclusive. Data in *Annual Report of the Director of the Mint*, . . . 1937, p. 36.

(3) Sharps and Wilkins, quoted in *ibid.*, 1933, p. 80, estimate domestic sales of old gold at £15,000,000 in 1932. This estimate has been converted into fine ounces at 118 shillings per ounce, the average price during that year. No allowance is made for a "normal" supply of old gold; this may be balanced by unknown excess quantity marketed in 1933, for which no estimates are available but which is believed to be much less than in 1932.

(4) These figures are summarized from monthly net export of gold, as reported in *Accounts Relating to the Sea-Borne Trade and Navigation of British India*.

(5) These figures represent annual net exports of gold, converted to fine ounces from Customs gold units, as reported in *The Trade of China*.

SILVER MONEY

TABLE B
SALES OF SILVER BY GERMANY, 1873-1879
(Millions of fine ounces)

Year	Quantity	Year	Quantity
1873	1.7	1877	46.1
1874	11.3	1878	26.1
1875	3.4	1879	6.1
1876	19.5	Total	114.2

SOURCE

Proceedings of the International Monetary Conference . . . held . . . in Paris in . . . 1881, p. 16; figures there given in (metric) pounds of 500 grams have been converted to fine ounces.

TABLE C
SALES OF DEMONETIZED SILVER, 1918-1938
(Millions of fine ounces)

Year	United States	United Kingdom	Continent	India	China	Other	Total
1918	53.0	-----	-----	-----	-----	-----	53.0
1919	147.0	-----	-----	-----	-----	-----	147.0
1920	22.0	-----	27.0	-----	-----	-----	49.0
1921	-----	6.5	30.0	-----	-----	-----	36.5
1922	-----	24.0	19.0	-----	-----	-----	43.0
1923	-----	25.0	20.0	-----	-----	-----	45.0
1924	-----	2.0	18.0	-----	-----	-----	20.0
1925	-----	7.0	-----	-----	-----	-----	7.0
1926	-----	0.7	-----	-----	-----	-----	0.7
1927	-----	1.2	8.0	9.2	-----	-----	18.4
1928	-----	5.5	32.0	22.5	-----	-----	60.0
1929	-----	10.0	10.0	35.0	-----	12.0	67.0
1930	-----	-----	22.0	29.5	-----	20.0	71.5
1931	-----	-----	-----	35.0	-----	33.5	68.5
1932	-----	-----	12.1	24.0	-----	11.0	47.1
1933	-----	-----	45.8	47.1	10.9	-----	103.8
1934	-----	-----	25.0	33.0	200.0	-----	258.0
1935	-----	-----	22.0	29.0	190.0	9.4	250.4
1936	-----	-----	2.0	-----	302.0	-----	304.0
1937	-----	-----	6.2	0.9	177.9	4.5	189.5
1938	-----	-----	40.1	2.3	234.3	57.3	334.0
1939	-----	-----	-----	-----	-----	-----	-----
1940	-----	-----	-----	-----	-----	-----	-----

SOURCES

1918-1920: Estimated sales of Pittman-act and other silver.

1921-1938: Estimates from Handy & Harman, *Annual Review of the Silver Market*. "Unallocated Supplies" in 1935 and 1937, representing speculative stocks withheld from market in early 1930's, are not included.

Price of Silver

1833-1873: Equivalent New York prices computed at par of exchange from London high and low prices as given in *Annual Report of the Director of Mint* . . . 1938, p. 86.

1874-1937: Actual New York high and low prices given in *ibid.*, p. 85.

1938: Actual New York high and low prices taken from current quotations in *Commercial and Financial Chronicle*.

APPENDIX II

CURRENT DATA

For a few important series, figures are given here from 1933, with space for the reader to fill in figures for the next few years if he so desires.

TABLE D
PRODUCTION OF GOLD, 1933-1938
(Millions of fine ounces)

Year	United States	British Empire	Mexico	South America	U.S.S.R.	Other Countries	Total
1933	2.3	16.6	0.6	0.9	2.7	2.3	25.4
1934	2.7	16.3	0.7	1.1	3.9	2.7	27.4
1935	3.2	17.1	0.7	1.2	4.8	3.0	30.0
1936	4.4	18.5	0.8	1.2	5.2	2.9	33.0
1937	4.8	20.2	0.8	1.4	5.0	2.5	34.7
1938	5.1	20.3	0.9	1.4	5.3	4.1	37.1
1939	-----	-----	-----	-----	-----	-----	-----
1940	-----	-----	-----	-----	-----	-----	-----

SOURCE: as in Appendix I.

TABLE E
PRODUCTION OF SILVER, 1933-1938
(Millions of fine ounces)

Year	United States	British Empire	Mexico	South America	U.S.S.R.	Other Countries	Total
1933	23	30	68	13	1	34	169
1934	32	34	74	17	1	32	190
1935	46	37	76	27	4	31	221
1936	63	41	77	33	7	33	254
1937	71	47	85	29	7	35	274
1938	62	45	85	32	7	34	265
1939	-----	-----	-----	-----	-----	-----	-----
1940	-----	-----	-----	-----	-----	-----	-----

SOURCE: as in Appendix I.

SILVER MONEY

TABLE F
MONTHLY HIGH AND LOW PRICE OF SILVER, 1933-1938

Month	New York Cents per ounce, 0.999 fine		London Pence per ounce, 0.925 fine	
	High	Low	High	Low
1933				
Jan.	26.25	*24.5	17.125	*16.5
Feb.	27.25	25.375	17.3125	16.5625
Mar.	30.	26.5	18.4375	17.
Apr.	37.25	27.	20.4375	17.25
May	36.25	32.125	*20.5	18.1875
June	36.75	34.75	19.5625	18.375
July	40.375	35.5	18.9375	17.875
Aug.	37.	35.	18.125	17.75
Sept.	40.5	36.625	18.5	18.0625
Oct.	40.	36.125	18.5	17.75
Nov.	*45.	40.	18.625	18.25
Dec.	44.625	42.5	19.0625	18.4375
1934				
Jan.	45.	43.25	19.75	19.0625
Feb.	46.75	43.375	20.6875	19.25
Mar.	46.75	45.125	20.75	19.875
Apr.	46.75	42.5	20.25	18.75
May	45.125	*41.75	19.8125	*18.1875
June	46.25	44.5	21.125	19.4375
July	46.75	45.75	21.	20.0625
Aug.	49.75	46.375	21.875	20.4375
Sept.	50.00	49.25	22.4375	21.625
Oct.	55.625	50.00	24.875	22.4375
Nov.	*55.75	53.00	*25.25	23.4375
Dec.	55.	53.25	24.875	23.8125
1935				
Jan.	55.	53.875	24.75	24.3215
Feb.	56.5	53.5	25.6875	24.3125
Mar.	61.25	56.875	28.875	26.0625
Apr.	*81.	61.25	*36.25	28.25
May	77.	71.25	35.375	32.375
June	74.	69.5	33.75	31.
July	69.75	67.75	31.3125	30.1875
Aug.	67.75	65.375	30.1875	29.
Sept.	65.375	65.375	29.5625	29.
Oct.	65.375	65.375	29.625	29.3125
Nov.	65.375	65.375	29.5	29.1875
Dec.	65.375	*49.75	29.25	*20.875
1936				
Jan.	*49.75	*44.75	22.375	*19.
Feb.	44.75	44.75	20.0625	19.4375
Mar.	44.75	44.75	20.1875	19.0625
Apr.	45.75	44.75	20.875	19.875
May	45.75	44.75	20.875	19.75
June	44.75	44.75	20.0625	19.4375
July	44.75	44.75	19.75	19.375
Aug.	44.75	44.75	19.6875	19.125
Sept.	44.75	44.75	20.0625	19.4375
Oct.	44.75	44.75	20.1875	19.6875
Nov.	47.5	44.75	*22.9375	20.
Dec.	46.5	44.875	21.375	20.875

*High or low for the year.

TABLE F--(continued)
MONTHLY HIGH AND LOW PRICE OF SILVER, 1933-1938

Month	New York Cents per ounce, 0.999 fine		London Pence per ounce, 0.925 fine	
	High	Low	High	Low
1937				
Jan.	45.75	*44.75	*21.3125	20.25
Feb.	44.75	44.75	20.1825	19.9375
Mar.	45.75	44.75	21.125	20.1875
Apr.	*46.75	44.75	21.5	20.1875
May	45.25	44.875	20.4375	20.25
June	45.	44.75	20.375	19.75
July	44.75	44.75	20.1875	19.1875
Aug.	44.75	44.75	20.	19.1875
Sept.	44.75	44.75	20.	19.75
Oct.	44.75	44.75	20.0625	19.1875
Nov.	44.75	44.75	19.9375	19.5625
Dec.	44.75	44.75	19.6875	*18.1875
1938				
Jan.	*44.75	44.75	20.375	19.25
Feb.	44.75	44.75	20.3125	19.9375
Mar.	44.75	*42.75	*20.5625	*18.375
Apr.	42.75	42.75	19.1875	18.5625
May	42.75	42.75	18.9375	18.625
June	42.75	42.75	19.0625	18.6875
July	42.75	42.75	19.9375	18.9375
Aug.	42.75	42.75	19.875	19.125
Sept.	42.75	42.75	19.9375	18.75
Oct.	42.75	42.75	19.8125	19.3125
Nov.	42.75	42.75	20.25	19.5
Dec.	42.75	42.75	20.25	19.9375
1939				
Jan.	.....	.....	.....	.....
Feb.	.....	.....	.....	.....
Mar.	.....	.....	.....	.....
Apr.	.....	.....	.....	.....
May	.....	.....	.....	.....
June	.....	.....	.....	.....
July	.....	.....	.....	.....
Aug.	.....	.....	.....	.....
Sept.	.....	.....	.....	.....
Oct.	.....	.....	.....	.....
Nov.	.....	.....	.....	.....
Dec.	.....	.....	.....	.....
1940				
Jan.	.....	.....	.....	.....
Feb.	.....	.....	.....	.....
Mar.	.....	.....	.....	.....
Apr.	.....	.....	.....	.....
May	.....	.....	.....	.....
June	.....	.....	.....	.....
July	.....	.....	.....	.....
Aug.	.....	.....	.....	.....
Sept.	.....	.....	.....	.....
Oct.	.....	.....	.....	.....
Nov.	.....	.....	.....	.....
Dec.	.....	.....	.....	.....

*High or low for the year.

SOURCE: Handy & Harman Records and Commercial and Financial Chronicle.

APPENDIX III

THE COMPUTATION OF PARITY CONSTANTS

1. TABLE OF WEIGHT AND MONETARY CONSTANTS *Weights*

1 avoirdupois ounce	= 437½ grains.
1 troy ounce	= 480 grains.
1 gram	= 15.4324 grains.
1 tola (India)	= 180 grains.

World Silver Markets

New York: quotations in cents per troy ounce, 0.999 fine.

London: quotations in pence per troy ounce, 0.925 fine.

Bombay: quotations in rupees per 100 tolas, fine.

American Coinage

1 gold dollar (1834-1934)	= 25.8 grains gold, 0.900 fine, = 23.22 grains fine gold.
1 ounce fine gold	= \$20.6718 in pre-1934 dollars.
1 gold dollar (Jan. 31, 1934-)	= 15 5/21 grains gold, 0.900 fine, = 13 5/7 grains fine gold.
1 ounce fine gold	= \$35.00 in 1934 dollars.
1 silver dollar (1837-)	= 412½ grains silver, 0.900 fine, = 371¼ grains fine silver.
1 ounce fine silver	= \$1.2929+ at bullion parity of silver dollar.
1 dollar in subsidiary coin (1873-)	= 25 grams (385.81 grains) silver, 0.900 fine. = 22.5 grams (347.23 grains) fine silver.
1 ounce fine silver	= \$1.3823+ at bullion parity of subsidi- ary coin.

British Coinage (at old par)

1 pound sterling (£1)	= 123.274478 grains gold, 11/12 fine, = 113.001605 grains fine gold.
1 ounce gold 11/12 fine (basis of quoting before 1919)	= £3.89375, = £3 17s. 10½d.
1 ounce fine gold (basis of quoting after 1919)	= £4.24773, = £4 4s. 11½d.
1 pound sterling (£1) in silver coin (before 1920)	= 1745.455 grains silver, 0.925 fine, = 1614.546 grains fine silver.
1 pound sterling (£1) in silver coin (1920-)	= 1745.455 grains silver, 0.500 fine, = 872.727 grains fine silver.

Indian Coinage

1 rupee (1835-) = 1 tola (180 grains) silver, 11/12 fine,
= 165 grains fine silver.

Chinese Coinage

1 Chinese standard dollar (1933-1935) = 26.6971 grams (412 grains) silver,
0.880 fine,
= 23.4934 grams (362.56 grains) fine,
silver.

2. CHAIN RULE

Computations connected with monetary parities and foreign exchange are done most easily by the method of chain rule, except in cases where they can be solved by simple proportion.

Chain rule may be illustrated by the following example to find the old par value of the pound sterling in American currency. A series of equations is written down, each one beginning with a quantity expressed in the same concrete unit as the quantity with which the preceding equation ended:

- (a) X dollars = 1 pound sterling,
- (b) 1 pound sterling = 113.0016 grains fine gold,
- (c) 23.22 grains fine gold = 1 dollar.

The above equations are derived as follows:

- (a) Statement of the problem;
- (b) Definition of the pound sterling;
- (c) Definition of the dollar.

Next, the three equations are multiplied together, and the right-hand side of the resulting equation is divided by the left-hand side, giving:

$$1 = \frac{1 \text{ pound sterling} \times 113.0016 \text{ grains fine gold} \times 1 \text{ dollar}}{X \text{ dollars} \times 1 \text{ pound sterling} \times 23.22 \text{ grains fine gold}}$$

Since exactly the same concrete units appear in both numerator and denominator, they cancel out, and the answer becomes:

$X = 4.86656$ (commonly taken as 4.8665, as established by law in 1874).

In practice, the concrete units are omitted in writing the product of the original equations.

3. COMPUTATION OF FORMULAS

Symbols

- G = price of gold in London, in shillings per fine ounce.
- G' = price of gold in New York, in dollars per fine ounce.
- S = price of silver in London, in pence per ounce, 0.925 fine.
- S' = price of silver in New York, in cents per ounce, 0.999 fine.
- R = ratio between values of gold and silver in London.
- R' = ratio between values of gold and silver in New York.
- E = exchange rate, New York on London, or current par of exchange, in dollars per pound sterling.

The relationship between New York gold price and London gold price is:

- G' dollars = 1 ounce fine gold,
- 1 ounce fine gold = G shillings,
- 20 shillings = 1 pound sterling,
- 1 pound sterling = E dollars,

$$1 = \frac{1 \times G \times 1 \times E}{G' \times 1 \times 20 \times 1},$$

$$G' = \frac{GE}{20};$$

or, for the special case of the old par, where $E = 4.8665$,

(2) $G' = 0.2433G.$

The actual relationship on any day may differ slightly from the above because of the condition of the exchange market, but the difference normally will be limited by the cost of shipping.

The relationship between New York silver price and London silver price is:

S' cents	= 1 ounce silver, 0.999 fine,
1 ounce silver, 0.925 fine	= S pence,
240 pence	= 1 pound sterling,
1 pound sterling	= E dollars,
1 dollar	= 100 cents,
	$1 = \frac{0.999 \times S \times 1 \times E \times 100}{S' \times 0.925 \times 240 \times 1 \times 1},$
(3)	$S' = 0.45ES;$

or, for the special case of the old par, where $E = 4.8665$,

(4) $S' = 2.190S$

The actual relationship on any day may differ slightly from the above because of the condition of the silver market, but the difference normally is limited by the cost of shipping.

Note that in the chain-rule computation, since the right-hand member of the first equation and the left-hand member of the second equation both are 1 ounce silver, only the finenesses are used in combining them.

The relationship between London silver price and the ratio is:

R ounces fine silver	= 1 ounce fine gold,
1 ounce fine gold	= G shillings,
1 shilling	= 12 pence,
S pence	= 1 ounce silver, 0.925 fine,
	$1 = \frac{1 \times G \times 12 \times 0.925}{R \times 1 \times 1 \times S},$
(5)	$R = \frac{11.1G}{S}.$

For the special case of the pound at its old gold value, the price of gold was £4 4s. 11½*d.*, that is, $G = 84.955$ shillings; formula (5) becomes:

(6) $R = \frac{943.00}{S}.$

The relationship between New York silver price and the ratio is:

R' ounces fine silver	= 1 ounce fine gold,
1 ounce fine gold	= G' dollars,
1 dollar	= 100 cents,
S' cents	= 1 ounce silver, 0.999 fine,
	$= \frac{1 \times G' \times 100 \times 0.999}{R' \times 1 \times 1 \times S'}.$

$$(7) \quad R' = \frac{99.9G'}{S}.$$

For the special case of the dollar at its pre-1934 value, where $G' = 20.6718$, formula (7) becomes:

$$(8) \quad R' = \frac{2065.1}{S'}.$$

For the special case of the dollar established January 31, 1934, where $G' = 35.00$, formula (7) becomes:

$$(9) \quad R' = \frac{3496.5}{S'}.$$

For example, at the current monetary value of silver, $S' = 129.16$, which gives a coinage ratio of

$$\begin{aligned} R' &= \frac{3496.5}{129.16} \\ &= 27.07 \text{ to } 1. \end{aligned}$$

APPENDIX IV

COINAGE RATIOS AND BULLION PARITIES OF SILVER COINS

TABLE G. PREWAR

Table G shows the coinage ratios and bullion parities of the silver coins of the principal countries of the world, as determined by monetary legislation existing before the World War.

Columns (2) and (3) give the name and par value in American cents of each country's monetary unit.

Column (4) gives the coinage ratio, obtained by dividing the fine-silver content, per monetary unit, of the silver coins, by the fine-gold content of the monetary unit. In this and in the next two columns, where more than one figure is shown for a country, it means that different denominations of silver coins have different coinage ratios; that for the highest denomination is given first. Coinage ratios that have remained unchanged after the war are marked with an asterisk (*).

Column (5) gives the bullion parity in cents per ounce, 0.999 fine. This is obtained by dividing 2065.1 by the coinage ratio, in accordance with formula (8) of Appendix III.

Column (6) gives the bullion parity in pence per ounce, 0.925 fine. This is obtained by dividing 943.00 by the coinage ratio in accordance with formula (6) of Appendix III.

TABLE H. POSTWAR

Table H gives the corresponding data based on legislation in force in each country, after it had returned to the gold standard subsequently to the World War, and while Great Britain and the United States still were on the gold standard. As in Table G, coinage ratios that have remained unchanged since the war are marked with an asterisk (*).

The departure of any country from the gold standard makes the figures shown for that country incorrect. The departure of the United States and Great Britain from the gold standard makes all the bullion parities incorrect, when measured in depreciated cents and pence. Until currencies are stabilized on a new gold basis, however, this table serves as a base from which current parities may be computed by the use of current exchange rates, as described below.

ADJUSTMENT FOR DEPRECIATED CURRENCIES

If it is desired to find the bullion parity in cents per ounce of any foreign silver coin at present, when most currencies are off gold, it is only necessary to multiply the figure given in column (5) of Table H by the current exchange rate for the foreign currency concerned (in terms of U. S. cents) and divide by the par value from column (3). No adjustment is needed for the current gold value of the American dollar, because the exchange value of the foreign currency and the price of silver both are measured in the current dollar, and the old dollar cancels out, as shown in the following example.

Example: If the exchange rate of the French franc is 2.673 cents, what is its current bullion parity?

Answer: $\frac{2.673 \text{ current cents}}{3.918 \text{ old cents}} \times 179.0 \text{ old cents} = 122.1 \text{ current cents.}$

The corresponding bullion parity in pence per ounce may be found by converting cents to pence by formula (3) of Appendix III; or by multiplying the old parity in pence by the current exchange rate of the franc in London and dividing by the old par of the franc in London. The two methods may give slightly different results if the exchange rates in the triangle New York-Paris-London are not in exact equilibrium.

See also Roush, "Melting Point of Silver Coinage the Resultant of Price and Exchange Rates," for a nomogram for quick computation of bullion parities.

TABLE G
PREWAR COINAGE RATIOS AND BULLION PARITIES OF SILVER COINS

COUNTRY	MONETARY UNIT		BASIS OF SILVER COINAGE		
	Name	Par value in pre-1934 U.S. cents 0.2322 grains fine gold	Coinage Ratio	Bullion Parity	
				Cents per oz., 0.999 fine	Pence per oz., 0.925 fine
(1)	(2)	(3)	(4)	(5)	(6)
<i>North America</i>					
United States	Dollar	100.¢	15.99* 14.95*	129.2¢ 138.1	59.0d. 63.1
Canada	Dollar	100.	14.34	144.0	65.8
Mexico	Peso	49.845	32.59 26.67	63.4 77.4	28.9 35.4
<i>South America</i>					
Argentina	Peso	96.472	15.50	133.2	60.8
Bolivia	Boliviano	38.93	28.45	72.6	33.1
Brazil	Milreis	54.635	10.95	188.6	86.1
Chile	Peso	36.498	11.80 12.29 16.39	175.0 168.0 126.0	79.9 76.7 57.5
Colombia	Dollar	97.331	15.36*	134.4	61.4
Ecuador	Sucre	48.665	30.73	67.2	30.7
Peru	Pound	486.65	30.73	67.2	30.7
Uruguay	Peso	103.422	14.46*	142.8	65.2
Venezuela	Bolivar	19.295	15.50* 14.38*	133.2 143.6	60.8 65.6
<i>Europe</i>					
Austria- Hungary	Crown	20.262	14.17 18.22 13.69	145.7 113.3 150.8	66.5 51.8 68.9
Belgium	Franc	19.295	15.50 14.38	133.2 143.6	60.8 65.6
Bulgaria	Lev				
France	Franc				
Greece	Drachma				
Italy	Lira				
Rumania	Leu				
Servia	Dinar				
Spain	Peseta				
Switzerland	Franc				

*Coinage ratio unchanged after World War.

TABLE G—(continued)
PREWAR COINAGE RATIOS AND BULLION PARITIES OF SILVER COINS

COUNTRY	MONETARY UNIT		BASIS OF SILVER COINAGE		
	Name	Par value in pre-1934 U.S. cents 0.2322 grains fine gold	Coinage Ratio	Bullion Parity	
				Cents per oz., 0.999 fine	Pence per oz., 0.925 fine
(1)	(2)	(3)	(4)	(5)	(6)
Denmark	Crown	26.798¢	14.88	138.8¢	63.4¢
Norway	Crown		14.40	143.4	65.5
Sweden	Crown		14.38*	143.6	65.6
Finland	Markka	19.295	15.50	133.2	60.8
			13.17	156.8	71.6
Germany	Mark	23.82	13.95	148.0	67.6
Netherlands	Florin (guilder)	40.195	15.62	132.2	60.4
			15.13*	136.5	62.3
Portugal	Escudo	108.05	14.81*	139.4	63.7
Russia	Ruble	51.455	12.84	160.8	73.4
			23.24	88.9	40.6
United Kingdom	Pound	486.65	11.62	177.7	81.1
			14.29	144.5	66.0
<i>Asia</i>					
India	Rupee	32.443	21.90		
Japan	Yen	49.845	21.60	94.3	43.1
Netherlands	Florin	40.20	15.62	95.6	43.7
Indies	(guilder)		15.13	132.2	60.4
			14.81	136.5	62.3
Philippine	Peso	50.	21.27*	139.4	63.7
Islands			19.94*	97.1	44.3
Siam	Tical	37.085	24.19	103.6	47.3
			21.50	85.4	39.0
Straits Set- tlements	Dollar	56.78	21.30	96.1	43.9
			19.07	97.0	44.3
				108.3	49.4
<i>Africa and Australasia</i>					
Australia	Pound	486.65	14.29*	144.5	66.0
New Zealand	Pound				
South Africa	Pound				
Egypt	Pound	494.30	15.69*	131.6	60.1
<i>Coins in certain countries prior to recoinage in 1907</i>					
Japan	Yen	49.845	28.75	71.8	32.8
Philippine	Peso	50.	32.25	64.0	29.2
Islands					
Straits Set- tlements	Dollar	56.78	28.40	72.7	33.2

*Coinage ratio unchanged after World War.

SOURCE

Computed by the writer from weights and finenesses of gold and silver coins given in U. S. Bureau of the Mint, *Monetary Systems of the Principal Countries of the World*, Washington, 1917.

TABLE H
POSTWAR COINAGE RATIOS AND BULLION PARITIES OF SILVER COINS

COUNTRY	MONETARY UNIT		BASIS OF SILVER COINAGE		
	Name	Par value in pre-1934 U.S. cents 0.2322 grains fine gold	Coinage Ratio	Bullion Parity	
				Cents per oz., 0.999 fine	Pence per oz., 0.926 fine
(1)	(2)	(3)	(4)	(5)	(6)
<i>North America</i>					
United States	Dollar	100.¢	15.99*	129.2¢	59.0d.
Canada	Dollar	100.	14.95*	138.1	63.1
Mexico	Peso	49.85	12.40	166.5	76.0
			16.00	129.1	58.9
<i>South America</i>					
Bolivia	Boliviano	36.499	21.85	94.5	43.2
Brazil	Milreis	11.963	10.00	206.5	94.3
Chile	Peso	12.166	13.11	157.5	71.9
Colombia	Peso	97.331	15.36*	134.4	61.4
Ecuador	Sucre	20.	11.96	172.6	78.8
Peru	Sol	28.	29.67	69.6	31.8
Uruguay	Peso	103.42	14.46*	142.8	65.2
			12.85	160.7	73.4
Venezuela	Bolivar	19.295	15.50*	133.2	60.8
			14.38*	143.6	65.6
<i>Europe</i>					
Albania	Franc	19.295	15.50	133.2	60.8
			14.38	143.6	65.6
Austria	Schilling	14.07	18.14	113.9	52.0
Bulgaria	Lev	0.7224	9.20	224.5	102.5
Czechoslovakia	Koruna	2.96	15.70	131.5	60.1
Danzig	Gulden	19.47	5.12	403.3	184.1
			8.54	242.0	110.5
Estonia	Kroon	26.80	7.44	277.6	126.7
France	Franc	3.918	11.54	179.0	81.8
Germany	Reichsmark	23.82	6.98	296.1	135.2
Greece	Drachma	1.298	14.50	142.4	65.0
			17.92	115.2	52.6
Hungary	Pengo	17.49	12.16	169.8	77.5
Irish Free State	Pound	486.65	11.58	178.3	81.4
Italy	Lira	5.263	7.58	272.6	124.5
			10.54	195.9	89.4
Latvia	Lat	19.295	15.50	133.2	60.8
			14.38	143.6	65.6
			17.25	119.7	54.7
Lithuania	Litas	10.	8.97	230.2	105.1
Netherlands	Florin (guilder)	40.195	11.90	173.5	79.2
			15.13*	136.5	62.3
			14.81*	139.4	63.7
Poland	Zloty	11.22	9.78	211.3	96.5
Rumania	Leu	0.5982	7.78	265.5	121.2
Sweden	Krona	26.798	14.88	138.8	63.4
			14.40	143.4	65.5
			14.38*	143.6	65.6

*Coinage ratio unchanged from before World War.

TABLE H—(continued)
POSTWAR COINAGE RATIOS AND BULLION PARITIES OF SILVER COINS

COUNTRY	MONETARY UNIT		BASIS OF SILVER COINAGE		
	Name	Par value in pre-1934 U.S. cents 0.2322 grains fine gold	Coinage Ratio	Bullion Parity	
				Cents per oz., 0.999 fine	Pence per oz., 0.925 fine
(1)	(2)	(3)	(4)	(5)	(6)
<i>Europe (con't)</i>					
Switzerland	Franc	19.295	8.63 14.38*	239.3 143.6	109.3 65.6
Union of So- cialist Soviet Republics	Chervonetz (10 rubles)	514.57	23.25 11.62	88.8 177.7	40.6 81.1
United Kingdom	Pound	486.65	7.72	267.4	122.1
<i>Asia</i>					
India	Rupee	36.50	19.47	106.1	48.4
Indo-China	Piastre	39.18	30.53 31.15	67.6 66.3	30.9 30.3
Japan	Yen	49.85	9.50	217.3	99.2
Netherlands	Florin	40.20	11.90	173.5	79.2
Indies	(guilder)		15.14 14.88	136.4 138.8	62.3 63.4
Philippine Islands	Peso	50.	21.27* 19.94*	97.1 103.6	44.3 47.3
Siam	Baht	44.24	20.28 14.65	101.8 141.0	46.5 64.4
Straits Set- tlements	Dollar	56.78	9.86 19.07	209.4 108.3	95.6 49.4
<i>Africa and Australasia</i>					
Australia	Pound	486.65	14.29*	144.5	66.0
Egypt	Pound	494.31	15.69*	131.6	60.1
New Zealand	Pound	486.65	7.72	267.4	122.1
Union of South Africa	Pound	486.65	12.36	167.1	76.3

* Coinage ratio unchanged from before World War.

SOURCE

Computed by the writer from weights and finenesses of gold and silver coins as given in U.S. Bureau of the Mint, Monetary Units and Coinage Systems of the Principal Countries of the World, Washington, 1929; Bratter, The Monetary Use of Silver in 1933, Washington, 1933; U.S. Bureau of the Mint, Annual Report of the Director of the Mint, Washington, annually.

APPENDIX V

WORLD CONSUMPTION OF SILVER, 1920-1938

TABLE I
(Millions of fine ounces)

YEAR	ARTS		MONETARY			UNAC- COUNTED	TOTAL
	Miscel.	India	Miscel.	U.S.	China		
1920	27.0	14.2	11.5	30.0	88.0	37.3	208.0
1921	20.5	41.3	5.0	50.0	58.5	22.2	197.5
1922	28.5	57.0	9.6	62.0	70.0	28.9	256.0
1923	33.2	100.7	11.5	50.0	77.0	15.0	287.4
1924	32.5	108.2	61.3	4.4	41.7	11.0	259.1
1925	36.0	106.7	17.6	17.0	59.4	15.4	252.1
1926	39.5	91.6	16.6	6.7	73.9	26.0	254.3
1927	40.0	90.0	16.7	6.5	85.0	31.4	269.6
1928	39.5	89.0	18.4	6.0	124.0	40.3	317.2
1929	55.5	81.8	22.5	2.5	136.7	28.9	327.9
1930	43.5	94.5	14.0	6.1	123.0	37.2	318.3
1931	69.7	57.0	18.7	2.4	59.0	55.5	262.3
1932	53.8	12.0	47.9	1.2	40.0	55.9	210.8
1933	46.5	10.0	27.5	23.7	.....	160.2	267.9
1934	50.4	15.0	31.6	307.1	.....	39.3	443.4
1935	48.5	5.0	28.2	528.3	.....	.....	610.0
1936	54.5	100.0	21.3	331.6	.....	47.3	554.7
1937	62.4	65.0	38.9	312.2	.....	.....	478.5
1938	53.8	14.0	23.0	403.2	.....	.....	494.0
1939	.....	.....	.....	.....	.....	.....	.....
1940	.....	.....	.....	.....	.....	.....	.....

SOURCE

Handy & Harman, *Annual Review of the Silver Market*. In some years German consumption has been divided arbitrarily by the writer between arts and monetary, in default of explicit data.

APPENDIX VI
DISTRIBUTION OF WORLD'S GOLD AND SILVER IN 1933
TABLE J

LOCATION	GOLD		SILVER	
	Quantity	Monetary Value	Quantity	Monetary Value
	Millions of fine ounces	Millions of U.S. \$ 23.22 gr. fine gold	Millions of fine ounces	Millions of U.S. \$ 23.22 gr. fine gold
I. MONETARY				
<i>a. In countries on or formerly on the gold standard:</i>				
<i>North America:</i>				
United States	196 oz.	\$ 4,045	640 oz.	\$ 847
Canada	4	84	17	28
Mexico	.....	.....	78	100
Total	200 oz.	\$ 4,129	735 oz.	\$ 975
<i>South and Central America:</i>				
Argentina	12 oz.	\$ 249	.....	.....
Chile	0.5	10	2 oz.	\$ 2
Colombia	0.5	12	8	11
Cuba	.....	.....	9	12
Guatemala	.....	.....	1	1
Peru	0.5	11	7	5
Uruguay	2	48	4	6
Venezuela	.....	.....	10	15
Others	0.5	14	5	8
Total	16 oz.	\$ 344	46 oz.	\$ 60
<i>Europe:</i>				
Austria	1 oz.	\$ 21	10 oz.	\$ 12
Belgium	17	361	.....	.....
Bulgaria	0.5	11	3	6
Czechoslovakia	3	51	.....	.....
Denmark	2	36	1	2
France	157	3,254	66	119
Germany	9	192	135	400
Greece	0.5	8	3	4
Hungary	1	17	6	11
Irish Free State	.....	.....	3	5
Italy	15	307	48	97
Latvia	.....	.....	5	7
Malta	.....	.....	1	4
Netherlands	20	415	35	54
Norway	2	39	5	7
Poland	3	56	10	21
Portugal	1	24	1	1
Rumania	3	57	4	11
Spain	21	436	144	193
Sweden	3	55	10	14
Switzerland	23	477	21	31
U.S.S.R.	18	368	78	137
United Kingdom	28	583	89	238
Yugoslavia	1.5	31	5	8
Others	1.5	29	2	3
Total	331 oz.	\$ 6,828	685 oz.	\$ 1,385

TABLE J (continued)

LOCATION	GOLD		SILVER	
	Quantity	Monetary Value	Quantity	Monetary Value
	Millions of fine ounces	Millions of U.S. \$ 23.22 gr. fine gold	Millions of fine ounces	Millions of U.S. \$ 23.22 gr. fine gold
Asia:				
British India	8 oz.	\$ 162	1,050 oz.	\$1,117
Ceylon	.....	.....	2	4
Hyderabad	.....	.....	69	90
Indo-China	.....	.....	21	14
Japan	10	212	107	232
Netherlands Indies	2	42	111	171
Philippine Islands	.....	.....	19	19
Siam	1.5	30	19	19
Straits Settlements	.....	.....	16	21
Syria	.....	.....	10	4
Turkey	0.5	10	.....	.....
Others	.....	.....	3	3
Total	22 oz.	\$ 456	1,427 oz.	\$1,694
Africa and Australasia:				
Algeria	0.5 oz.	\$ 8	1 oz.	\$ 2
Anglo-Egyptian Sudan	.....	.....	7	9
Australia	2	42	15	21
British East Africa	.....	.....	6	24
Egypt	1.5	33	23	30
Morocco	.....	.....	3	1
New Zealand	1	25	12	32
Southern Rhodesia	.....	.....	2	3
Union of South Africa	2	35	7	12
Others	.....	.....	2	4
Total	7 oz.	\$ 143	78 oz.	\$ 138
Estimated circulation and hoards	40 oz.	\$ 827		
Total, gold-standard countries	616 oz.	\$12,727	2,971 oz.	\$4,252
<i>b. In countries on or in transition from the silver standard:</i>				
China	.....	.....	1,700 oz.	\$ 425
Hong Kong	.....	.....	162	40
Ethiopia	.....	.....	34	9
Persia (now Iran)	.....	.....	73	18
Total, silver-standard countries	.....	.....	1,969 oz.	\$ 492
Total, monetary	616 oz.	\$12,727	4,940 oz.	\$4,744
2. NONMONETARY				
United States	80 oz.		1,000 oz.	
Europe	80		1,000	
India	119		3,300	
China	13		800	
Elsewhere	40		500	
Total, nonmonetary	332 oz.		6,600 oz.	
Grand total visible stock	948 oz.		11,540 oz.	
Balance unaccounted for	162		3,946	
World Production, 1493-1932	1,110 oz.		15,486 oz.	

SOURCES

The computations for stocks of silver were originally published by the writer in "The Distribution of the World's Silver," *Review of Economic Statistics*, Vol. 17, November, 1935, pp. 181-188, and are reproduced here by permission of the editors. See the original for somewhat more extensive discussion than is given in the notes below.

Gold, monetary. These figures represent gold reserves of central banks and governments as of December 31, 1932, from *Federal Reserve Bulletin*, Vol. 19, May, 1933, p. 293. Dollar figures have been converted to fine ounces by dividing by \$20.67, and expressing to the nearest half-million ounces.

It should be noted that these figures are too low because they do not allow for such gold coin as may be in circulation and hoards. In *League of Nations, Selected Documents on the Distribution of Gold Submitted to the Gold Delegation of the Financial Committee*, Table I, opposite page 66, gives estimates of total gold reserves and monetary stocks for the years 1925 to 1930 inclusive. The figures for world total stocks exceed those for reserves by as much as 13 per cent in 1926 decreasing to 6 per cent in 1930. In view of hoarding at the end of 1932 it seems reasonable to allow at the end of the table 7 per cent in addition to the reserves.

Gold, nonmonetary, United States, Europe, etc. From 1880 to 1932 a total of \$1,789,230,211 of gold was reported as furnished for use in manufactures and arts (*Annual Report of the Director of the Mint . . . 1933*, p. 30). This includes some old material, counted more than once during the period, but, on the other hand, makes no allowance for gold articles manufactured before 1880 and extant in 1933. On the basis of these figures, which, at \$20.67 per fine ounce, are equivalent to 86,000,000 fine ounces, an estimate of 80,000,000 fine ounces for gold articles extant in 1933 seems reasonable. For Europe an arbitrary guess of the same quantity is made, and for the rest of the world, excluding India and China, an arbitrary guess of half that quantity, or 40 million fine ounces is made.

Gold, nonmonetary, India. The total stock of gold in India as of March 31, 1919 was estimated by G. Findlay Shirras in *Indian Finance and Banking*, p. 281, as \$372,000,000, which, at 113 grains of fine gold to the pound, is equivalent to 88,000,000 fine ounces. Net imports of gold from 1919-20 through 1932-33, from *Accounts Relating to the Sea-Borne Trade and Navigation of British India* amounted to 34,000,000 fine ounces. Domestic production during the same period, from *Statistical Abstract of British India* and current sources, amounted to 5,000,000 fine ounces. These total 127,000,000 fine ounces, of which 8,000,000 are in monetary use, leaving 119,000,000 fine ounces of nonmonetary gold.

Gold, nonmonetary, China. A study made by the writer, "The Accumulation of the Precious Metals in India and China," summarized in *Abstracts of Papers Presented at the Research Conference on Economics and Statistics Held by the Cowles Commission . . . 1936*, pp. 30-32, showed an estimated stock of about 17,000,000 fine ounces at the end of 1935, or about 13,000,000 fine ounces at the end of 1932.

Silver, monetary. For all countries except India and China the figures for silver money in domestic monetary units given by Bratter in *The Monetary Use of Silver in 1933* have been converted into fine ounces by multiplying by the fine silver contents per unit (taken from the same book and from U.S. Bureau of the Mint, *Monetary Units and Coinage Systems of the Principal Countries of the World*), and into United States dollars at the pairs of exchange given in the same sources.

Silver, monetary, India. The stock of monetary silver in India as of March 31, 1926 was estimated by A. C. McWatters as "probably nearer 350 than 400 crores" i.e., nearer 3,500,000,000 rupees than 4,000,000,000 rupees (Hilton Young, *Report*, Vol. II, p. 74). Another estimate, based on the Shirras method (see his *Indian Finance and Banking*, pp. 478-482) of analyzing rupee census figures, was 3,250,000,000 rupees (Hilton Young, *Report*, Vol. II, p. 73). Assuming 3,500,000,000 rupees as the stock on March 31, 1926, and subtracting 440,000,000 rupees representing government sales of silver up to March 31, 1933 (the rupee equivalent at 165/480 fine ounces per rupee of 151,000,000 fine ounces total sales shown in *Report of the Controller of the Currency for the year 1932-33*, p. 10) leaves 3,060,000,000 rupees in existence as of March 31, 1933, which, at 165/480, equal 1,050,000,000 fine ounces. Taking the rupee at 1s. 6d. and the pound at par (although actually depreciated at that time) 3,060,000,000 rupees would have a monetary value of U.S. \$1,117,000,000.

Silver, monetary, China. At the end of 1930 Eduard Kann ("How much Silver is there in China?") estimated that there were \$2,200,000,000 in Chinese currency. Net imports during 1931 and 1932, by Chinese Customs figures, amounted to \$60,000,000, making a total of \$2,260,000,000 at the end of 1932. At approximately $\frac{3}{4}$ fine ounce per Chinese dollar, this is equivalent to approximately 1,700,000,000 fine ounces. At 25 cents, U. S. currency, per ounce, the approximate price at the beginning of 1933, this silver had a monetary value of U. S. \$425,000,000.

Silver, nonmonetary, United States, Europe, etc. From 1880 to 1932 a total of 1,105,888,084 fine ounces of silver was reported as furnished for use in manufactures and Arts (*Annual Report of the Director of the Mint . . . 1933*, p. 31.) This includes some old material, counted more than once during the period, but, on the other hand, makes no allowance for silver articles manufactured before 1880 and extant in 1933. On the basis of these figures an estimate of 1,000,000,000 fine ounces for silver articles extant in 1933 seems reasonable. For Europe an arbitrary guess of the same quantity is made, and for the rest of the world, excluding India and China, an arbitrary guess of half that quantity, or 500,000,000 fine ounces, is made.

Silver, nonmonetary, India. Shirras (*op. cit.*, p. 282) estimated the total stock of silver in India as of March 31, 1919 at 3,729,000,000 ounces, evidently taken at 0.925 fine, equivalent to 3,450,000,000 fine ounces. Net imports from 1919-20 to 1932-33 (from *Accounts Relating to the Sea-Borne Trade and Navigation of British India*) were 875,000,000 fine ounces. Domestic production during the same period (from *Statistical Abstract of British India* and current sources) was 73,000,000 fine ounces. Subtracting from the total of 4,398,000,000 fine ounces the monetary stock, estimated above as 1,050,000,000 fine ounces, and an allowance of 48,000,000 fine ounces for abrasion and loss, leaves a nonmonetary stock of 3,300,000,000 fine ounces.

Silver, nonmonetary, China. Kann (*loc. cit.*) estimated nonmonetary silver in China at 800,000,000 fine ounces.

Balance unaccounted. The above estimates of monetary and nonmonetary stocks compared with world production since 1493 leave unaccounted 162,000,000 fine ounces of gold and 3,946,000,000

fine ounces of silver, or 14 per cent and 25 per cent of the total production of the two metals respectively. Part of this represents actual loss by shipwreck and other disaster, abrasion, and consumption in plating and chemical combination. It is to be expected that all kinds of losses should be higher for silver than for gold, in view of its more common circulation as money, its daily use in utensils, and its chemical and industrial uses. The unaccounted figures for both metals, however, seem somewhat high, and it is not unlikely that perhaps 50,000,000 fine ounces of gold and 1,000,000,000 fine ounces of silver may be extant in monetary and nonmonetary uses, over and above the estimates in the above table.

APPENDIX VII

TEXT OF PART OF THE THOMAS AMENDMENT TO THE AGRICULTURAL ADJUSTMENT ACT, APPROVED MAY 12, 1933

(From *Annual Report of The Secretary of the Treasury, . . . 1933*, pp. 191-193)

Title III — Financial and Exercising power conferred by Section 8 of Article I of the Constitution: To coin money and regulate the value thereof.

SEC. 43. Whenever the President finds, upon investigation, that (1) the foreign commerce of the United States is adversely affected by reason of the depreciation in the value of the currency of any other government or governments in relation to the present standard value of gold, or (2) action under this section is necessary in order to regulate and maintain the parity of currency issues of the United States, or (3) an economic emergency requires an expansion of credit, or (4) an expansion of credit is necessary to secure by international agreement a stabilization at proper levels of the currencies of various governments, the President is authorized, in his discretion—

(a) [This paragraph provides for credit expansion through the Federal Reserve banks by open-market operations or by direct purchase of government obligations to the extent of \$3,000,000,000.]

(b) If the Secretary [of the Treasury], when directed by the President, is unable to secure the assent of the several Federal Reserve banks and the Federal Reserve Board to the agreements authorized in this section, or if operations under the above provisions prove to be inadequate to meet the purposes of this section, or if for any other reason additional measures are required in the judgment of the President to meet such purposes, then the President is authorized—

(1) [This paragraph authorizes the issue of United States notes up to \$3,000,000,000 for the purpose of repaying debts or purchasing obligations of the United States.]

(2) By proclamation to fix the weight of the gold dollar in grains nine tenths fine and also to fix the weight of the silver dollar in grains nine tenths fine at a definite fixed ratio in relation to the gold dollar at such amounts as he finds necessary from his investigation to stabilize domestic prices or to protect the foreign commerce against the adverse effect of depreciated foreign currencies, and to provide for the unlimited coinage of such gold and silver at the ratio so fixed, or in case the Government of the United States enters into an agreement with any government or governments under the terms of which the ratio between the value of gold and other currency issued by the United States and by any such government or governments is established, the President may fix the weight of the gold dollar in accordance with the ratio so agreed upon, and such gold dollar, the weight of which is so fixed, shall be the standard unit of value, and all forms of money issued or coined by the United States shall be maintained at a parity with this standard and it shall be the duty of the Secretary of the Treasury to maintain such parity, but in no event shall the weight of the gold dollar be fixed so as to reduce its present weight by more than 50 per centum.

SEC. 44. The Secretary of the Treasury, with the approval of the President,

is hereby authorized to make and promulgate rules and regulations covering any action taken or to be taken by the President under subsection (a) or (b) of section 43.

SEC. 45. (a) The President is authorized, for a period of 6 months from the date of the passage of this Act, to accept silver in payment of the whole or any part of the principal or interest now due, or to become due within 6 months after such date, from any foreign government or governments on account of any indebtedness to the United States, such silver to be accepted at not to exceed the price of 50 cents an ounce in United States currency. The aggregate value of the silver accepted under this section shall not exceed \$200,000,000.

(b) The silver bullion accepted and received under the provisions of this section shall be subject to the requirements of existing law and the regulations of the mint service governing the methods of determining the amount of pure silver contained, and the amount of the charges or deductions, if any, to be made; but such silver bullion shall not be counted as part of the silver bullion authorized or required to be purchased and coined under the provisions of existing law.

(c) The silver accepted and received under the provisions of this section shall be deposited in the Treasury of the United States, to be held, used, and disposed of as in this section provided.

(d) The Secretary of the Treasury shall cause silver certificates to be issued in such denominations as he deems advisable to the total number of dollars for which such silver was accepted in payment of debts. Such silver certificates shall be used by the Treasurer of the United States in payment of any obligations of the United States.

(e) The silver so accepted and received under this section shall be coined into standard silver dollars and subsidiary coins sufficient, in the opinion of the Secretary of the Treasury, to meet any demands for redemption of such silver certificates issued under the provisions of this section, and such coins shall be retained in the Treasury for the payment of such certificates on demand. The silver so accepted and received under this section, except so much thereof as is coined under the provisions of this section, shall be held in the Treasury for the sole purpose of aiding in maintaining the parity of such certificates as provided in existing law. Any such certificates or reissued certificates, when presented at the Treasury, shall be redeemed in standard silver dollars, or in subsidiary silver coin, at the option of the holder of the certificates: *Provided*, That, in the redemption of such silver certificates issued under this section, not to exceed one third of the coin required for such redemption may in the judgment of the Secretary of the Treasury be made in subsidiary coins, the balance to be made in standard silver dollars.

(f) When any silver certificates issued under the provisions of this section are redeemed or received into the Treasury from any source whatsoever, and belong to the United States, they shall not be retired, canceled, or destroyed, but shall be reissued and paid out again and kept in circulation; but nothing herein shall prevent the cancelation and destruction of mutilated certificates and the issue of other certificates of like denomination in their stead, as provided by law.

(g) The Secretary of the Treasury is authorized to make rules and regulations for carrying out the provisions of this section.

APPENDIX VIII

THE LONDON SILVER AGREEMENT OF JULY 22, 1933

(From Executive Agreement Series, No. 63, *Silver*)

MEMORANDUM OF HEADS OF AGREEMENT entered into by the Delegates of India, China and Spain as holders of large stocks or users of silver, and of Australia, Canada, the United States, Mexico and Peru as principal producers of silver, at the Monetary and Economic Conference held in London, July, 1933.

WHEREAS, at a meeting of the Sub-Commission II (Permanent Measures) of the Monetary and Financial Commission of the Monetary and Economic Conference held on Thursday, July 20th, 1933, the following Resolution was unanimously adopted.

"Be it resolved to recommend to all the Governments parties to this Conference:

"(a) That an agreement be sought between the chief silver producing countries and those countries which are the largest holders or users of silver with a view to mitigating fluctuations in the price of silver; and that the other nations not parties to this agreement should refrain from measures which could appreciably affect the silver market;

"(b) That the Governments parties to this Conference shall refrain from new legislative measures which would involve further debasement of their silver coinage below a fineness of 800/1000;

"(c) That they shall substitute silver coins for low value paper currency insofar as the budgetary and local conditions of each country will permit;

"(d) That all of the provisions of this Resolution are subject to the following exceptions and limitations:

"The requirements of such provisions shall lapse on April 1st, 1934, if the agreement recommended in Paragraph (a) does not come into force by that date, and in no case shall extend beyond January 1st, 1938;

"Governments may take any action relative to their silver coinage that they may deem necessary to prevent the flight or destruction of their silver coinage by reason of a rise in the bullion price of the silver content of their coin above the nominal or parity value of such silver coin," and,

WHEREAS, the Governments of India and Spain may desire to sell certain portions of their silver holdings, and it will be to their advantage that the countries which are large producers of silver should absorb silver as herein provided, to offset such sales, and,

WHEREAS, it is to the advantage of the large producing countries named in Article 2 that the sales of silver from monetary stocks be limited as herein provided, and

WHEREAS, it is to the advantage of China that sales from monetary stocks of silver be offset by purchases as herein provided, with a view to its effective stabilisation;

Now, THEREFORE, it is agreed between the parties hereto:

1. (a) That the Government of India shall not dispose by sale of more than one hundred and forty million fine ounces of silver during a period of four years, commencing with January 1st, 1934. The disposals during each calendar year of the said four year period shall be based on an average of thirty five million fine ounces per year, it being understood, however, that, if in any year, the Government of India shall not dispose of thirty five million fine ounces, the difference between the amount actually disposed of and thirty five million fine ounces may be added as additional disposals in subsequent years. Provided further that the maximum amount disposed of in any year shall be limited to fifty million fine ounces.

(b) Notwithstanding anything previously stated in this Article, it is understood that if the Government of India should after the date of this agreement sell silver to any Government for the purpose of transfer to the United States Government in payment of war debts such silver shall be excluded from the scope of this agreement.

(c) Provided, however, that when the total of disposals referred to in paragraph (a) above plus the sales referred to in paragraph (b) above by the Government of India under this agreement shall amount to one hundred and seventy five million fine ounces, the obligation of the parties hereto shall cease.

2. That the Governments of Australia, Canada, the United States, Mexico and Peru, during the existence of this agreement, shall not sell any silver, and shall also in the aggregate purchase, or otherwise arrange for withdrawing from the market, thirty five million fine ounces of silver from the mine production of such countries in each calendar year for a period of four years commencing with the calendar year 1934. The said Governments undertake to settle by agreement the share in the said thirty five million fine ounces which each of them shall purchase or cause to be withdrawn.

3. That the silver purchased and withdrawn in accordance with Article 2 above shall be used for currency purposes (either for coinage or for currency reserves), or be otherwise retained from sale during said period of four years.

4. That the Government of China shall not sell silver resulting from demonetised coins for a period of four calendar years commencing January 1st, 1934.

5. That the Government of Spain shall not dispose by sale of more than twenty million fine ounces of silver during a period of four years commencing January 1st, 1934. The disposals during each calendar year of the said four year period shall be based on an average of five million fine ounces per year; it being understood, however, that if in any year the Government of Spain shall not dispose of five million fine ounces, the difference between the amount actually disposed of and five million fine ounces may be added as additional disposals in subsequent years; provided further that the maximum amount to be disposed of in any year shall be limited to seven million fine ounces.

6. That the Governments concerned will exchange all such information as may be necessary with regard to the measures to fulfil the provisions of this memorandum of agreement.

7. That, it is understood, that subject to the provisions of Article 8, the undertakings of each party to the present memorandum of agreement are conditional upon the fulfilment of the undertakings of every other party thereto.

8. That this memorandum of agreement is subject to ratification by the Governments concerned. The instruments of ratification shall be deposited not later

than the 1st April, 1934,¹ with the Government of the United States. It shall come into force as soon as the ratifications of all the Governments concerned are received provided that all the ratifications are received before the 1st April, 1934. A notice by any Government that the affirmative action necessary to carry out the purposes of this agreement has been taken will be accepted as an instrument of ratification. Nevertheless, if one or more of the Governments enumerated in Article 2 fail to ratify by the 1st April, 1934, the agreement shall come into force at that date if the other Governments mentioned in Article 2 which have ratified notify the other Governments which ratify that they are prepared to purchase, or cause to be withdrawn, in the aggregate the amount of silver mentioned in Article 2. The Government of the United States is requested to take such steps as may be necessary for the purpose of the conclusion of this agreement.

IN WITNESS WHEREOF, the undersigned have signed the present memorandum of agreement. Done at London this 22nd day of July, 1933, in a single copy which shall be deposited in the archives of the Government of the United States.

S. M. BRUCE

Delegate of Australia.

EDGAR N. RHODES

Delegate of Canada.

W. W. YEN

Delegate of China.

KEY PITTMAN

Delegate of United States of America.

GEORGE SCHUSTER

Delegate of India.

EDUARDO SUÁREZ

Delegate of Mexico.

F. TUDELA

Delegate of Peru.

L. NICOLAU D'OLWER

Delegate of Spain.

¹ Extended to May 1, 1934, by agreement of all of the signatories.

APPENDIX IX

PRESIDENT ROOSEVELT'S SILVER-PURCHASE PROCLAMATION OF DECEMBER 21, 1933

(From *Annual Report of the Secretary of the Treasury . . . 1934*, pp. 209-210)

Whereas, by paragraph (2) of section 43, title III, of the act of Congress, approved May 12, 1933 (Public No. 10), the President is authorized "By proclamation to fix the weight of the gold dollar in grains nine-tenths fine and also to fix the weight of the silver dollar in grains nine-tenths fine at a definite fixed ratio in relation to the gold dollar at such amounts as he finds necessary from his investigation to stabilize domestic prices or to protect the foreign commerce against the adverse effect of depreciated foreign currencies, and to provide for the unlimited coinage of such gold and silver at the ratio so fixed, * * *"; and

Whereas, from investigations made by me, I find it necessary, in aid of the stabilization of domestic prices and in accordance with the policy and program authorized by Congress, which are now being administered, and to protect our foreign commerce against the adverse effect of depreciated foreign currencies, that the price of silver be enhanced and stabilized; and

Whereas a resolution presented by the delegation of the United States of America was unanimously adopted at the World Economic and Monetary Conference in London on July 20, 1933, by the representatives of sixty-six Governments, which in substance provided that said governments will abandon the policy and practice of melting up or debasing silver coins; that low valued silver currency be replaced with silver coins and that no legislation should be enacted that will depreciate the value of silver; and

Whereas a separate and supplemental agreement was entered into, at the instance of the representatives of the United States, between China, India, and Spain, the holders and users of large quantities of silver, on the one hand, and Australia, Canada, Mexico, Peru, and the United States on the other hand, as the chief producers of silver, wherein China agreed not to dispose of any silver derived from the melting up or debasement of silver coins, and India agreed not to dispose of over 35,000,000 ounces of silver per annum during a period of four years commencing January 1, 1934, and Spain agreed not to dispose of over 5,000,000 ounces of silver annually during said period, and both of said governments agreed that at the end of said period of four years they would then subject themselves to the general resolution adopted at the London Conference, and in consideration of such limitation it was agreed that the governments of the five producing countries would each absorb from the mines in their respective countries a certain amount of silver, the total amount to be absorbed by said producing countries being 35,000,000 ounces per annum during the four years commencing the 1st day of January, 1934; and that such silver so absorbed would be retained in each of said respective countries for said period of four years, to be used for coinage purposes or as reserves for currency, or to otherwise be retained and kept off the world market during such period of time, it being understood that of

the 35,000,000 ounces the United States was to absorb annually at least 24,421,410 ounces of the silver produced in the United States during such period of time.

Now, therefore, finding it proper to cooperate with other governments and necessary to assist in increasing and stabilizing domestic prices, to augment the purchasing power of peoples in silver-using countries, to protect our foreign commerce against the adverse effect of depreciated foreign currencies, and to carry out the understanding between the sixty-six governments that adopted the resolution hereinbefore referred to; by virtue of the power in me vested by the act of Congress above cited, the other legislation designated for national recovery, and by virtue of all other authority in me vested;

I, Franklin D. Roosevelt, President of the United States of America, do proclaim and direct that each United States coinage mint shall receive for coinage into standard silver dollars any silver which such mint, subject to regulations prescribed hereunder by the Secretary of the Treasury, is satisfied has been mined, subsequently to the date of this proclamation, from natural deposits in the United States or any place subject to the jurisdiction thereof. The Director of the Mint, with the voluntary consent of the owner, shall deduct and retain of such silver so received fifty per cent as seigniorage and for services performed by the Government of the United States relative to the coinage and delivery of silver dollars. The balance of such silver so received, that is, fifty per cent thereof, shall be coined into standard silver dollars and the same, or an equal number of other standard silver dollars, shall be delivered to the owner or depositor of such silver. The fifty per cent of such silver so deducted shall be retained as bullion by the Treasury and shall not be disposed of prior to the thirty-first day of December, 1937, except for coining into United States coins.

The Secretary of the Treasury is authorized to prescribe regulations to carry out the purposes of this proclamation. Such regulations shall contain provisions substantially similar to the provisions contained in the regulations made pursuant to the act of Congress, approved April 23, 1918, (40 Statutes at Large, page 535), known as the Pittman Act, with such changes as he shall determine, prescribing how silver mined, subsequently to the date of this proclamation, from natural deposits in the United States or any place subject to the jurisdiction thereof, shall be identified.

This proclamation shall remain in force and effect until the thirty-first day of December, 1937, unless repealed or modified by act of Congress or by subsequent proclamation.

The present ratio in weight and fineness of the silver dollar to the gold dollar shall, for the purposes of this proclamation, be maintained until changed by further order or proclamation.

Notice is hereby given that I reserve the right by virtue of the authority vested in me to revoke or modify this proclamation as the interest of the United States may seem to require.

In witness whereof I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington this 21st day of December, in the year of our Lord nineteen hundred and thirty-three, and of the Independence of the United States of America the one hundred and fifty-eighth.

By the President:

FRANKLIN D. ROOSEVELT.

WILLIAM PHILLIPS,

Acting Secretary of State.

APPENDIX X

EXTRACT FROM PRESIDENT ROOSEVELT'S MESSAGE TO CONGRESS OF JANUARY 15, 1934, RECOMMENDING LEGISLATION ON GOLD

(From *Congressional Record*, Vol. 78, Jan. 15, 1934, pp. 614-615)

To the Congress:

In conformity with the progress we are making in restoring a fairer price level and with our purpose of arriving eventually at a less variable purchasing power for the dollar, I ask the Congress for certain additional legislation to improve our financial and monetary system. By making clear that we are establishing permanent metallic reserves in the possession and ownership of the Federal Government, we can organize a currency system which will be both sound and adequate.

There is still much confusion of thought which prevents a world-wide agreement creating a uniform monetary policy. Many advocate gold as the sole basis of currency; others advocate silver; still others advocate both gold and silver whether as separate bases, or on a basis with a fixed ratio, or on a fused basis.

We hope that, despite present world confusion, events are leading to some future form of general agreement. The recent London agreement in regard to silver was a step, though only a step, in this direction.

[The ensuing paragraphs recommend authorizing the Government to take title to all gold in the country, to abandon the use of gold coin, to issue gold only for settlement of international balances, and to take the profit resulting from any decrease in the gold content of the dollar. They also recommend fixing the limits of revaluation at 50 per cent and 60 per cent of the old content of the dollar; and setting up a stabilization fund of \$2,000,000,000 out of the profits of devaluation.]

The foregoing recommendations relate chiefly to gold. The other principal precious metal — silver — has also been used from time immemorial as a metallic base for currencies as well as for actual currency itself. It is used as such by probably half the population of the world. It constitutes a very important part of our own monetary structure. It is such a crucial factor in much of the world's international trade that it cannot be neglected.

On December 21, 1933, I issued a proclamation providing for the coinage of our newly mined silver and for increasing our reserves of silver bullion, thereby putting us among the first nations to carry out the silver agreement entered into by 66 governments at the London Conference. This agreement is distinctly a step in the right direction and we are proceeding to perform our part of it.

All of the 66 nations agreed to refrain from melting or debasing their silver coins, to replace paper currency of small denominations with silver coins, and to refrain from legislation that would depreciate the value of silver in the world markets. Those nations producing large quantities of silver agreed to take specified amounts from their domestic production and those holding and using

large quantities agreed to restrict the amount they would sell during the 4 years covered by the agreement.

If all these undertakings are carried out by the governments concerned, there will be a marked increase in the use and value of silver.

Governments can well, as they have in the past, employ silver as a basis for currency, and I look for a greatly increased use. I am, however, withholding any recommendation to the Congress looking to further extension of the monetary use of silver because I believe that we should gain more knowledge of the results of the London agreement and of other monetary measures .

Permit me once more to stress two principles. Our national currency must be maintained as a sound currency which, insofar as possible, will have a fairly constant standard of purchasing power and be adequate for the purposes of daily use and the establishment of credit.

The other principle is the inherent right of government to issue currency and to be the sole custodian and owner of the base or reserve of precious metals underlying that currency. With this goes the prerogative of government to determine from time to time the extent and nature of the metallic reserve. I am confident that the Nation will well realize the definite purpose of the Government to maintain the credit of that Government and, at the same time, to provide a sound medium of exchange which will serve the needs of our people.

FRANKLIN D. ROOSEVELT.

THE WHITE HOUSE, *January 15, 1934.*

APPENDIX XI

TEXT OF PITTMAN AMENDMENT TO GOLD RESERVE ACT OF 1934

(From *Annual Report of the Secretary of the Treasury . . . 1934*, p. 193)

Paragraph (2) of subsection (b) of section 43, title III, of an act entitled "An act to relieve the existing national economic emergency by increasing agricultural purchasing power, to raise revenue for extraordinary expenses incurred by reason of such emergency, to provide emergency relief with respect to agricultural indebtedness, to provide for the orderly liquidation of joint stock land banks, and for other purposes," approved May 12, 1933, is amended by adding at the end of said paragraph (2) the following:

"The President, in addition to the authority to provide for the unlimited coinage of silver at the ratio so fixed, under such terms and conditions as he may prescribe, is further authorized to cause to be issued and delivered to the tenderer of silver for coinage, silver certificates in lieu of the standard silver dollars to which the tenderer would be entitled and in an amount in dollars equal to the number of coined standard silver dollars that the tenderer of such silver for coinage would receive in standard silver dollars.

"The President is further authorized to issue silver certificates in such denominations as he may prescribe against any silver bullion, silver, or standard silver dollars in the Treasury not then held for redemption of any outstanding silver certificates, and to coin standard silver dollars or subsidiary currency for the redemption of such silver certificates.

"The President is authorized, in his discretion, to prescribe different terms and conditions and to make different charges, or to collect different seigniorage, for the coinage of silver of foreign production than for the coinage of silver produced in the United States or its dependencies. The silver certificates herein referred to shall be issued, delivered, and circulated substantially in conformity with the law now governing existing silver certificates, except as may herein be expressly provided to the contrary, and shall have and possess all of the privileges and the legal tender characteristics of existing silver certificates now in the Treasury of the United States, or in circulation.

"The President is authorized, in addition to other powers, to reduce the weight of the standard silver dollar in the same percentage that he reduces the weight of the gold dollar.

"The President is further authorized to reduce and fix the weight of subsidiary coins so as to maintain the parity of such coins with the standard silver dollar and with the gold dollar."

APPENDIX XII

PRESIDENT ROOSEVELT'S MESSAGE TO CONGRESS OF MAY 22, 1934 RECOMMENDING LEGISLATION ON SILVER

(From *Congressional Record*, Vol. 78, May 22, 1934, pp. 9209-10)

To the Congress of the United States:

On January 11, 1934, I recommended to the Congress legislation which was promptly enacted under the title "The Gold Reserve Act of 1934." This act vested in the United States Government the custody and control of our stocks of gold as a reserve for our paper currency and as a medium of settling international balances. It set up a stabilization fund for the control of foreign exchange in the interests of our people, and certain amendments were added to facilitate the acquisition of silver.

As stated in my message to the Congress, this legislation was recommended as a step in improving our financial and monetary system. Its enactment has laid a foundation on which we are organizing a currency system that will be both sound and adequate. It is a long step forward, but only a step.

As a part of the larger objective, some things have been clear. One is that we should move forward as rapidly as conditions permit in broadening the metallic base of our monetary system and in stabilizing the purchasing and debt-paying power of our money on a more equitable level. Another is that we should not neglect the value of an increased use of silver in improving our monetary system. Since 1929 that has been obvious.

Some measures for making a greater use of silver in the public interest are appropriate for independent action by us. On others, international cooperation should be sought.

Of the former class is that of increasing the proportion of silver in the abundant metallic reserves back of our paper currency. This policy was initiated by the proclamation of December 21, 1933, bringing our current domestic production of silver into the Treasury, as well as placing this Nation among the first to carry out the agreement on silver which we sought and secured at the London Conference. We have since acquired other silver in the interest of stabilization of foreign exchange and the development of a broader metallic base for our currency. We seek to remedy a maladjustment of our currency.

In further aid of this policy it would be helpful to have legislation broadening the authority for the further acquisition and monetary use of silver.

I, therefore, recommend legislation at the present session declaring it to be the policy of the United States to increase the amount of silver in our monetary stocks with the ultimate objective of having and maintaining one fourth of their monetary value in silver and three fourths in gold.

The executive authority should be authorized and directed to make the purchases of silver necessary to attain this ultimate objective.

The authority to purchase present accumulations of silver in this country should be limited to purchases at not in excess of 50 cents per ounce.

The executive authority should be enabled, should circumstances require, to take over present surpluses of silver in this country not required for industrial uses on payment of just compensation, and to regulate imports, exports, and other dealings in monetary silver.

There should be a tax of at least 50 percent on the profits accruing from dealing in silver.

We can proceed with this program of increasing our store of silver for use as a part of the metallic reserves for our paper currency without seriously disturbing adjustments in world trade. However, because of the great world supply of silver and its use in varying forms by the world's population, concerted action by all nations, or at least a large group of nations, is necessary if a permanent measure of value, including both gold and silver, is eventually to be made a world standard. To arrive at that point, we must seek every possibility for world agreement, although it may turn out that this Nation will ultimately have to take such independent action on this phase of the matter as its interests require.

The success of the London conference in consummating an international agreement on silver, which has now been ratified by all the governments concerned, makes such further agreement worth seeking. The ebb and flow of values in almost all parts of the world have created many points of pressure for readjustments of internal and international standards. At no time since the efforts of this Nation to secure international agreement on silver began in 1878 have conditions been more favorable for making progress along this line.

Accordingly, I have begun to confer with some of our neighbors in regard to the use of both silver and gold, preferably on a coordinated basis, as a standard of monetary value. Such an agreement would constitute an important step forward toward a monetary unit of value more equitable and stable in its purchasing and debt-paying power.

FRANKLIN D. ROOSEVELT.

THE WHITE HOUSE, *May 22, 1934.*

APPENDIX XIII

THE SILVER PURCHASE ACT OF 1934

(From *Annual Report of the Secretary of the Treasury . . . 1934*, pp. 205-209)

(Public—No. 438—73rd Congress, H. R. 9745)

An act to authorize the Secretary of the Treasury to purchase silver, issue silver certificates, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that the short title of this Act shall be the "Silver Purchase Act of 1934."

SEC. 2. It is hereby declared to be the policy of the United States that the proportion of silver to gold in the monetary stocks of the United States should be increased, with the ultimate objective of having and maintaining, one-fourth of the monetary value of such stocks in silver.

SEC. 3. Whenever and so long as the proportion of silver in the stocks of gold and silver of the United States is less than one-fourth of the monetary value of such stocks, the Secretary of the Treasury is authorized and directed to purchase silver, at home or abroad, for present or future delivery with any direct obligations, coin, or currency of the United States, authorized by law, or with any funds in the Treasury not otherwise appropriated, at such rates, at such times, and upon such terms and conditions as he may deem reasonable and most advantageous to the public interest: *Provided*, That no purchase of silver shall be made hereunder at a price in excess of the monetary value thereof: *And provided further*, that no purchases of silver situated in the continental United States on May 1, 1934, shall be made hereunder at a price in excess of 50 cents a fine ounce.

SEC. 4. Whenever and so long as the market price of silver exceeds its monetary value or the monetary value of the stocks of silver is greater than 25 per centum of the monetary value of the stocks of gold and silver, the Secretary of the Treasury may, with the approval of the President and subject to the provisions of section 5, sell any silver acquired under the authority of this act, at home or abroad, for present or future delivery, at such rates, at such times, and upon such terms and conditions as he may deem reasonable and most advantageous to the public interest.

SEC. 5 The Secretary of the Treasury is authorized and directed to issue silver certificates in such denominations as he may from time to time prescribe in a face amount not less than the cost of all silver purchased under the authority of section 3, and such certificates shall be placed in actual circulation. There shall be maintained in the Treasury as security for all silver certificates heretofore or hereafter issued and at the time outstanding an amount of silver in bullion and standard silver dollars of a monetary value equal to the face amount of such silver certificates. All silver certificates heretofore or hereafter issued shall be legal tender for all debts, public and private, public charges, taxes, duties, and dues, and shall be redeemable on demand at the Treasury of the

United States in standard silver dollars; and the Secretary of the Treasury is authorized to coin standard silver dollars for such redemption.

SEC. 6. Whenever in his judgment such action is necessary to effectuate the policy of this act, the Secretary of the Treasury is authorized, with the approval of the President, to investigate, regulate, or prohibit, by means of licenses or otherwise, the acquisition, importation, exportation, or transportation of silver and of contracts and other arrangements made with respect thereto; and to require the filing of reports deemed by him reasonably necessary in connection therewith. Whoever willfully violates the provisions of any license, order, rule, or regulation issued pursuant to the authorization contained in this section shall, upon conviction, be fined not more than \$10,000 or, if a natural person, may be imprisoned for not more than ten years, or both; and any officer, director, or agent of any corporation who knowingly participates in such violation may be punished by a like fine, imprisonment, or both.

SEC. 7. Whenever in the judgment of the President such action is necessary to effectuate the policy of this act, he may by Executive order require the delivery to the United States mints of any or all silver by whomever owned or possessed. The silver so delivered shall be coined into standard silver dollars or otherwise added to the monetary stocks of the United States as the President may determine; and there shall be returned therefor in standard silver dollars, or any other coin or currency of the United States, the monetary value of the silver so delivered less such deductions for seigniorage, brassage, coinage, and other mint charges as the Secretary of the Treasury with the approval of the President shall have determined: *Provided*, That in no case shall the value of the amount returned therefor be less than the fair value at the time of such order of the silver required to be delivered as such value is determined by the market price over a reasonable period terminating at the time of such order. The Secretary of the Treasury shall pay all necessary costs of the transportation of such silver and standard silver dollars, coin, or currency, including the costs of insurance, protection, and such other incidental costs as may be reasonably necessary. Any silver withheld in violation of any Executive order issued under this section or of any regulations issued pursuant thereto shall be forfeited to the United States, and may be seized and condemned by like proceedings as those provided by law for the forfeiture, seizure, and condemnation of property imported into the United States contrary to law; and, in addition, any person failing to comply with the provisions of any such Executive order or regulation shall be subject to a penalty equal to twice the monetary value of the silver in respect to which such failure occurred.

SEC. 8. Schedule A of title VIII of the Revenue Act of 1926, as amended (relating to stamp taxes), is amended by adding at the end thereof a new subdivision to read as follows:

"10. SILVER, AND SO FORTH, SALES AND TRANSFERS. — On all transfers of any interest in silver bullion, if the price for which such interest is or is to be transferred exceeds the total of the cost thereof and allowed expenses, 50 per centum of the amount of such excess. On every such transfer there shall be made and delivered by the transferor to the transferee a memorandum to which there shall be affixed lawful stamps in value equal to the tax thereon. Every such memorandum shall show the date thereof, the names and addresses of the transferor and transferee, the interest in silver bullion to which it refers, the price for which such interest is or is to be transferred, and the cost thereof and the allowed

expenses. Any person liable for payment of tax under this subdivision, (or anyone who acts in the matter as agent or broker for any such person) who is a party to any such transfer, or who in pursuance of any such transfer delivers any silver bullion or interest therein, without a memorandum stating truly and completely the information herein required, or who delivers any such memorandum without having the proper stamps affixed thereto, with intent to evade the foregoing provisions, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall pay a fine of not exceeding \$1,000 or be imprisoned not more than six months or both. Stamps affixed under this subdivision shall be canceled (in lieu of the manner provided in section 804) by such officers and in such manner as regulations under this subdivision shall prescribe. Such officers shall cancel such stamps only if it appears that the proper tax is being paid, and when stamps with respect to any transfer are so canceled, the transferor and not the transferee shall be liable for any additional tax found due or penalty with respect to such transfer. The Commissioner shall abate or refund, in accordance with regulations issued hereunder, such portion of any tax hereunder as he finds to be attributable to profits (1) realized in the course of the transferor's regular business of furnishing silver bullion for industrial, professional, or artistic use and (a) not resulting from a change in the market price of silver bullion, or (b) offset by contemporaneous losses incurred in transactions in interests in silver bullion determined, in accordance with such regulations, to have been specifically related hedging transactions; or (2) offset by contemporaneous losses attributable to changes in the market price of silver bullion and incurred in transactions in silver foreign exchange determined, in accordance with such regulations, to have been hedged specifically by the interest in silver bullion transferred. The provisions of this subdivision shall extend to all transfers in the United States of any interest in silver bullion, and to all such transfers outside the United States if either party thereto is a resident of the United States or is a citizen of the United States who has been a resident thereof within three months before the date of the transfer or if such silver bullion or interest therein is situated in the United States; and shall extend to transfers to the United States Government (the tax in such cases to be payable by the transferor), but shall not extend to transfers of silver bullion by deposit or delivery at a United States mint under proclamation by the President or in compliance with any Executive order issued pursuant to section 7 of the Silver Purchase Act of 1934. The tax under this subdivision on transfers enumerated in subdivision 4 shall be in addition to the tax under such subdivision. This subdivision shall apply (1) with respect to all transfers of any interest in silver bullion after the enactment of the Silver Purchase Act of 1934, and (2) with respect to all transfers of any interest in silver bullion on or after May 15, 1934, and prior to the enactment of the Silver Purchase Act of 1934, except that in such cases it shall be paid by the transferor in such manner and at such time as the Commissioner, with the approval of the Secretary of the Treasury, may by regulations prescribe, and the requirement of a memorandum of such transfer shall not apply.

"As used in this subdivision—

"The term 'cost' means the cost of the interest in silver bullion to the transferor, except that (a) in case of silver bullion produced from materials containing silver which has not previously entered into industrial, commercial, or monetary use, the cost to a transferor who is the producer shall be deemed to be the market price at the time of production determined in accordance with regu-

lations issued hereunder; (b) in the case of an interest in silver bullion acquired by the transferor otherwise than for valuable consideration, the cost shall be deemed to be the cost thereof to the last previous transferor by whom it was acquired for a valuable consideration; and (c) in the case of any interest in silver bullion acquired by the transferor (after April 15, 1934) in a wash sale, the cost shall be deemed to be the cost to him of the interest transferred by him in such wash sale, but with proper adjustment, in accordance with regulations under this subdivision, when such interests are in silver bullion for delivery at different times.

"The term 'transfer' means a sale, agreement of sale, agreement to sell, memorandum of sale or delivery of, or transfer, whether made by assignment or in blank or by any delivery, or by any paper or agreement or memorandum or any other evidence of transfer or sale; or means to make a transfer so defined.

"The term 'interest in silver bullion' means any title or claim to, or interest in, any silver bullion or contract therefor.

"The term 'allowed expenses' means usual and necessary expenses actually incurred in holding, processing, or transporting the interest in silver bullion as to which an interest is transferred (including storage, insurance, and transportation charges but not including interest, taxes, or charges in the nature of overhead), determined in accordance with regulations issued hereunder.

"The term 'memorandum' means a bill, memorandum, agreement, or other evidence of a transfer.

"The term 'wash sale' means a transaction involving the transfer of an interest in silver bullion and, within thirty days before or after such transfer, the acquisition by the same person of an interest in silver bullion. Only so much of the interest so acquired as does not exceed the interest so transferred, and only so much of the interest so transferred as does not exceed the interest so acquired, shall be deemed to be included in the wash sale.

"The term 'silver bullion' means silver which has been melted, smelted, or refined and is in such state or condition that its value depends primarily upon the silver content and not upon its form."

SEC. 9. The Secretary of the Treasury is hereby authorized to issue, with the approval of the President, such rules and regulations as the Secretary of the Treasury may deem necessary or proper to carry out the purposes of this Act, or of any order issued hereunder.

SEC. 10. As used in this Act —

The term "person" means an individual, partnership, association, or corporation;

The term "the continental United States" means the States of the United States, the District of Columbia, and the Territory of Alaska;

The term "monetary value" means a value calculated on the basis of \$1 for an amount of silver or gold equal to the amount at the time contained in the standard silver dollar and the gold dollar respectively;

The term "stocks of silver" means the total amount of silver at the time owned by the United States (whether or not held as security for outstanding currency of the United States) and of silver contained in coins of the United States at the time outstanding;

The term "stocks of gold" means the total amount of gold at the time owned by the United States, whether or not held as a reserve or as security for any outstanding currency of the United States.

SEC. 11. There is authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$500,000, which shall be available for expenditure under the direction of the President and in his discretion, for any purpose in connection with the carrying out of this act; and there are hereby authorized to be appropriated annually such additional sums as may be necessary for such purposes.

SEC. 12. The right to alter, amend, or repeal this act is hereby expressly reserved. If any provision of this act, or the application thereof to any person or circumstances, is held invalid, the remainder of the act, and the application of such provision to other persons or circumstances, shall not be affected thereby.

SEC. 13. All acts and parts of acts inconsistent with any of the provisions of this act are hereby repealed, but the authority conferred in this act upon the President and the Secretary of the Treasury is declared to be supplemental to the authority heretofore conferred.

Approved, June 19, 1934, 9 P.M.

APPENDIX XIV

PRESIDENT ROOSEVELT'S PROCLAMATION OF AUGUST 9, 1934 AUTHORIZING THE MINTS TO RECEIVE SILVER SITUATED IN THE CONTINENTAL UNITED STATES ON THAT DATE

(From *Annual Report of the Secretary of the Treasury . . . 1935*, pp. 256-258)

Whereas, by paragraph (2) of section 43, title III of the act of Congress approved May 12, 1933 (Public No. 10), as amended by the Gold Reserve Act of 1934, the President is authorized "By proclamation to fix the weight of the gold dollar in grains nine-tenths fine and also to fix the weight of the silver dollar in grains nine-tenths fine at a definite fixed ratio in relation to the gold dollar at such amounts as he finds necessary from his investigation to stabilize domestic prices or to protect the foreign commerce against the adverse effect of depreciated foreign currencies, and to provide for the unlimited coinage of such gold and silver at the ratio so fixed, * * *"; and "The President, in addition to the authority to provide for the unlimited coinage of silver at the ratio so fixed, under such terms and conditions as he may prescribe, is further authorized to cause to be issued and delivered to the tenderer of silver for coinage, silver certificates in lieu of the standard silver dollars to which the tenderer would be entitled and in an amount in dollars equal to the number of standard silver dollars that the tenderer of such silver for coinage would receive in standard silver dollars"; and "The President is further authorized to issue silver certificates in such denominations as he may prescribe against any silver bullion, silver, or standard silver dollars in the Treasury not then held for redemption of any outstanding silver certificates, and to coin standard silver dollars or subsidiary currency for the redemption of such silver certificates"; and

Whereas, the Silver Purchase Act of 1934, approved June 19, 1934, provides in sections 2, 5, and 7, in part, as follows:

[Here follow Sections 2, 5, and 7 quoted from the Act. See Appendix XIII.]

Now, therefore, finding it necessary, in my judgment, to effectuate the policy of the Silver Purchase Act of 1934, to assist in increasing and stabilizing domestic prices, to protect our foreign commerce against the adverse effect of depreciated foreign currencies, and to promote the objectives of the proclamation of the 21st day of December, nineteen hundred and thirty-three, relating to the coinage of silver; by virtue of the power in me vested by the Acts of Congress above cited, and other legislation designated for national recovery, and by virtue of all other authority in me vested;

I, Franklin D. Roosevelt, President of the United States of America, do proclaim and direct that each United States mint shall receive for coinage or for addition to the monetary stocks of the United States, as hereinafter determined, any silver which such mint, subject to regulations prescribed hereunder by the Secretary of the Treasury, is satisfied was situated on the effective date hereof in the continental United States, including the Territory of Alaska.

The silver so delivered shall be added to the monetary stocks of the United

States and shall be coined from time to time into standard silver dollars in such amounts as are required to carry out the provisions of this proclamation and to provide for the redemption of silver certificates; and there shall be returned therefor in standard silver dollars, silver certificates, or any other coin or currency of the United States, the monetary value of the silver so delivered (that is, \$1.2929+ a fine troy ounce), less a deduction of 61 8/25 percent thereof for seigniorage, brassage, coinage, and other mint charges, such deduction having been determined by the Secretary of the Treasury with my approval.

The provisions hereof are supplemental to the provisions of the proclamation of the 21st day of December, nineteen hundred and thirty-three, and the United States coinage mints shall continue to receive for coinage in accordance with the provisions of such proclamation silver which such mint, subject to regulations prescribed thereunder by the Secretary of the Treasury, is satisfied has been mined subsequently to the date of such proclamation, from natural deposits in the United States or any place subject to the jurisdiction thereof: *Provided, however,* That the Director of the Mint shall, at the option of the tenderer of such silver, deliver silver certificates in lieu of the standard silver dollars to which the tenderer of such silver for coinage would be entitled and in an amount in dollars equal to the coined standard silver dollars that the tenderer of such silver for coinage would receive in standard silver dollars.

The Secretary of the Treasury is authorized to prescribe regulations to carry out the purposes of this proclamation.

Notice is hereby given that I reserve the right by virtue of the authority vested in me to revoke or modify this proclamation as the interest of the United States may seem to require.

This proclamation shall bear the date of, and becomes effective on, the day on which the Secretary or Acting Secretary of State countersigns the same, affixes thereto the seal of the United States, and deposits this proclamation so countersigned and sealed in the office of the Secretary of State, as a part of the archives of the Nation.

In witness whereof I have hereunto set my hand.

FRANKLIN D. ROOSEVELT.

By the President; and countersigned and sealed with the seal of the United States, by direction of the President, this 9th day of August, in the year of our Lord nineteen hundred and thirty-four, and of the Independence of the United States of America the one hundred and fifty-ninth.

CORDELL HULL,
Secretary of State.

APPENDIX XV

PRESIDENT ROOSEVELT'S EXECUTIVE ORDER OF AUGUST 9, 1934 REQUIRING THE DELIVERY OF SILVER TO THE UNITED STATES MINTS

(From *Annual Report of the Secretary of the Treasury . . . 1935*, pp. 258-260)

By virtue of the authority vested in me by the Silver Purchase Act of 1934 and of all other authority vested in me, I, Franklin D. Roosevelt, President of the United States of America, do hereby require the delivery of all silver situated in the continental United States on the effective date hereof, by any and all persons owning, possessing, or controlling any such silver, and do hereby require any and all persons owning, possessing, or controlling any such silver to deliver the same in the manner, upon the conditions and subject to the exceptions herein contained, such action being in my judgment necessary to effectuate the policy of the Silver Purchase Act of 1934.

SEC. 2. *Silver required to be delivered.*—There shall be delivered in accordance with the terms of this order all silver situated in the continental United States on the effective date hereof, except silver falling within any of the following categories so long as it continues to fall thereunder:

- a. Silver coins, whether foreign or domestic;
- b. Silver of a fineness of 0.8 or less, which has not entered into industrial, commercial, professional, artistic, or monetary use;
- c. Silver mined after December 21, 1933, from natural deposits in the United States or any place subject to the jurisdiction thereof; provided, however, that so much of such silver so mined in the continental United States on or before the effective date of this order which shall not have been deposited with a United States mint under the proclamation of Dec. 21, 1933, shall, if processed to a fineness greater than 0.8 within seventy-five days from the effective date of this order be delivered in accordance with this order, not later than ninety days from the effective date hereof, or if processed to a fineness greater than 0.8 after seventy-five days from the effective date of this order, be delivered within 15 days thereafter in accordance with this order;
- d. Silver held for industrial, professional, or artistic use and unmelted scrap silver and silver sweepings in an amount not exceeding in the aggregate five hundred fine troy ounces belonging to any one person;
- e. Silver owned on the effective date hereof by a recognized foreign government, foreign central bank, or the Bank for International Settlements;
- f. Silver contained in articles fabricated and held in good faith for a specific and customary use and not for their value as silver bullion; or
- g. Silver held under a license issued in accordance with section 6 hereof.

SEC. 3. *Time and place of delivery.*—The silver required to be delivered hereunder shall be delivered not later than ninety days from the effective date hereof to the United States mint nearest to the place where the silver is situated immediately prior to delivery; provided that such silver temporarily falling within the

exempt categories enumerated in section 2, shall be delivered at the end of ninety days from the effective date hereof, or 15 days after the time when it ceases to fall within such categories, whichever date is later. Any person acquiring ownership, possession, or control of silver required to be delivered under this order after seventy-five days from the effective date hereof, shall deliver such silver within 15 days of such acquisition.

SEC. 4. *Amount returnable for silver.*—The silver herein required to be delivered shall be coined into standard silver dollars or otherwise added to the monetary stocks of the United States in accordance with the proclamation, bearing the same date as this order, relating to the coinage of silver, and there shall be returned therefor in standard silver dollars, silver certificates, or any other coin or currency of the United States, the monetary value of the silver so delivered (that is, \$1.2929 + a fine troy ounce), less a deduction of 61 8/25 percent thereof for seigniorage, brassage, coinage, and other mint charges, as provided in such proclamation; that is, the amount returnable for the silver delivered in accordance herewith shall be an amount equal to 50 + cents a fine troy ounce, which amount is not less than the fair value, at the time of this order, of the silver required to be delivered hereunder as determined by the market price over a reasonable period terminating at the time of this order.

SEC. 5. *Reimbursement of costs.*—The Secretary of the Treasury shall pay all necessary costs, actually incurred, of the transportation of such silver and standard silver dollars, silver certificates, and other coin or currency of the United States, including the cost of insurance, protection, and such other incidental costs as may be reasonably necessary. Persons desiring reimbursement of such costs shall submit their accounts on voucher forms which may be obtained by writing to the Treasurer of the United States, Washington, D. C.

SEC. 6. *Licenses.*—The Secretary of the Treasury, subject to such regulations as he may prescribe, acting directly or through such agency or agencies as he may designate, shall issue licenses authorizing the withholding of silver which the Secretary of the Treasury, or such agency as he may designate, is satisfied:

(a) Is required for legitimate and customary use in industry, profession, or art, by a person regularly engaged in such industry, profession, or art or in the business of processing silver or furnishing silver therefor;

(b) Has been imported for reexport; or

(c) Is required to fulfill an obligation to deliver silver in such amount to a third person, incurred or assumed by the applicant on or before the effective date of this order; provided that, at the date of the application, the applicant owns such silver or holds the obligation of another to deliver to him such silver.

The Secretary of the Treasury may, with the approval of the President, issue licenses authorizing the withholding of silver for purposes deemed to be in the public interest and not inconsistent with the purposes of the Silver Purchase Act of 1934 and of this order.

SEC. 7. *Deliveries in fulfillment of obligations or to licensees.*—No person required to deliver silver owned by him or in his possession or control shall be deemed to have failed to comply with the provisions of this order if such silver is delivered in fulfillment of an obligation incurred or assumed by such person on or before the effective date of this order or is delivered to a person licensed to acquire and withhold silver in such an amount under Section 6.

SEC. 8. *Definitions.*—As used in this order the term "person" means an individual, partnership, association, or corporation;

The term "continental United States" means the States of the United States, the District of Columbia, and the Territory of Alaska.

The term "United States Mints" means the following mints and assay offices:

United States Mint, Philadelphia, Pa.

United States Assay Office, New York, N. Y.

United States Mint, Denver, Colo.

United States Mint, San Francisco, Calif.

United States Assay Office, Seattle, Wash.

United States Mint, New Orleans, La.

SEC. 9. *Penalties and Forfeitures*.—All persons are hereby informed of the following provisions of section 7 of the Silver Purchase Act of 1934 with respect to penalties and forfeitures:

"* * * Any silver withheld in violation of any Executive order issued under this section or of any regulations issued pursuant thereto shall be forfeited to the United States, and may be seized and condemned by like proceedings as those provided by law for the forfeiture, seizure, and condemnation of property imported into the United States contrary to law; and, in addition, any person failing to comply with the provisions of any such Executive order or regulation shall be subject to a penalty equal to twice the monetary value of the silver in respect of which such failure occurred."

This order shall bear the date of, and become effective on, the day on which the Secretary or Acting Secretary of State countersigns and deposits this order so countersigned in the office of the Secretary of State, as a part of the archives of the nation.

This order may be modified or revoked at any time.

FRANKLIN D. ROOSEVELT.

Countersigned, by direction of the President, this 9th day of August, 1934.

CORDELL HULL,

Secretary of State.

APPENDIX XVI

TABLE K

RECORDED MONTHLY NET EXPORTS OF SILVER FROM CHINA, 1933-1938
(Millions of Chinese dollars)

	1933	1934	1935	1936	1937	1938	1939	1940
Jan.	9.7*	1.8*	2.7*	15.4	0.0	35.9	.....	.....
Feb.	12.7*	1.6	0.6*	0.5*	0.1*	2.1	.....	.....
Mar.	6.6*	0.9*	1.0*	0.7*	0.1*	2.5	.....	.....
Apr.	3.7	14.8	2.4*	0.1*	0.0	2.4	.....	.....
May	47.3	2.2	1.0	16.5	0.0	9.9	.....	.....
June	12.0	12.9	0.1*	69.2	0.1*	4.9	.....	.....
July	3.3*	24.3	0.1*	10.9	54.7	16.0	.....	.....
Aug.	3.6*	79.1	0.2*	11.6	8.0	2.4	.....	.....
Sept.	5.5*	48.1	0.8*	90.9	208.6	2.5	.....	.....
Oct.	4.1	56.3	0.1*	35.9	62.6	1.5	.....	.....
Nov.	7.1*	11.3	0.1*	0.5	0.5	.....	.....	.....
Dec.	4.4*	12.0	66.5	0.0	64.4	.....	.....	.....
Total	14.2	259.9	59.4	249.6	398.5	80.1†	.....	.....

* Net imports.
† 10 months.

SOURCE: Monthly figures of Chinese Maritime Customs, as reprinted in Finance & Commerce.

SELECTED BIBLIOGRAPHY

SELECTED BIBLIOGRAPHY

The following bibliography is intended as an aid to those who wish to pursue further any aspects of the subject. For this reason brief comments have been placed after most of the entries to indicate the character and contents of the works listed.

The bibliography makes no claim to being complete. In view of the great mass of literature published on the subject during the last quarter of the nineteenth century, the considerable quantity during recent years, and the extensive material on silver money in India, China, and other countries, a bibliography with any pretensions to completeness probably would fill several volumes of this size.

An attempt has been made to include the most outstanding works on the various phases of the subject. Many excellent books and articles have been omitted, however, and, on the other hand, many items have been included which are of no value in themselves but which illustrate some of the misinformation and wild schemes which have been so common in this field.

The bibliography is arranged by groups of chapters on related topics. A book listed under one section is repeated under another only when it is of primary importance for that section. General reference books, periodicals, and newspapers, not particularly concerned with silver, to which incidental references are made in footnotes, are not listed. In each section items are arranged alphabetically by authors, and chronologically for the works of each author. United States Government publications (all published by the Government Printing Office unless otherwise indicated) are listed under the author when an author's name is given; otherwise under the department or bureau concerned.

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II. SOME QUANTITATIVE ASPECTS OF SILVER

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III. BIMETALLISM IN THE UNITED STATES, 1793-1873

VI. THE SILVER QUESTION IN THE UNITED STATES, 1873-1893

VIII. THE ABANDONMENT OF SILVER BY THE UNITED STATES, 1893-1900

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- IV. BIMETALLISM IN FRANCE AND THE LATIN MONETARY UNION
- V. THE DEMONETIZATION OF SILVER IN EUROPE
- VII. INTERNATIONAL MONETARY CONFERENCES

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A complete translation of the proceedings and documents of this conference.

WILLIS, H. PARKER. *A History of the Latin Monetary Union.* Chicago, University of Chicago Press, 1901. 332 pp.

A comprehensive study, based on the original sources.

D. INDIA

- IX. SILVER AND INDIA BEFORE 1892
- X. INDIAN CURRENCY REFORMS, 1892-1914
- XIX. THE EFFECT OF THE WORLD WAR ON THE INDIAN CURRENCY SYSTEM

XX. POSTWAR CHANGES IN THE INDIAN CURRENCY SYSTEM

1. Official reports published by H. M. Stationery Office, London
(Arranged Chronologically)

SELECT COMMITTEE ON THE DEPRECIATION OF SILVER, *Report . . . , together with the Proceedings of the Committee, Minutes of Evidence, and Appendix.* 1876. lvi + 74 + 205 pp.

ROYAL COMMISSION APPOINTED TO INQUIRE INTO THE RECENT CHANGES IN THE RELATIVE VALUES OF THE PRECIOUS METALS. *First report . . . ; with Minutes of Evidence and Appendices.* 1887. 364 pp.

———. *Second Report . . .* 1888. 276 pp.

———. *Final Report . . .* 1888. 157 pp.

The *Final Report* has been reprinted, with an introduction by Ralph Robey, under the title of *The Monetary Problem: Gold and Silver*, New York, Columbia University Press, 1936, 369 pp.

INDIAN CURRENCY COMMITTEE (cited as Herschell committee). *Report of the Committee Appointed to Inquire into the Indian Currency.* [C.—7060.—I.], 1893. 43 pp.

———. *Minutes of Evidence Taken before the Committee . . . together with an Analysis of the Evidence and Appendices.* [C.—7060.—II.], 1893. 338 pp.

The above two volumes were reprinted as *Report of the Indian Currency Committee*, Washington, Government Printing Office, 1893, 825 pp.

INDIAN CURRENCY COMMITTEE, 1898 (cited as Fowler committee). *Report of the Committee Appointed to Inquire into the Indian Currency.* 1899. 27 pp.

———. *Minutes of Evidence Taken before the Committee . . . together with an Analysis of the Evidence.* Part I [C.—8440 of 1898], 1898. 319 pp. Part II, 1899. 261 pp.

———. *Indexes and Appendixes to the Evidence . . .* [C.—9376.], 1899. 190 pp.

ROYAL COMMISSION ON INDIAN FINANCE AND CURRENCY (cited as Chamberlain commission). *Interim Report of the Commissioners.* [Cd. 7068.], 1913, 4 pp.

———. *Minutes of Evidence taken before the Commission . . .* Vol. I [Cd. 7069], 1913. 358 pp.

———. *Appendices to the Interim Report . . .* Vol. I [Cd. 7070], 1913. Pp. 1-335. Vol. II [Cd. 7071], 1913. Pp. 337-633.

———. *Index to Minutes of Evidence and to the First Two Volumes of Appendixes . . .* [Cd. 7072], 1913. 64 pp.

———. *Final Report . . .* [Cd. 7236], 1914. 91 pp.

———. *Minutes of Evidence taken before the Commission . . .* Vol. II [Cd. 7237], 1914. 162 pp.

———. *Appendices to the Final Report . . .* Vol. III [Cd. 7238], 1914. Pp. 635-769.

———. *Index to the Two Volumes of Minutes of Evidence and to the Three Volumes of Appendixes . . .* [Cd. 7239], 1914.

EAST INDIA, COMMITTEE ON INDIAN EXCHANGE AND CURRENCY (cited as Babington Smith committee). Vol. I. *Report of the Committee Appointed by the Secretary of State for India to enquire into Indian Exchange and Currency.* [Cmd. 527], 1920. 56 pp.

———. Vol. II. *Minutes of Evidence Taken before the Committee . . .* [Cmd. 528], 1920. 329 pp.

- . Vol. III. *Appendices to the Report of the Committee . . .* [Cmd. 529], 1920. 251 pp.
- . Vol. IV. *Index to Minutes of Evidence Taken by, and Appendices to Report of, Committee . . .* [Cmd. 530], 1920. 57 pp.
- ROYAL COMMISSION ON INDIAN CURRENCY AND FINANCE (cited as Hilton Young Commission). Vol. I. *Report of the Royal Commission . . .* [Cmd. 2687], 1926. 144 pp.
- . Vol. II. *Appendices to the Report . . .* 1926. Pp. 1-434.
- . Vol. III. *Appendices to the Report . . .* 1926. Pp. 435-631.
- . Vol. IV. *Minutes of Evidence Taken in India . . .* 1926. 537 pp.
- . Vol. V. *Minutes of Evidence Taken in London . . .* 1926. 330 pp.
- . Vol. VI. *Index to the Report . . .* 1926. 63 pp.

The reports of these committees, with the accompanying volumes of evidence and appendixes, contain a great quantity of historical and statistical material, as well as extensive opinions from contemporary observers, including many of the persons best qualified to understand the problems of Indian currency.

The Herschell, Fowler, Chamberlain, Babington Smith, and Hilton Young Reports (without the evidence and appendixes) are reprinted in full in *Reports of Currency Committees*, Calcutta, Government of India, Central Publication Branch, 1931, 457 pp.

2. Miscellaneous

- BLISS, DON C., JR. *The Bombay Bullion Market*. U. S. Bureau of Foreign and Domestic Commerce, Trade Information Bulletin, No. 457. Washington, 1927. 79 pp.

A full discussion of the subject by the U. S. Assistant Trade Commissioner at Bombay.

- CHABLANI, H. L. *Indian Currency, Banking, and Exchange*. London, Oxford University Press, 1932. 204 pp.

One of the best of the numerous publications on the subject by Indian writers. Since about one-half of the book is devoted to postwar developments, it serves to bring up to date the work of Kemmerer, Keynes, and Shirras.

- . *Studies in Indian Currency and Exchange*. London, Oxford University Press, 1931. 263 pp.

A more advanced treatment of some of the special problems.

- Commerce*. Calcutta, weekly.

A financial paper, useful for current news.

- DADACHANJI, B. E. *History of Indian Currency and Exchange*. Bombay, D. B. Taraporevala Sons & Co. Second edition, 1931. 247 pp.

A systematically arranged history of Indian Currency.

- Financial News*. Bombay, weekly.

A financial paper, with current statistics, and especial emphasis on the Bombay cotton and silver markets.

- GUPTA, S. B. SEN. *Indian Currency and Exchange, with Its History and Development*. Bombay, Jaura, 1932. 312 pp.

A concise account of Indian currency.

- INDIA, GOVERNMENT OF (Indian official publications were formerly published by Central Publication Branch, Calcutta, now by Manager of Publications, Delhi). *Gazette of India*. Daily.

This contains various official documents.

INDIA, BUREAU OF PUBLIC INFORMATION. *India in 1931-32 (1932-33, etc.)*. Annually.

An annual narrative report on general conditions in India, issued in accordance with statutory requirements, for the information of the British Parliament. It provides a valuable semi-official picture of the developments of the year and their significance.

INDIA, DEPARTMENT OF COMMERCIAL INTELLIGENCE AND STATISTICS. *Accounts Relating to the Sea-Borne Trade and Navigation of British India*. Monthly.

———. *Annual Statement of the Sea-Borne Trade of British India with the British Empire and Foreign Countries*. Annually.

These publications give monthly and annual figures respectively for merchandise trade, in detailed classifications, and also for movements of gold and silver by quantity and value. It should be noted that gold is given in fine ounces and silver in standard ounces (0.925 fine).

———. *Statistical Abstract for British India*. Annually.

This volume of about 800 pages gives statistics on a great variety of subjects, condensed from reports of various government departments. It covers a 10-year period but is not published until about two years after the close of the period.

INDIA, FINANCE DEPARTMENT. *Budget for 1934-35 (1935-36, etc.)*. Annually.

———. *Finance and Revenue Accounts of the Government of India*. Annually.

These publications give expected and actual receipts and expenditures, and transactions relating to the sale of silver.

———. *Report of the Controller of the Currency*. Annually through 1934-35.

This report contained a brief summary of conditions affecting the currency and considerable statistical material on coinage, movements of treasure, etc. For continuation, see RESERVE BANK OF INDIA.

———. *Review of the Reports on the Administration of the Mints at Calcutta and Bombay*. Annually.

Devoted primarily to the technical details of the operation of the mints, but contains some information not found elsewhere on gold and silver, such as quantities melted and refined for the public.

INDIA, LEGISLATIVE DEPARTMENT. *Act No. X of 1923. An Act to Consolidate the Law Relating to the Government Paper Currency*. 14 pp.

———. *Act No. IV of 1927. An Act further to Amend the Indian Coinage Act, 1906, and the Indian Paper Currency Act, 1923, . . .* 3 pp.

———. *The Reserve Bank of India Act (II of 1934)*. 40 pp.

The above laws are the basis of the currency system in recent years.

JATHAR, G. B., and BERI, S. G. *Indian Economics*. London, Oxford University Press. Vol. I, 4th edition, 1933. 459 pp. Vol. II, 3rd edition, 1932. 590 pp.

An excellent comprehensive picture of Indian economics, treating controversial political matters with a fairness which contrasts strongly with the attitude of some Indian writers.

KEMMERER, EDWIN WALTER. *Modern Currency Reforms*. New York, Macmillan, 1916. 564 pp.

Part I, pp. 1-152, gives a compact account of the Indian Currency reforms down to the outbreak of the World War. The other parts take up Porto Rico, the Philippines, the Straits Settlements, and Mexico. Good bibliographies are included.

KEYNES, JOHN MAYNARD. *Indian Currency and Finance.* London, Macmillan, 1913. 263 pp.

This book was completed before the author was appointed to the Chamberlain commission, and so represents his own opinions only.

LEAVENS, DICKSON H. "The Accumulation of the Precious Metals in India and China," *Abstracts of Papers Presented at the Research Conference on Economics and Statistics held by the Cowles Commission for Research in Economics, 1936*, Colorado College Publication, General Series No. 208, September, 1936, pp. 30-32.

This abstract summarizes a study of available data as to the inflow and outflow of gold and silver in India and China, with some remarks on future prospects.

RESERVE BANK OF INDIA. *Report on Currency and Finance.* Annually from 1937 (first issue covered 1935-36 and 1936-37).

This was started to meet requests for the continuation of the statistical material and general survey formerly published in the *Report of the Controller of the Currency*. It is planned that it "should be published annually as soon as possible after the close of each financial year."

SHIRAS, G. FINDLAY. *Indian Finance and Banking.* 3rd impression. London, Macmillan, 1920. 535 pp.

The history of Indian currency through the World War, with a brief appendix on the report of the Babington-Smith committee, which appeared after the first edition of the book was published.

E. CHINA

XI. SILVER AND CHINA

XII. BUSINESS IN CHINA UNDER THE SILVER STANDARD

XIV. PROPOSALS FOR MONETARY REFORM IN CHINA

XXI. CHINESE TRADE AND CURRENCY DURING AND AFTER THE WORLD WAR

XXII. THE EFFECT ON CHINA OF THE FALL IN THE PRICE OF SILVER, 1929-1933

XXVIII. THE EFFECT OF AMERICAN SILVER POLICY ON CHINA, 1934 AND 1935

XXIX. THE ABANDONMENT OF THE SILVER STANDARD BY CHINA

ANDREW, A. PIATT. "The End of the Mexican Dollar," *Quarterly Journal of Economics*, Vol. 18, May, 1904, pp. 321-356; reprinted in **HANNA et al.**, *The Gold Standard in International Trade*, pp. 470-491.

An account of the use of Spanish, Mexican, and other dollar coins in various countries, especially in the Far East.

BANK OF CHINA, RESEARCH DEPARTMENT. *Financial Market Statistics.* Monthly, 1931-1934.

———. *Financial & Commercial Monthly Bulletin.* Monthly, 1935-.

The above two publications represent one series, with change of name and expansion in 1935. They give daily exchange rates and other financial statistics.

———. *Statistics of China's Foreign Trade, 1912-1930, with Complete Texts of Tariff Regulations.* Shanghai, 1931. 206 pp.

———. *Statistics of China's Foreign Trade, 1931-1933.* Shanghai, 1934. 111 pp.

These two publications bring China's trade statistics more up to date and in slightly different form from the longer series given in the work of **YANG** mentioned below.

CHANG KIA-NGAU. "The Vanishing Mexican Dollar," *Millard's Review of the Far East*, Vol. 1, Aug. 4, 1917, pp. 235-239.

A description of the various dollar coins then current in China, with particulars as to their weight, fineness, and circulation.

CHINA, THE MARITIME CUSTOMS. I. Statistical Series, No. 6. *Decennial Reports, 1922-1931*. Shanghai, Statistical Department of the Inspectorate General of Customs, 1933. 2 vols., 1041 pp.

These reports are arranged by ports, but in addition contain "A History of the External Trade of China, 1834-81" (Vol. I, pp. 1-144), and "Synopsis of the External Trade of China, 1882-1931" (Vol. I, pp. 147-193), by T. R. Banister, Deputy Commissioner, which gives a valuable summary, including statistical material, of the developments of a century.

———. *The Foreign Trade of China*. Shanghai, Inspectorate General of Customs. Annually through 1931.

Part I. *Report and Abstract of Statistics*.

Part II. *Analysis*: Vol. I. *Imports*; Vol. II. *Exports*.

———. *The Trade of China*. Shanghai, Inspectorate General of Customs. Annually from 1932.

Vol. I. *Report, with General Tables of Customs Revenue, Value of Trade, Treasure, and Shipping*.

Vol. II. *Foreign Trade: Abstract of Import and Export Statistics*.

Vol. III. *Foreign Trade: Analysis of Imports*.

Vol. IV. *Foreign Trade: Analysis of Exports*.

Vol. V. *Domestic Trade: Interport Statistics*.

In addition to the extensive statistical material, the general remarks on Chinese trade, exchange, and economic conditions are helpful.

CHINA, MINISTRY OF INDUSTRIES. *Price Indexes in China and Foreign Countries*. Nanking, 1932. 247 pp.

All available series of Chinese index numbers, and many foreign ones.

CHINA, NATIONAL GOVERNMENT OF THE REPUBLIC OF CHINA. Commission of Financial Experts. *Project of Law for the Gradual Introduction of a Gold-Standard Currency System in China, together with a Report in Support Thereof*. Shanghai, Bureau of Industrial and Commercial Information, Ministry of Industry, Commerce, and Labor, 1930. 182 pp.

The law drawn up by Professor E. W. Kemmerer and his staff, together with full explanation, and arguments in its support.

CHINA, NATIONAL GOVERNMENT CENTRAL MINT. *The National Government Central Mint and a Brief Review of its Operations from its Opening up to Fiscal Year Ended June 30, 1935*. Shanghai (?), 1935. 29 pp.

CHINA, NATIONAL TARIFF COMMISSION. *Prices and Price Indexes in Shanghai*. Shanghai, monthly.

The place of original publication of the index numbers computed by the commission, and reprint of index numbers computed by other organizations.

China Press. Shanghai, daily.

An English newspaper, Chinese-owned.

Chinese Economic Journal. Peking, later Shanghai. Monthly.

A monthly journal published successively by various government bureaus, with articles on Chinese industry, commerce, and finance.

DOBROVOLSKY, S. "The Origin of the Shanghai Mint," *Finance & Commerce*, Vol. 24, Oct. 31, 1934, pp. 481-482.

A historical account.

EDKINS, J. *Chinese Currency*. Shanghai, Presbyterian Mission Press, 1901. 151 pp.

A great variety of information gleaned from various sources. The book lacks organization, bits of fact from ancient writers being intermingled with statistics of current trade. It is valuable, however, because it assembles much material from scattered Chinese sources which could not be read in the original by any but an able sinologue.

EITEL, E. J. *Europe in China: the History of Hongkong from the Beginning to the Year 1882*. London, Luzac and Co.; Hongkong, Kelly & Walsh, Ltd. 1895. 575 pp.

Considerable information on currency matters, in particular on pages 184 f., 243 f., 275 f., 345, 374 f., 386 ff., 441 f., 495 ff., 554 f.

ELLISTON, HERBERT B. "China Dethrones Silver," *Foreign Affairs*, Vol. 14, January, 1936, pp. 334-339.

FETTER, FRANK WHITSON. "China and the Flow of Silver" (with maps and a note by Herbert M. Bratter), *Geographical Review*, Vol. 26, January, 1936, pp. 32-47.

A summary account of silver in China by a member of the Kemmerer commission.

Finance & Commerce, Shanghai, weekly.

A financial paper which contains very full news about current developments in the silver and exchange situation in China, together with special articles written for it or reprinted from foreign sources. Its weekly review of the exchange market was written, from 1930 to 1934, by Eduard Kann, who continues to contribute numerous special articles from time to time. In references to this journal, items signed by Mr. Kann are so indicated.

HANNA, HUGH H., CONANT, CHARLES A., and JENKS, JEREMIAH W. *Stability of International Exchange*. Fifty-eighth Congress, Second Session, House of Representatives, Document No. 144. Washington, 1903. 518 pp.

The first volume of the report by the Commission on International Exchange on the introduction of the gold standard into China and other silver-using countries. It contains accounts of the discussion with European Governments, chiefly on the proposed plan for Chinese currency reform, and appendices with data on Mexico, China, Straits Settlements, Indo-China, India, the Philippines, and other countries.

———. *Gold Standard in International Trade*. Washington, 1904. 512 pp.

The second volume of the above report, containing, in addition to much material on China, appendixes on the Philippine Islands, Panama, Mexico, and the Straits Settlements, including many of the important documents.

HSU, LEONARD SHIH-LIEN, and others. *Silver and Prices in China*. Report of the Committee for the Study of Silver Values and Commodity Prices, Ministry of Industries. Shanghai, Commercial Press, Ltd., 1935. 245 pp.

The Minister of Industries in February, 1934 appointed a committee of eight members, including two Americans, John Lossing Buck and Ardron B. Lewis of the University of Nanking, to study the current situation of falling commodity prices. This report, completed in December of the same year, was prepared under the handicaps of lack of reliable statistical data and of lack of time. The committee, however, studied such statistical material as was available, discussed the various policies which could be adopted to meet

the situation brought about by the rising price of silver, and, while making no definite recommendation, tended to favor an exchange standard.

KANN, EDUARD. *The Currencies of China*. Second edition, Shanghai, Kelly & Walsh, Ltd., 1927. 562 pp.

The standard work on Chinese currency. It covers very fully the various kinds of currency and transactions in them, with computations of the relationships and parities worked out. In addition there is much historical and descriptive material. The author, now an exchange broker in Shanghai, has had over a third of a century of experience in banking in China, and combines practical experience with a scholarly point of view.

This edition is now somewhat out of date since the abolition of the tael and the subsequent abandonment of the silver standard, but is exceedingly valuable for its full information up to the date of publication.

———. "What is a Shanghai Tael?" *Chinese Economic Journal*, Vol. 1, August, 1927, pp. 769-772. This was first published in a letter to the *North China Daily News*, earlier in 1927.

A computation of the exact fine-silver equivalent of the Shanghai tael.

———. "The Mystery of the Hongkong Dollar," *Chinese Economic Journal*, Vol. 6, January 1930, pp. 9-32.

Historical background and discussion of the current Hong Kong currency situation.

———. "How Much Silver is there in China?" *Chinese Economic Journal*, Vol. 8, April, 1931, pp. 410-420. Also published in *Finance & Commerce*, Vol. 19, No. 97, Apr. 8, 1931, pp. 7-9.

An estimate of the amount of silver, monetary and nonmonetary, in China.

KREPS, T. J. "The Price of Silver and Chinese Purchasing Power," *Quarterly Journal of Economics*, Vol. 48, February, 1934, pp. 245-287.

A discussion of the effect of falling silver on Chinese trade and prices, refuting many of the fallacious popular arguments.

LEAVENS, DICKSON H. "The Gold-Silver Ratio in the Early Foreign Relations of the Far East," *Chinese Economic Journal*, Vol. 2, April, 1928, pp. 322-327.

A historical note showing how the ratio in China and Japan adjusted itself to that in Europe.

———. "The Ratio between the T. T. Rate and the Silver Price," *Chinese Economic Journal*, Vol. 2, May, 1928, pp. 394-410.

A study of the relative value of silver in Shanghai and London from 1909 to 1927.

———. "Chinese Money and Banking," *Annals of the American Academy of Political and Social Science*, Vol. 152, November, 1930, pp. 206-213.

A brief account of conditions as they were in 1930.

———. "American Silver Policy and China," *Harvard Business Review*, Vol. 14, Autumn, 1935, pp. 45-58.

A discussion of the Chinese situation written just before China went off the silver standard.

———. "The Silver Clause in China," *American Economic Review*, Vol. 26, December, 1936, pp. 650-659.

This traces the use of a silver clause in bonds and contracts in the early 1930's and the problems that arose when China left the silver standard at the end of 1935.

LEE, FREDERICK E. *Currency, Banking, and Finance in China*. Bureau of Foreign and Domestic Commerce, Trade Promotion Series, No. 27. Washington, 1926. 220 pp.

A survey of Chinese monetary conditions.

LEWIS, ARDRON B. "Silver and Chinese Economic Problems," *Pacific Affairs*, March, 1935, pp. 48-55.

A survey by an agricultural economist of the University of Nanking. — and CHANG LU-LUAN. *Silver and the Chinese Price Level*. Nanking, University of Nanking, December, 1933. 39 pp.

A pamphlet which argues that falling prices of Chinese agricultural commodities were due to an increasing purchasing power of silver, and that this tendency should be counteracted by a decrease in the silver content of the Chinese dollar.

LIN WEI-YING. *China under Depreciated Silver, 1926-1931*. The Foreign Trade Association of China, Monograph No. 1. Shanghai, Commercial Press, Ltd., 1935. 230 pp.

———. *The New Monetary System of China, A Personal Interpretation*. Shanghai, Kelly & Walsh, Ltd., 1935. 175 pp.

These two volumes give an excellent account of an eventful decade in the currency history of China, including very extensive bibliographies.

MORSE, HOSEA BALLOU. *The Trade and Administration of China*. Revised edition. Shanghai, Kelly & Walsh, Ltd., 1913. 466 pp.

A general picture of Chinese economic and political life up to the beginning of the twentieth century. Chapter V is devoted to currency.

Dr. Morse was for many years in the service of the Chinese Imperial Maritime Customs, and after his retirement in 1908 devoted himself to research and writing on Chinese economic subjects.

———. *The International Relations of the Chinese Empire*. London, Longmans, 1910-1918. 3 vols., 1736 pp.

A very full description of the principal events and the political and economic forces affecting the foreign relations of China from the abolition of the East India Company's monopoly in 1833 to the Revolution in 1911.

———. *The Chronicles of the East India Company Trading to China, 1635-1834*. Oxford, Clarendon Press, 1926, 1929. 5 vols., 1761 pp.

A very detailed account of the early foreign trade, based on the records of the Company. There are many references to silver and currency throughout the book.

Municipal Gazette. Shanghai, weekly (supplement to *North China Daily News*).

Official organ of the Municipal Council of the International Settlement.

North China Daily News. Shanghai, daily.

North China Herald. Shanghai, weekly.

The oldest British newspaper in Shanghai, and the best source for general China news. The *Herald* is a complete reprint of the *News*, in more convenient format, except that most of the advertisements and ephemeral matter are omitted.

PINNICK, A. W. *Silver and China: An Investigation of the Monetary Principles Governing China's Trade and Prosperity*. Shanghai, Kelly & Walsh, Ltd., 1930. 90 pp.

A discussion of the Chinese situation as it was when the decline of silver was first becoming conspicuous.

REMER, C. F. *The Foreign Trade of China*. Shanghai, Commercial Press, Ltd., 1926. 269 pp.

A statistical and economic study of China's foreign trade, chiefly from 1871 to 1921.

———. "International Trade between Gold and Silver Countries: China, 1885-1913," *Quarterly Journal of Economics*, Vol. 40, August, 1926, pp. 597-643.

A study to test the theoretical effects supposed to arise from changes in the price of silver.

———. *Foreign Investments in China*. New York, Macmillan, 1933. 708 pp.

A thorough investigation of available material, with full discussion of the reasons for the estimates adopted for various items.

SALTER, SIR ARTHUR. *China and Silver*. New York, Economic Forum, Inc., 1934. 117 pp.

An abridgement of official report to the Chinese Government. It takes the position that a rise in the price of silver would be undesirable for China. *Shanghai Times*. Shanghai, daily.

A British newspaper.

T'ANG LEANG-LI. *China's New Currency System*. Shanghai, China United Press, 1936. 138 pp.

A readable account of the Chinese currency reform of November, 1935, and the events leading to it.

TRECHIKOFF, NICHOLAS. *Bibliography of Currency and Finance of China*. Harbin, 1930. 70 pp.

This extensive bibliography contains 1085 items, about half of which are in Russian and the other half in English; a descriptive sentence or two in Russian follows each entry.

TSAO, L. E. "Currency Reform in China," *Information Bulletin* (published by Council of International Affairs, Nanking), Vol. 1, No. 10, August 11, 1936, pp. 1-19.

A semi-official account of past proposals and of the 1935 action.

UNITED KINGDOM, SECRETARY OF STATE FOR THE COLONIES. *Hong Kong Currency*. Report of a Commission Appointed by the Secretary of State for the Colonies, May, 1931. [Cmd. 3932]. London, H. M. Stationery Office, 1931. 67 pp.

This report recommended increased use of notes, convertibility of notes to silver bullion instead of to silver dollars, the custody of the silver reserve by the Government instead of by the note-issuing banks, and preparation for eventual stabilization.

U. S. BUREAU OF FOREIGN AND DOMESTIC COMMERCE. *Far Eastern Financial Notes*. Washington, Department of Commerce, semi-monthly (processed).

This gives up-to-date news on financial and monetary developments, including reports by mail and cable from United States officials abroad.

VISSERING, G. *On Chinese Currency*. Amsterdam, DeBussy, 1914. 2 vols., 514 pp.

A report on Chinese monetary reform, which also contains a brief account of the currency system of the Netherlands Indies.

YANG, C., HAU, H. B., and others. *Statistics of China's Foreign Trade during the Last Sixty-five Years*. Shanghai, National Research Institute of Social Sciences, Academia Sinica, 1931. xxiv + XIV + 189 pp.

A painstaking compilation from annual reports of the Chinese Maritime Customs, which gives 24 tables of Chinese trade figures annually from 1864 to 1928 inclusive, including total values; values by classes of commodities and

by principal commodities, by ports, and by foreign countries; quantities of principal commodities; and other significant statistics; together with charts.

In addition to the material specifically relating to China listed above, some of the papers listed in Section H pay much attention to the effect on China of the falling price of silver in the early 1930's.

F. OTHER COUNTRIES

XIII. THE CHANGE FROM SILVER TO GOLD STANDARDS IN ASIA AND LATIN AMERICA

XVIII. DECREASED USE OF SILVER IN COINAGE

ANDREW, A. PLATT. "The End of the Mexican Dollar." Listed in Section E.

ANTHONISZ, J. O. *Currency Reform in the Straits Settlements*. London, Simpson, about 1915. 160 pp.

A book by a former Treasurer of the Straits Settlements describing the reforms, and replying to some criticisms by Kemmerer and others.

BRATTER, HERBERT M. *The Monetary Use of Silver in 1933*. Listed in Section A.

———. *The Currency System of Japan*. U.S. Bureau of Foreign and Domestic Commerce, Trade Information Bulletin, No. 673. Washington, 1930. 23 pp.

COSENZA, MARIO EMILIO, editor. *The Complete Journal of Townsend Harris*. New York, Doubleday, Doran, 1930. 616 pp.

Scattered through this interesting narrative of the experiences of the first American diplomat in Japan are many paragraphs dealing with the currency question and the progress of his negotiations.

DUNN, W. E. *Peru, A Commercial and Industrial Handbook*. Bureau of Foreign and Domestic Commerce, Trade Promotion Series, No. 25. Washington, 1925. 530 pp.

FETTER, FRANK W. *Monetary Inflation in Chile*. Princeton, Princeton University Press, 1931, 213 pp.

HANNA, HUGH H., CONANT, CHARLES A., and JENKS, JEREMIAH W. *Stability of International Exchange*. Listed in Section E.

———. *Gold Standard in International Trade*. Listed in Section E.

HARRISON, F. C., and CONANT, CHARLES A. *Report Presenting a Plan of Monetary Reform for Nicaragua*. 1912. 130 pp.

KEMMERER, E. W. "The Recent Rise in the Price of Silver and Some of Its Monetary Consequences," *Quarterly Journal of Economics*, Vol. 26, February, 1912, pp. 215-274.

A discussion of the rise of silver from 1903 to 1907, its causes, and its effects on the Philippines, the Straits Settlements, Japan, and Mexico.

———. *Modern Currency Reforms*. Listed in Section D.

LEAVENS, DICKSON H. "The Gold-Silver Ratio in the Early Foreign Relations of the Far East." Listed in Section E.

———. "The Distribution of the World's Silver," *Review of Economic Statistics*, Vol. 17, November, 1935, pp. 131-138.

LUTHRINGER, GEORGE F. *The Gold-Exchange Standard in the Philippines*. Princeton, Princeton University Press, 1934. 291 pp.

A brief recapitulation of Kemmerer's account of the establishment of the gold-exchange standard, followed by a detailed study of the workings of the system from 1904 to 1932, showing that it functioned satisfactorily as long as it was conducted in accordance with the principles originally laid

down, but was endangered at times by mismanagement, and by undue political influence.

MATSUKATA, MASAYOSHI. *Report on the Adoption of the Gold Standard in Japan*. Tokio, Government Press, 1899. 389 pp.

A very full and documented account by one who played the leading part in the reform.

MCQUEEN, CHARLES A. *Chilean Currency and Exchange in 1921*. Bureau of Foreign and Domestic Commerce, Trade Information Bulletin, No. 37. Washington, 1922. 11 pp.

———. *Currency, Exchange and Banking in Bolivia*. Bureau of Foreign and Domestic Commerce, Trade Information Bulletin, No. 207. Washington, 1924. 22 pp.

———. *Foreign Exchange in Latin America: A Survey of Conditions Since 1914*. Bureau of Foreign and Domestic Commerce, Trade Information Bulletin, No. 316. Washington, 1925.

———. *Peruvian Public Finance*. Bureau of Foreign and Domestic Commerce, Trade Promotion Series, No. 30. Washington, 1926. 126 pp.

———. *Latin American Monetary and Exchange Conditions*. Bureau of Foreign and Domestic Commerce, Trade Information Bulletin, No. 430. Washington, 1926. 59 pp.

PHILIPPINE ISLANDS, GOVERNOR GENERAL. *Annual Report*. Washington, annually.

The body of the report includes brief summaries of currency matters; fuller statements are to be found in the annexed report of the Secretary of Finance.

ROBINSON, LELAND REX. *Changes in the Monetary Use of Silver since 1914*. U. S. Bureau of Foreign and Domestic Commerce, Trade Information Bulletin, No. 140. Washington, 1923. 66 pp.

A careful description and analysis of the monetary position of silver in 1923, compiled from questionnaires sent to American officials abroad.

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	1st	Apr. 15–Nov. 22, 1929		
	2nd	Dec. 2, 1929–July 3, 1930	72	12694
	Special	July 7–21, 1930	73	395
	3rd	Dec. 1, 1930–Mar. 4, 1931	74	7396
72nd	1st	Dec. 7, 1931–July 16, 1932	75	15778
	2nd	Dec. 5, 1932–Mar. 4, 1933	76	5668
73rd	Special	Mar. 4–6, 1933	77	6243
	1st	Mar. 9–June 15, 1933		
	2nd	Jan. 3–June 18, 1934	78	12662
74th	1st	Jan. 3–Aug. 26, 1935	79	14822
	2nd	Jan. 3–June 20, 1936	80	10897
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ABBREVIATIONS

t = table c = chart n = footnote

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