

SOME PROBABLE EFFECTS OF REDUCING THE GOLD  
CONTENT OF THE STANDARD AMERICAN DOLLAR

by

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## INTRODUCTION

### Some Probable Effects of Reducing the Gold

#### Content of the Dollar

As far back as the thirteenth century there are records to show that human nature, as reflected in economic conditions, has not changed as much as we would like to think. Periods of good times characterized by rising prices, increasing credit, and more favorable economic conditions have been followed regularly by periods of adversity, commonly called depression.

The first big decline of this depression period came in 1920-21 when the general wholesale price level decreased from 226 per cent of the 1910-14 average in 1920 to 143 per cent in 1921. Following this, when the nations had adjusted reparations and war debts and the credit of Europe was renewed in the American markets, there was a temporary improvement in conditions. The price level rose again until in 1925 its average was 151 per cent. It was common talk, except among a few of the supposedly more pessimistic economists, that the world had forever cheated depression of its turn. Conditions would continue to improve. Business had permanently gotten into a period of higher prices.

But, as has always happened, depression would have its turn.

By 1933 the following conditions obtained:

1. The general wholesale price level had declined to 87 per cent of the 1910-14 average or a decline of about two thirds from the high level of 226 in 1920. /1

2. Industrial activity in March 1933 was slightly less than 50 per cent of the 1926 average. /2

3. Import and export trade of the United States had fallen off two thirds from the 1928 volume. /3

4. A newspaper estimate placed the number of unemployed in the United States at more than 10,000,000.

5. Farm prices decreased from 215 per cent of 1909-14 average in 1919 to 50 per cent in March 1933, or a decline of more than 75 per cent. /4

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/1 Cornell University Bulletin No. 79, Farm Economics, page 1.

/2 Bureau of Commerce Reports.

/3 Information from 1932 Commerce Yearbook and Bureau of Commerce Reports.

/4 Cornell University Bulletin 79, Farm Economics.

6. The national income fell from \$85,000,000 in 1928 to \$37,500,000 in 1932, a fall of approximately 60 per cent.

7. Our long term domestic debt, public and private had been reduced but \$5,000,000 from \$155,000,000 in 1929 to \$150,000,000 in 1933, while property value had declined from a capitalized value of \$450,000,000 to a little more than \$200,000,000, 1 all of which goes to show how far history has repeated itself.

As is always the case when in difficulties the instinct for self preservation begins to assert itself and people start looking for a cause and the proper cure. Failing to realize that it is not low prices that cause economic distress but the upsetting and dislocation of the balance between prices in different phases and remembering that times were better when prices were higher, price raising has been one of the first considerations. Here the quantity theory of money, which is that "variations in money produce normally proportional changes in price," 2, comes in for important consideration. Certain groups

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1 Information from Alvin Johnson, Debt and the Devil, Yale Review, pp 450-464.

2 Fisher, Irving: Purchasing Power of Money, p 183.

of people advocate putting the theory into operation voluntarily as a means of overcoming these adverse economic conditions. That there is a large following and it is seriously considered, is indicated by the fact that more than sixty bills dealing with an increased supply of money were introduced in the short session of the last Congress. 1 All of these bills had as their purpose increasing the amount of money. The common proposals were of three types. (1) Print more currency. (2) Mint silver dollars (a return to bi-metallism). (3) Reduce the gold content of the present dollar.

There have been several proposals for reducing the gold content of the dollar. The American Farm Bureau Federation proposal is to reduce the amount from 23.22 grains to 13.78 grains. The Committee-of-the-Nation proposal reads as follows: "It is the opinion of the committee that in this revaluation, the United States Treasury should raise the price of gold from \$20.67 per ounce to a new price of \$36.17 per ounce," or a reduction of 42.9 per cent in the quantity of gold in a dollar. 2

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1 Sullivan, Mark: Congressional Digest, March 1933 pp 66-67.

2 Committee of the Nation Report No. 2, Article 4.

## PROBLEM

This discussion is a study of the probable effect should the United States, reduce the amount of gold in the standard American dollar. Consideration of the problem comes as a result of the present adverse economic conditions the relatively high purchasing power of money and efforts to correct these two conditions. For convenience sake, the amount of reduction considered has been arbitrarily taken as one-third. This therefore would make three new gold dollars out of two present dollars.

## PURPOSE

In this thesis the purpose has been to review past monetary changes and their results to study the effect of reductions and inflations in certain other countries, and to analyze the probable effect in the United States; hoping in that way to see if a reduction might help in alleviating present distress, dislocations, and lack of balance by (1) improving prices and (2) reducing debts.



## DEFINITIONS AND EXPLANATIONS

Due to the fact that many expressions commonly have different meanings and for the sake of clearness in this discussion, the reader is asked to accept the following definitions of terms.

- (a) Money - Anything that passes freely from hand to hand, and is generally accepted as (1) a medium of exchange (2) a namer of values and (3) a standard of deferred payments. /1
- (b) Fiat money - Money that in its intrinsic worth does not possess any degree of its face value, but gains its value by public faith in the government that issued it. /2
- (c) Credit money - Bank loans and investments. /3
- (d) Potential money - Bank deposits.
- (e) Inflation - Any increase in the amount of money as compared with the amount of goods and volume of business at a particular time.

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/1 Ely, R. T. and Wicker, Ray; Elementary Principles of Economics. pp 267-68

/2 Coined as a statement from Material by E. R. A. Seligman, Currency Inflation and Public Debt, p 1-2.

/3 Sullivan, M; Congressional Digest, March 1933, p 67.

- (f) Currency - Legalized representative money.
- (g) Government - The citizens acting as a group through their chosen representatives.
- (h) Depreciation - Any reduction in the purchasing power of money.
- (j) In a representative government such as the United States any action of the government represents the action of the people. Therefore reduction of the gold content of the dollar would mean that the buyers as "we the people" agree with the sellers as "we the people" to use and accept a smaller amount of gold as our monetary unit.
- (k) The country should never be in a mood for any "just as good" legislation. If the advantages to be gained outweigh any hardships or dislocations that might be caused, there might be justification for the re-adjustment necessary for a trial. If not reasonably apparent then the advisability of its employment is doubtful.

#### MATERIAL

The sources of the material are: - suggestions from advisors; information from books, magazine articles, and

newspaper editorials; data assembled from Moody's Investors service; and information of a more or less confidential nature supplied from thirty banks, trust, insurance and publishing companies.

Beside the bibliography at the close, unless the information is given confidentially a direct reference to the source of a quotation is given at the bottom of the page on which the information or quotation is found.

#### METHOD

The method is deductive in the main taking any information, materials or data and attempting to draw from them specific conclusions.

In making up Table IV bonafide lists of issues of bonds and funded debt of (1) the United States (2) states and municipalities (3) public utilities companies (4) mortgage and finance companies (5) investment trusts (6) real estate mortgage companies (7) American industrial companies and (8) railroads were used. All of the bonds and funded debt of the State and National Governments were listed. In the case of all others the bonds and funded debt of each tenth concern in order as it came was used. The municipalities included the bonds and funded debt of

counties, cities, townships, drainage areas, school districts and any other local tax or public assessment supported bond issues and funded debt (not stocks) whose unpaid balance on each issue was \$100,000 or more on December 1, 1931\*. The totals of these were obtained by sampling, and in the following manner. Totals were made of the bond issues of every tenth municipality, public utility, mortgage and finance company, investment trust, real estate mortgage company, American industrial company and railroad in order as they were found in the list and then this total multiplied by ten in each case. These figures were added together and used as a grand total for all. The Standard deviation was not figured but when it is considered that one tenth or 1,112 of 11,120 companies and 771 of 7710 cities and municipalities were used and taken in regular order as found listed, the figures should not be far from the actual.

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(\*) Exception is made in the case of California.  
All its debt is included.

## HISTORICAL DEVELOPMENT

Records indicate that the precious metals, gold, silver and copper were prized for adornment by the people of Egypt and Asia Minor as early as 4000 B. C. At that time most trade was by barter. However some transactions, supposedly the larger, involved the use of money and it is interesting to note that most of the money was in the form of gold and bronze rings because silver was too scarce. An estimate of the worth of silver places its value at about four to five times that of gold. By 200 B. C. gold had reached a value of 13 to 15 times silver and it has fluctuated around this comparative valuation ever since. 1

When the Hebrew nation was at its height the world was still primarily in a barter economy. However coinage as practiced by the Egyptians was borrowed by the Greeks. They passed it on to the Romans and through them it was diffused to most of Western Europe. Coinage and the use of money reached a fairly high degree of development in the Roman Empire. Various estimates show the Romans as possessing, when at the height of the Empire's power,

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1 From information by Edie, Lionel D. Gold Production and Prices, University of Indiana Studies, Volume XV. Number 78, pp. 8-10.

about \$1,500 million of money. The Barbaric invasions robbed the Empire of much of its money and, following the breaking up of the Roman Empire, Europe returned to barter. During the period that followed most of the money was silver and any production barely offset abrasion and wastage. At the time of the discovery of America there was probably little more than \$200 million of money in Europe. However during the three centuries following its discovery \$11,000 million of silver and \$4,500 million of gold were produced 1 and according to estimates by the United States Bureau of Mines "more than half the gold used by man in historic times has been brought from the ground since 1900. 2 America has been one of the great contributors to this supply. In 1776 while the colonies were preparing to separate themselves from England, Adam Smith wrote "as the wealth of Europe has increased greatly since the discovery of the mines of America, so the value of the gold and silver has declined." 3 However little of this gold was found within the English colonies so the United States was

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1 From information by Edie, Lionel D: Gold Production and Prices, University of Indiana Studies, Vol XV. No. 78

2 Rogers, James H. America Weighs her Gold p 8.

3 Smith, Adam, Wealth of Nations, Book I, Chapter XI. Part 3.

short of gold and silver as a medium of exchange from the beginning of its history. The first Coinage Act of 1792 provided for coinage of eagles, half-eagles, and quarter eagles of gold; and dollars of silver. Nothing was said about a gold dollar. /1 The ratio of coinage however was 15 ounces of silver equals one ounce of gold. This was an undervaluation of gold so little was brought to the mints. "---in fact the only gold coinage between 1804 and 1834 was about \$9 million in the form of half-eagles and a smaller amount in the form of quarter-eagles at irregular intervals. The mint value of gold proved so low that even the smaller coins were rapidly exported." /2

Exporting of gold helped to maintain a monetary shortage. This in turn led to a change in the ratio in 1834 when the amount of gold in the dollar was reduced by  $6 \frac{2}{3}$  per cent. "The Act of 1834 changed the legal ratio from 1:15 to 1:16. --The readjustment of the weight of the coins in order to meet this change could have been made in two ways:

1. Increasing the number of grains in a silver dollar.

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/1 From information by Dewey, D. R. Financial History of the United States, pp 103-104.

/2 Dewey Financial History of the United States. page 211.

2. Lessening the weight of the gold dollar. -- The latter unfortunately was the course adopted. It is to be regretted that, in this manner, we laid ourselves open to the charge of debasing our coinage; but it is true. /1

On account of the alloy used the ratio was not exactly 1:16 so a slight change was made again in 1837. But just as the previous ratio was an undervaluation of gold, -- "this ratio in turn proved to be an undervaluation of silver and led to the withdrawal of silver dollars so that after 1840 this coin was rarely seen in circulation and even the fractional coins tended to disappear." /2 In practice this placed the United States on a gold standard basis. This standard was interrupted by a suspension of specie payment in 1837, reducing the weight of fractional silver coins in 1853, and a suspension of specie payment in December 1861 which lasted until January 1, 1879.

The "Bland Allison Act" which was passed in 1878 and continued in force until 1890 gave a definite double standard of money by providing for regular coinage of a certain amount of silver dollars each year. In the twelve

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/1 Laughlin, J. L. History of Bimetallism in the United States, p 69.

/2 Dewey, D. R. Financial History of the United States, p 211.



years following 378,166,000 silver dollars were coined. In 1893 an act was passed discontinuing the purchase of silver for coinage. But coinage of silver became a definite political issue. The lines were closely drawn with the Democrats favoring a double standard of money, and the Republicans upholding the gold standard. Not until the election of 1900 when the Republicans won on a definite "gold standard plank in the platform" did the status of the American dollar reach a more stable basis. <sup>/1</sup> This standard has been maintained until March 6, 1933 when by Proclamation of the President, in order to stop large drains of gold from the banks and the treasury, a banking holiday was declared. While gold still remains the standard of American money value a later proclamation has placed the United States off the gold standard for an indefinite period.

Consideration of the exchange system practiced at present shows that the world is, in its exchange systems three steps from barter.

1. Metal exchange, the use of real money or precious metals.
2. Currency exchange, the employment of fiduciary

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<sup>/1</sup> Information from Dewey, D. R: Financial History of the United States pp 405-469.

or representative money.

3. Credit exchange --the transfer and use of bank deposits, drafts, checks and other evidences of money.

Of course all three of these are involved in the present money system or credit exchange system of the United States and in the amounts shown in the following table.

|            | <u>Gold</u>     | <u>Currency Money</u> | <u>Bank Deposits</u> |
|------------|-----------------|-----------------------|----------------------|
| Dec-3-1932 | \$4,513 Million | \$4,792 Million       | \$42,800 Million *   |

A comparison of gold to bank deposits or of fiduciary money to bank deposits indicates that the bank deposits, which are the basis of credit money, are greater than either of the others by the ratio of about nine to one. It should be noted that to return to a money economy would be to go back two steps from our present money system. If the people advocating reduction propose it as a means of increasing credit money then it brings up a question as to whether there is sufficient base now for a much larger credit structure.

A review of the first part of Table I shows how the gold money stock has increased since 1914. If the base was sufficient back in 1914, 1917, 1920 or even 1931 then

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(\*) This includes Postal Savings Bank deposits of \$837 million.

it should support a larger structure than it is supporting now or than it did support in the more prosperous times of the past. If the proposal is not for this purpose, but to return to a money economy, then the writer would like to throw out the question, "why not take one more step back and return to a barter economy?" (See Table I.)

IS REDUCING THE GOLD CONTENT OF THE  
DOLLAR INFLATION?

A consideration of this necessitates returning to the definition given of inflation which is "any increase in the amount of money as compared with the amount of goods and volume of business."

E. R. A. Seligman says that "inflation means the existence of a currency in greater quantities than is actually necessary to carry on business transactions at a normal price level." <sup>1</sup> Acceptance of this definition would mean immediately a determination as to what would be a normal price level. The public in general is convinced that the present level is not normal. Was the 1926 level? The 1910-14 average? Or what was? Obviously it is uncertain. Mr. Mark Sullivan says that "inflation is any increase in

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<sup>1</sup> Seligman E. R. A: Currency Inflation and Public Debt, p 10.

Table I. - Showing Amount of Gold in England, France, United States  
and the World. (In Millions of Dollars)

|                                  | Dec. 31 1932 | Dec. 31 1931 | Dec. 31 1920            | Dec. 31 1917            | Dec. 31 1914            |
|----------------------------------|--------------|--------------|-------------------------|-------------------------|-------------------------|
| Amount of Gold<br>money in world | \$11,859.0   | \$11,258.9   | \$7,238.7               | \$7,138.9               | \$5,342.0               |
| Gold in England                  | 583.0        | 588.0        | 754.2                   | 416.7                   | 425.9                   |
| Gold in France                   | 3,254.0      | 2,699.0      | 685.5                   | 639.7                   | 802.6                   |
| Gold Money in<br>United States   | 4,513.0      | 4,051.5      | 2,451.2                 | 2,523.0                 | 1,206.5                 |
| Paper Money in<br>United States  | 4,792.0      |              |                         |                         |                         |
| Total United<br>States Money     | 9,704.0      | 9,421.2      | Oct. 31 1920<br>8,479.6 | Mar. 31 1917<br>5,396.6 | June 30 1914<br>3,798.8 |

Compiled by the writer from information in Financial and Commercial  
Chronicle New York, February 11 1933, page 926.  
Federal Reserve Bulletins, May 1932, and January 1933.

the amount of money." <sup>/1</sup> However, France is experiencing quite an increase in the amount of gold money just now <sup>/2</sup> and there are few who would say France is inflating.

Using the definition found in "The Definition of Terms" and "Reducing the Gold Content" one third would give a 50 per cent increase in the number of gold dollars. Two present dollars would make three of the new dollars. This would mean that the United States instead of having \$4,513 million would have \$6,769.5 million. From a standpoint of purchasing foreign exchanges, there would be no increase in the amount of American money because there it is measured in terms of ounces. Therefore the foreign exchange purchasing power of the American dollar would be decreased in proportion to the reduction.

In terms of the number of American dollars as such there would be 50 per cent more gold dollars and these dollars would exchange face value for our present currency. The tendency would be for this currency to retain the same subjective value in the minds of the people and to the extent that it did the result would be inflation; or looking at it from a standpoint of an increase in the

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<sup>/1</sup> Sullivan Mark: What is Inflation of Currency? Congressional Digest, March 1933, page 67.

<sup>/2</sup> From an Editorial, Topeka State Journal, April 24, 1933.

number of dollars, the result would be inflation because there would be more dollars than there were before.

#### PROBABLE EFFECT ON MONEY

1. Consider first the effects on money as a namer or designator of value. This is the quality possessed by money that permits the clothing dealer to say that the suit of clothes is worth \$24.00 instead of three 200 pound pigs.

In this quality there is an unusual aspect in that reduction proposes to use applied psychology. It would hope to accomplish an actual reduction in the value of the dollar and at the same time retain the same subjective value in the minds of the people in general.

The extent to which both of these effects would be accomplished can only be surmised. However, the French Franc might be cited as an example. Prior to 1914 the Franc had a normal exchange value at New York of 19.2, since the war the Franc has been depreciated until its normal exchange value in American money is 3.92 cents. This is a reduction to about one-fifth of its pre-war value. According to an article published in the Kansas City Star, on March 18 1933 there was being considered, by the French Chamber of Deputies, a bill to raise the pay of French soldiers to one Franc per day. In American money that

means 3.92 cents or 27 cents per week. Obviously the French Poilou gives to the Franc a greater subjective and objective value too than its value in exchange for American money. If so, then the objective or exchange value of the Franc is higher for domestic use. This must be due, in part at least, to its traditional subjective value with the French people and handed down from the time before the World War when five and not 25 Francs were required to purchase a dollar.

It would seem safe to conclude that there would be a corresponding effect in the United States. The laborer would go ahead receiving the same number of dollars per day for his labor and paying the same number of dollars or cents as the case may be for the things he has to buy, and the farmer would get the same number of dollars or cents for his products. This, of itself would tend to give a greater subjective value to the dollar, and quoting professor Rogers "---besides, in the minds of most people, a dollar remains a dollar, however much its purchasing power varies." 1 This of itself would increase the amount of money and therefore would be inflation because the subjective value of the dollar would tend to remain the same while the number of dollars increased.

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1 Rogers, James H: America Weighs her Gold. p 205.

2. A medium of exchange.

There are three ways in which reduction would eff money as a medium of exchange. (1) It would mean less weight of gold per unit. This however would make little difference to the average individual because our money system is so organized now that little gold ever passes from hand to hand as money. Most transactions being by some form of currency or credit money such as bank credits, drafts, and checks, or before the banking holiday, certificates and federal reserve bank notes. Of course the banking holiday has removed the gold certificates from the channels of trade and limited the use of bank credits.

(2) It would increase the number of monetary units.

Gold money in the United States December 31, 1932  
\$4,513 million.

Paper money in the United States December 31,  
1932 \$4,792 million.

Total amount of money in the United States  
December 31, 1932, \$9,704 million. 1

A decrease in the amount of gold in the dollar of one third would mean an increase of 50 per cent in the number of gold dollars, or for every two dollars existing at present there would be three of the new gold dollars. This would mean that the total number of gold dollars would be

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1 See Table I.



$4,513 \text{ million} \times \frac{3}{2} = \frac{13539 \text{ million}}{2}$  or \$6769.5 million.

An increase of \$2,256.5 million gold. Since the ratio of gold to its resulting currency at present is about 52 per cent to 48 per cent the total amount of increase of money if the same ratio were maintained, would be \$2,256.5 million +  $\frac{48}{52} \times 2,256.5 \text{ million}$  or \$2,256.5 million + \$2,082.0 million giving a total increase in money of \$4,339.4 million.

Such reduction would make possible a further increase in the credit structure. On February 28, 1933 the total money in circulation in the United States was \$6,546 million. The figures on credit money given at the same time were \$45,852 million. 1 This gives a ratio of almost exactly seven to one, (if the figure above were 45,822 it would be exact,) and should the same ratio be maintained then the increase in credit money would equal seven times the increase in money in circulation. Assuming that the ratio of money in circulation would hold the same proportion to the present total money which is \$9,704 million. 2 The money in circulation is 67.456 per cent of

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1 Federal Reserve Bulletin, March 1933 pp 138-141.

2 See Table I.

the total money. So  $\$4,339.4 \times .67456 =$  the total increase in money in circulation or  $\$2,927.2$  million. This multiplied by seven equals the total possible increase in credit money, or  $\$20,490.4$  million.

Summarizing: A reduction of  $33 \frac{1}{3}$  per cent in the gold content of the dollar, were the present ratios of gold money in circulation and credit money maintained, would increase or make possible an increase as follows:

|                                |  |
|--------------------------------|--|
| Increase in gold               | <u><math>\\$2,256.5</math> million</u> |
| Increase in money              | $4,339.4$ million                      |
| Increase in credit money       | <u><math>20,490.0</math> million</u>   |
| Total increase                 | $\$24,829.4$ million                   |
| Total money at present         | $9,704.0$ million                      |
| Credit money                   | <u><math>45,852.0</math> million</u>   |
| Total possible money structure | $\$80,385.4$ million                   |

This would be far beyond the money structure of 1929 when it reached a peak of  $\$58,417$  million.

### 3. Standard of deferred payments:

There are two primary effects here. (1) Interest rates and (2) debt burdens and their repayment.

(1) The interest rates. In this, if the problem is viewed internally and unhampered no doubt interest rates

would go on about as before reduction. A company charging six per cent interest would continue to do so. Mortgage companies would continue to charge six and one-half per cent for their mortgage contracts and home loan companies would continue to receive their same rate of interest for their loans. There is one possibility. Through increasing the number of gold dollars, should there be an increase in the money (actual and potential) of \$24,000 million there might be brought about a decrease in interest rates. This could only be brought about by actually distributing this increase to the banks of the country generally. Even then the lower rates would only be brought about by placing the money in competition, money with money, for increased loans. That increase would have to be such that it would force the bankers to hunt for additional business.

Since it is evident that the possible loans under present conditions of rate and risk are taken up, special inducements would have to be offered and about the only thing to offer is more liberal time of repayment or rates of interest.

(2) Debt Burdens and their Repayment.

There seems to be the greatest room for a leveling

out process in this due to the dislocations that have taken place during this deflation period. This leveling out process could take place by scaling down debts or by increasing prices. As an example of the condition the debts have remained at 100, wholesale prices have come down to 60 per cent of the 1926 level and prices of farm products have declined to 41 per cent of their 1926 level. 1 The interest and debt which, according to the Industrial Conference Board increased from \$114,866 million in 1922 to \$154,761 million in 1929. 2 With a few exceptions this is being repaid at the same rate. Just as there was no dividing of large increases or profits on borrowed capital, with the loaner, now there is little sharing of the losses of the borrower. To bring a mortgage to the present wholesale price level it would mean that each \$1,000 of mortgage would be worth \$610 or to bring to the farm price level, every \$1,000 mortgage would now have a reduced value of \$410. Assuming that a 33 1/3 per cent reduction were made and that the quantity theory worked perfectly, a 40 per cent increase in prices would bring the level to 85.4 per cent of the 1926 level. This would mean a 40 per cent

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1 U. S. Bureau of Labor Statistics Wholesale Prices February 1933.

2 Report of National Industrial Conference Board January 1933 in Financial and Commercial Chronicle, Feb. 4, 1933, p 722.

increase in the ability of products to pay off debt, and would be a tremendous improvement over present conditions.

MAKING THE CHANGE TO A DOLLAR OF SMALLER  
GOLD CONTENT

Any question as to whether the change could be made was much more acute a short time ago than now. Under conditions as of April 20, 1933 with the United States definitely off the gold standard, with all gold and certificates that promise redemption in gold called into the Treasury and Federal Reserve Banks, and with a penalty imposed for possession of gold money by private individuals, the change could be made quite easily.

Should the United States resume unlimited redemption then any attempt at reduction would become a different problem. Money speculators are always quick to take up any possible change in money values and use it to their profit. Also if the people felt that there was to be some form of currency depreciation, withdrawals would be heavy just as they were preceding the inaugural of the Roosevelt Administration. Quoting from the Manhattan Chronicle -"We talked the last of January with a man connected with the House of

Representatives in Washington D. C. who told us it was his belief legislation for inflation would be passed this year, and that it was pretty generally believed in Washington that this would be done. So what happened? Withdrawals. Some --probably the largest offenders -- acted with the hope of making a huge profit; others from the fear of loss. As an illustration of the extent to which this is going on, may be cited the fact that withdrawals from the Federal Reserve System Banks for the week ending March 1, 1933 are said to have totaled \$962 million." 1 These withdrawals were not all in gold, many were in paper. That only shows the faith the people had in the United States Government and its Monetary System. This emphasizes that some saw a possibility of loss if the deposits were left in the banks and others saw a chance for huge gains should the deposits be withdrawn.

On September 30, 1932, the total bank deposits were \$41,942 million and the Postal Savings Bank Deposits were \$858 million, or a total, of \$42,000 million. 2 With money being withdrawn at the rate of almost a billion a week theoretically in about 44 weeks all deposits would

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1 Editorial in Manhattan Daily Chronicle, March 8, 1933.

2 Federal Reserve Bulletin, March 1933, p. 141.

have been withdrawn. Actually the withdrawals would stop much sooner because of a lack of money. If gold were asked for the supply would be exhausted in five weeks; and the total gold and currency in ten weeks. It should be noted at this point that if bank deposits are considered, every withdrawal of a dollar bill means a tying up of five dollars worth of credit money and every gold dollar withdrawn means a tying up of \$10 of credit money. The result then would be, should reduction be attempted under unlimited redemption as prior to March 5, 1933, that, (1) The United States would be forced off the gold standard. (2) The gold would be in private hoards. Who would get the excess?

If it were arranged so that the government would get the increased number of dollars, these dollars could be used for some worthy rehabilitation scheme to help stimulate present economic inactivity. Perhaps in that way the money could be put into the hands of people whose buying power at the present is depleted and in that way increase the total buying power of the public. This arrangement could be made quite easily were all the money coined. The government could just take the coins as they came in and send them to the mint to be recast. However, a

practice of more recent times is to pay larger sums in bullion. Therefore when the money got out of the hands of the government, who ever possessed it at the time the change was made would get the excess and a profit of 50 per cent would be reaped for the holder.

Consequently it would seem that --

1. Under present conditions the change could be made quite readily.

2. The government could get the gain or increase.

3. Under conditions of unlimited redemption (a) the United States would be forced off the gold standard before the change was made unless some method could be devised whereby the government would get the increase. (b) The supply of gold would be in private hoards instead of in the hands of the government and banks.

#### REDUCTION OF THE GOLD CONTENT OF THE DOLLAR AND ITS PROBABLE EFFECT ON PRICE

These more or less regular ups and downs in the price level have been recorded, charted, and the span, from one peak to the following peak or low to the following low, has been given the name of "A Trade Cycle" Mr. Hawtrey of the British treasury uncompromisingly and in no uncertain



terms says " The Trade Cycle is Purely a Monetary Phenomenon." <sup>/1</sup> As such it would mean that inflations in prices came about because of inflations in money and credit. A Nation generally does this in time of war. Then at some later date, if the money is depreciated, that nation may set about to raise the parity of its money. This will mean a reduction in the amount of money in proportion to the amount of business and trade, and would be done by decreasing the credit structure. During inflation the thing that was happening was the consumption not only equaled the national income but also the credit structure that was being built up. In short future income was being spent to satisfy present wants. Then the government and business set about to deflate. Consumption was cut down an amount, not just equal to the rate of rise of the credit structure, but to that amount plus the rate of deflation.

A few years of the economic distress that follows and there is set up a demand for a re-inflation, a thing that has been happening of late. In the short session of the last Congress, of the bills that were introduced, more than 60 dealt with inflation and all in an effort to increase

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<sup>/1</sup> Quotation taken from Haberler, Godfred: "Money and the Business Cycle" Harris Foundation Lectures 1932. p 51.

the amount of money. These bills were classified in three groups (1) Fiat money, (2) Coinage of silver and (3) Reducing the gold content of the dollar /1 . (1) The fears for fiat money seem to be either that it would not work or would work too well. (2) Coinage of silver brings out the old bi-metallic money standard problem that has been the cause of such bitter and heated political discussions in the past. (3) The people advocating reduction hope to accomplish an increase in money and in prices without the problem of bi-metallism in (2) and avoid the difficulties of (1) by fixing the amount of actual inflation. If inflation in the credit structure will stop at a fixed point just as the increase in the amount of gold would under this proposal then their reasoning is sound.

Just as inflation is not new, so is reduction of money value not so new. In the period 1834 to 1837 the United States reduced the gold content of the dollar  $6 \frac{2}{3}$  per cent. Also a review of Table Number II shows the countries of the world that have reduced the content of their monetary unit since 1920. The following information is given and in the order mentioned. Country, date of change

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/1 Summarized by the writer from an article by Sullivan, Mark: "What is meant by Inflation of the Currency." Congressional Digest, March 1933. pp 66-67.

name of old money, name of new, par of old, par of new, per cent reduction, par of exchange February 1933, average rate of exchange February 1933. (See Table II.)

As a further aid in determining the probable effect should the United States reduce the amount of gold in the dollar, comparisons were made between wholesale prices and exchange rates in certain countries that have inflated either by reduction or by the issuing of paper money. The following nations were used, England, Canada, France, Italy and Japan. (See Table III.)

There is some danger in accepting the figures in Table III without some special explanation. When a nation is off the gold standard and its note issuance is not fixed then the exchange value of that nation's currency is determined by the ratio of paper money to coin. The greater the proportion of paper money to gold or specie, the less will be the value of that money. This has been the case with most of the moneys listed in Table II. An examination of their exchange ratio shows that they had already depreciated to about the new rate established when the change in money occurred. Because of this fact there seemed to be little effect in the case of Italy, and France, when they reduced the actual amount of gold in the Lira and in the Franc.

Table II. - Showing Nations That Have Reduced Value of Their Monetary Unit - Date of Reduction - Percentage Par of Exchange and Percent Exchange Rate.

| Name of Country               | The new was first quoted in New York, or date of change | Name of old coin | Name of new coin | Par of old coin in dollars | Par of new coin in dollars | Percent reduction | Par of exchange Feb. 1, 1933 | Rate of exchange Feb. 1, 1933 | On or off the Gold Standard date if off |
|-------------------------------|---|------------------|------------------|----------------------------|----------------------------|-------------------|------------------------------|-------------------------------|---|
| 1 Austria                     | Mar. 13 1926  | Krone            | Schilling        | .2026                      | .1407                      | 30.5              | .1407                        | .1398                         | Off Oct. 9, 1931                        |
| 2 Belgium                     | Oct. 25 1926  | Franc            | Belga            | .1930                      | .1390                      | 27.9              | .1390                        | .1396                         | On                                      |
| 3 Bulgaria                    | Nov. 22 1928  | Lev.             | Lev.             | .1930                      | .0072                      | 96.2              | .0072                        | .0072                         | Off Oct. 15, 1931                       |
| 4 Finland                     | Jan. 2 1926   | Markka           | Markka           | .1930                      | .0252                      | 86.9              | .0252                        | .0149                         | Off Oct. 12, 1931                       |
| 5 France                      | Jun. 25 1928  | Franc            | Franc            | .1930                      | .0392                      | 79.6              | .0392                        | .0392                         | On                                      |
| 6 Greece                      | May 14 1928   | Drachma          | Drachma          | .1930                      | .0130                      | 93.2              | .0130                        | .0056                         | Off Apr. 27, 1932                       |
| 7 Hungary                     | Jan. 2 1926   | Krone            | Pengo            | .2026                      | .1749                      | 13.6              | .1749                        | .1743                         | Off July 17, 1931                       |
| 8 Italy                       | Dec. 21 1927  | Lira             | Lira             | .1930                      | .0526                      | 72.7              | .0526                        | .0511                         | On                                      |
| 9 Poland                      | Oct. 13 1927  | Zloty            | Zloty            | .1930                      | .1122                      | 41.8              | .1122                        | .1119                         | On                                      |
| 10 Portugal                   | July 1 1931   | Escudo           | Escudo           | 1.0850                     | .0422                      | 96.1              | .0422                        | .0310                         | Off Jan. 1, 1932                        |
| 11 Roumania                   | Feb. 7 1929   | Leu              | Leu              | .1930                      | .0060                      | 96.0              | .0060                        | .0059                         | Off May 18, 1932                        |
| 12 Bolivia                    | Aug. 20 1928  | Boliviano        | Boliviano        | .3893                      | .3650                      | 62.4              | Not quoted                   | Not quoted                    | Off Sep. 23, 1931                       |
| 13 Brazil                     | Dec. 18 1926  | Milreis          | Milreis          | .3244                      | .1196                      | 61.2              | .1196                        | .0763                         | Off Oct. 17, 1930                       |
| 14 Chile                      | Aug. 21 1925  | Peso             | Peso             | .3650                      | .1217                      | 66.6              | .1217                        | .0627                         | Off Apr. 20, 1932                       |
| 15 Ecuador                    | Mar. 19 1927  | Sucre            | Sucre            | .4866                      | .2000                      | 58.9              | Not quoted                   | Not quoted                    | Off Feb. 8, 1932                        |
| 16 Peru                       | May 18 1931   | Sol              | Sol              | .4000                      | .2800                      | 36.6              | Not quoted                   | Not quoted                    | Off May 15, 1932                        |
| 17 India                      | Apr. 1 1927   | Ruppee           | Ruppee           | .4866                      | .3650                      | 25.0              | .3650                        | .2583                         | Off                                     |
| 18 *Canada                    |   | Dollar           | Dollar           | 1.0000                     | 1.0000                     | None              | 1.0000                       | .8351                         | Off Oct. 19, 1931                       |
| 19 *Denmark                   |   | Krone            | Krone            | .2680                      | .2680                      | None              | Not quoted                   | Not quoted                    | Off Sep. 29, 1931                       |
| 20 *England                   |   | L. Sterling      | L. Sterling      | 4.8666                     | 4.8666                     | None              | 4.8666                       | 3.4220                        | Off Sep. 21, 1931                       |
| 21 *Japan                     |   | Yen              | Yen              | .4985                      | .4985                      | None              | .4985                        | .2079                         | Off Dec. 13, 1931                       |
| 22 *South Africa <sup>x</sup> |   | L. Sterling      |                  | 4.8666                     | 4.8666                     | None              | 4.8666                       | 3.3890                        | Off Dec. 27, 1932                       |

(\*) These nations have not reduced the content of their monetary unit but have depreciated their currency.

(x) Did not follow England off the Gold Standard, only temporarily, then created a money unit of own containing 113 grains of gold, but returned again to the L. in December 1932.

Compiled by the writer from Federal Reserve Bulletin January 1932, and January and March 1933.  
Farm Economics - Cornell University Bulletin No. 79, February 1933.  
Current Reports of United States Department of Commerce.

Table III. - Showing the Effect of Reduction or Inflation  
as Reflected in Exchange Rates and Wholesale  
Prices

| Italy 1926 = 100 Percent |        |       | : | France 1913 = 100 Percent |        |   |
|--------------------------|--------|-------|---|---------------------------|--------|---|
| Month                    | Whole- | Exch. | : | Whole-                    | Exch.  | : |
|                          | sale   |       |   | price                     |        |   |
|                          | price  | rate  |   | price                     | rate   |   |
| 1927                     | :      | :     | : | :                         | :      | : |
| Oct.                     | 468    | .0546 | : | ---                       | -----  | : |
| Nov.                     | 466    | .0544 | : | :                         | :      | : |
| Dec.                     | 463*   | .0538 | : | ---                       | -----  | : |
| 1928                     | :      | :     | : | :                         | :      | : |
| Jan.                     | 463    | .0528 | : | ---                       | -----  | : |
| Feb.                     | 461    | .0529 | : | ---                       | .0393  | : |
| Mar.                     | 464    | .0528 | : | 645                       | .0391  | : |
| Apr.                     | 464    | .0527 | : | 650                       | .0390  | : |
| May.                     | 465    | .0526 | : | 660                       | .0393  | : |
| June                     | 462    | .0524 | : | 649                       | .0303* | : |
| July                     | 453    | .0523 | : | 646                       | .0391  | : |
| Aug.                     | 456    | .0523 | : | 645                       | .0390  | : |
| Sep.                     | 458    | .0523 | : | 637                       | .0390  | : |
| Oct.                     | 463    | .0523 | : | 640                       | .0390  | : |
| Nov.                     | 466    | .0523 | : | 652                       | .0390  | : |
| Dec.                     | 464    | .0523 | : | 651                       | .0390  | : |
| 1929                     | :      | :     | : | :                         | :      | : |
| Jan.                     | 461    | .0523 | : | 657                       | .0390  | : |
| Feb.                     | 463    | .0523 | : | 660                       | .0390  | : |
| Mar.                     | 461    | .0523 | : | 654                       | .0390  | : |
| Apr.                     | 455    | .0523 | : | 648                       | .0390  | : |
| May                      | 452    | .0523 | : | 643                       | .0390  | : |
| June                     | 447    | .0523 | : | 629                       | .0390  | : |
| July                     | 440    | .0523 | : | 624                       | .0391  | : |
| Aug.                     | 437    | .0523 | : | 698                       | .0391  | : |
| Sep.                     | 437    | .0523 | : | 608                       | .0391  | : |
| Oct.                     | 436    | .0523 | : | 607                       | .0393  | : |
| Nov.                     | 431    | .0523 | : | 603                       | .0393  | : |
| Dec.                     | 425    | .0523 | : | 596                       | .0393  | : |

(\*) Reduced the value of the Lira to 5.26 ¢

(\*) Reduced the value of the Franc to 3.92 ¢.

Table III. (Con't.)

| England         |                 | : Canada 1926 = |                 | : Japan Oct. 1900 =  |       |                      |
|-----------------|-----------------|-----------------|-----------------|----------------------|-------|----------------------|
| 1913 = 100:     |                 | : 100           |                 | : 100                |       |                      |
| percent         |                 | : percent       |                 | : percent            |       |                      |
| : Whole-:       |                 | : Whole-:       |                 | : Whole- :           |       |                      |
| : sale : Exch., |                 | : sale : Exch., |                 | : sale : Exch.,      |       |                      |
| Month:          | price           | rate            | price           | rate                 | price | rate                 |
| 1931            |                 |                 |                 |                      |       |                      |
| Aug. :          | 100             | :4.8577:        | 71              | : .9969              | : 152 | : .4935              |
| Sep. :          | 99 <sup>x</sup> | :4.5312:        | 70 <sup>x</sup> | : .9624              | : 150 | : .4933              |
| Oct. :          | 104             | :3.8892:        | 70              | : .8910 <sup>x</sup> | : 147 | : .4925              |
| Nov. :          | 106             | :3.7199:        | 71              | : .8899              | : 147 | : .4929              |
| Dec. :          | 106             | :3.3737:        | 70              | : .8270              | : 151 | : .4346 <sup>x</sup> |
| 1932 :          |                 | :               | :               | :                    | :     | :                    |
| Jan. :          | 106             | :3.4312:        | 69              | :                    | : 160 | : .3598              |
| Feb. :          | 105             | :3.4563:        | 69              | : .8729              | : 161 | : .3432              |
| Mar. :          | 105             | :3.6393:        | 69              | : .8945              | : 159 | : .3215              |
| Apr. :          | 102             | :3.7499:        | 68              | : .8988              | : 154 | : .3280              |
| May :           | 101             | :3.6751:        | 68              | : .8844              | : 150 | : .3197              |
| June :          | 98              | :3.6466:        | 67              | : .8674              | : 146 | : .3028              |
| July :          | 98              | :3.5495:        | 67              | : .8706              | : 148 | : .2744              |
| Aug. :          | 100             | :3.4757:        | 67              | : .8755              | : 156 | : .2449              |
| Sep. :          | 102             | :3.4710:        | 67              | : .9026              | : 167 | : .2363              |
| Oct. :          | 101             | :3.3961:        | 65              | : .9123              | : 169 | : .2306              |
| Nov. :          | 101             | :3.2752:        | 65              | : .8730              | : 178 | : .2062              |
| Dec. :          | 101             | :3.2786:        | 64              | : .8659              | : 185 | : .2092              |
| 1933 :          |                 | :               | :               | :                    | :     | :                    |
| Jan. :          | ---             | :-----:         | 64              | : .8746              | : 185 | : .2093              |
| Feb. :          | ---             | :-----:         | --              | : .8350              | : --- | : .2079              |
| Mar. :          | ---             | :-----:         | --              | : -----              | : --- | : -----              |

(x) Relinquished the gold standard during this month.

Compiled by the writer from information in Federal Reserve Bulletins 1930-31-32, and Jan., Feb., Mar., 1933.

In the case of Canada, when the Canadian dollar was liberated somewhat by going off the gold standard there was apparently no effect upon wholesale prices. The price level was on a downward trend at the time and continued downward.

When England and Japan departed from the gold standard there was an immediate effect upon prices. Wholesale prices in England rising from an average of 99 per cent of the 1913 price level in September 1931, to 106, which is the last high, in November 1931. At the same time however the exchange rate of the pound sterling at New York dropped from \$4.53 to \$3.71. Japan's price level had a rise from 147 per cent of the 1900 price level in November 1931 (the gold standard was relinquished the early part of December) to an average of 161 for February 1932. At the same time the exchange rate, at New York, dropped from .4929 in November 1931 to .3432 in February 1932.

In January 1933 wholesale prices in England just equaled the 1913 price level and the pound sterling was quoted at 3.36 on the New York Exchange. Japan's prices again started downward and continued until June 1932. At that time further depreciation of the currency was begun and since there has been a rise in the price level. The

rise being from 148 to 185 in January 1933, while the Yen depreciated to .2062 in November 1932, and stood at .2073 for January 1933.

**Conclusion:**

Inflation seems to have the effect of bringing a rise in prices about proportional to the inflation. France and Italy were robbed of a chance to see the actual effect of reduction because previous inflation had already depreciated their currency to the approximate level of value given the new coin. All the nations considered were in a period of declining prices which might tend to limit the effect of action in any one country.

**Foreign Trade:**

A look at the exchange ratios in Table II shows that should the United States reduce the gold content  $33 \frac{1}{3}$  per cent it would mean that the purchasing power of the new dollar on the International Exchange would be reduced a corresponding amount. This would mean that a given amount of foreign money could purchase 50 per cent more goods in the United States than it could have before reduction. The law of supply and demand would continue to operate, the favorable ratio of buying on the American Market would increase foreign buyings here, and exports



would increase. At the same time, because the purchasing power of the American dollar had decreased in the International Market, the United States would buy less. The result would be to enlarge the balance of trade which is already in favor of the United States just as fast as the marginal buyers within the United States were cut off by the increased cost of imported goods.

The settlement of these adverse balances might be made in two ways. (1) Transfer of securities. However the situation in regard to this is about as follows. /1

1914 (In Millions)

| <u>American investments<br/>abroad</u> | <u>Investments of Foreigners<br/>in the United States</u> |
|--|---|
| 2,100 to 2,000                         | 4,500 to 5,500  |

( In Millions)

Private Long term Investments:For. Investments in the Unit-  
abroad Dec. 31, 1930 : ed States Dec. 31, 1929

15,134

4,700

The fact that foreign securities, as shown by this quotation, owned within the United States so far exceeds American securities owned by foreigners would tend to eliminate this.

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/1 Rogers, James H. "America Weighs Her Gold." Chapter IV. p 46-47.

(2) The other method is to transfer gold. However with 38.1 per cent of the gold money of the world already in the United States, with 66.7 per cent of (See Figure 1.) it in the United States and France together, it would seem that, excepting France, these nations already have a shortage. France too possibly would be short of gold to back her currency were it not for the fact that the French Franc was debased from 19.3 cents to 3.92 cents 1. For the nations involved in our foreign trade, that are already short of monetary gold to settle this unfavorable balance in gold would mean to further decrease the supply of that nation and increase the supply in the United States. The ultimate effect of this would be to further debase the currency of that nation and strengthen the money of the United States. Allowed to operate unhampered a level would soon be reached where the ratio of the balances of money value would be about the same as it was before the United States depreciated.

A second effect to the importing country would be due to the increased amount of goods obtained from the United States. These goods would compete with and replace more goods of their own manufacture. More goods of that country would be left unused; unemployment would increase,

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1 See Table II.

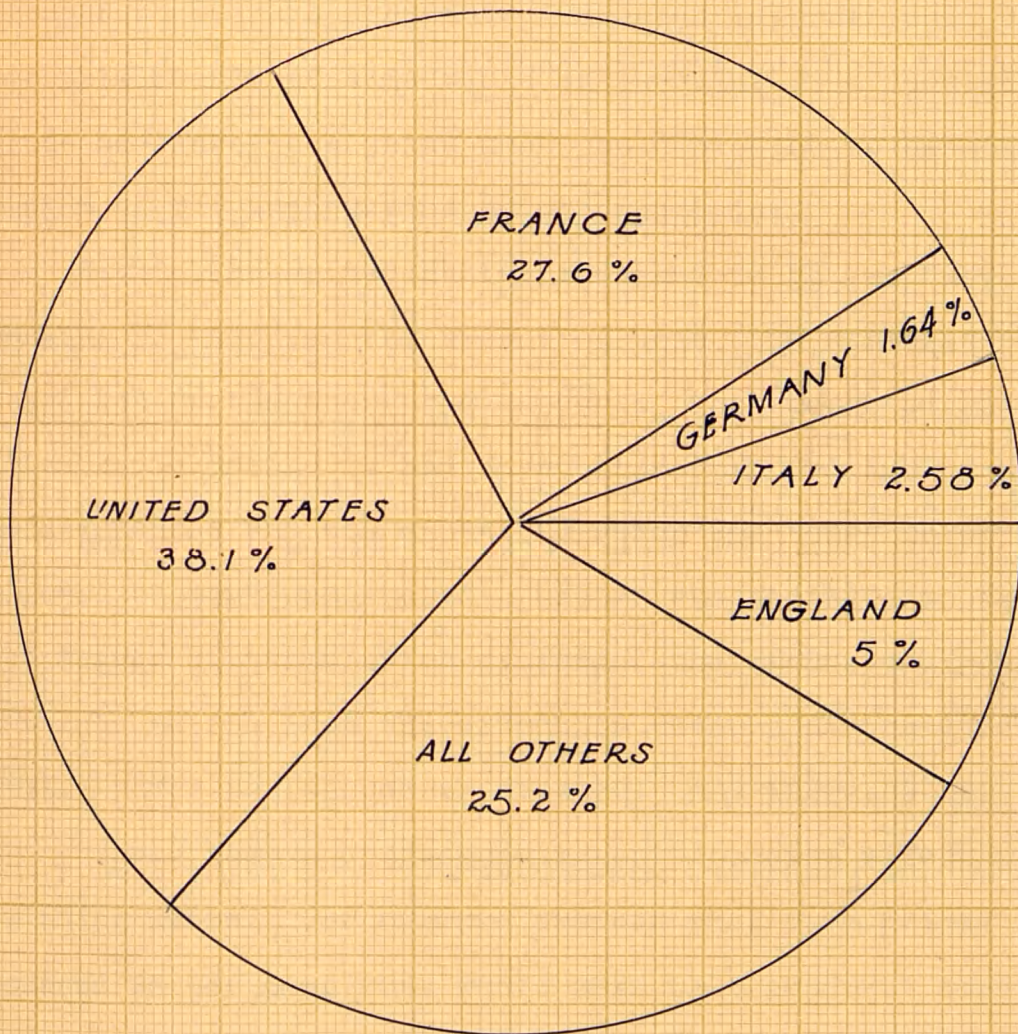


Figure 1. Showing the Distribution of the Gold Reserve of the World.

factories would curtail production until pressure would be brought to bear to stop this increased importation. The probable result of this would be throwing up of additional trade barriers to a point that would exclude to an approximation of the importation before reduction.

Within the United States there would be two factors working to increase the amount of gold, the stimulation to trade due to the increased exports. The amount of rise in price would depend in the first case upon the amount of gold imported and the extent to which the money theory was allowed to work unhampered; and in the second case upon the degree of stimulation of trade, the amount of industry set into motion, and the extent to which additional local buying power is reached or created. Any increase here in price would have a corresponding but opposite effect upon existing debts. For example suppose that farm prices increased 25 per cent that would mean that products that would pay off one hundred dollars before the rise would pay \$125 worth of debt after the rise.

A third factor in connection with Internal trade has to do with the mind of the buyer. Some people holding off or postponing buying because of the uncertainty of conditions may feel that this is the time to buy and again

enter the market for things that are needed but could be gotten along without. To the extent that this group is encouraged to buy, there will be an additional stimulation to trade and as a result just that much more of a rise in price.

A fourth factor evolves around the way any increase, particularly in gold, is handled by the banks. As the Federal Reserve operates now there would be a tendency to absorb the increase, decrease the ratio to credit money and then await a call for the credit money. However, should this increase of money be distributed generally to the banking interests of the country, this would increase their total holdings. This increase should send the banking interests into the field seeking investments and places to lend, and in that case the tendency would be to increase the total amount of debt. "Experience has shown that bank officials will not remain long idle with large excess reserves. They must loan or invest them or else make continued excuses to their Board of Directors. As the last choice becomes increasingly awkward, especially when profits are at best very low, some means of placing them is sure soon to be found." /1

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/1 Rogers, James H. "America Weighs Her Gold."  
p 187.

There are two ways of increasing trade either increase the credits and loans or spend additional savings and obviously this would be the former. Then the question arises as to whether there is too much debt now. The total public debt of the United States increased from \$1,000 million to \$21,000 million in the period from the beginning of the World War until January 1933. /1 Mr. H. L. Lutz says "the war" involved tremendous expansion of the public debt. The interest burden mounted to a figure far in excess of the total ordinary governmental cost in any year prior to 1917. /2

In the period from 1922 to 1929 the total public and private debt of the United States increased from \$114,866 million to \$154,761 million /3. Professor Johnson estimates that this latter total has been reduced by \$5,000 million which would leave a total of approximately \$150,000 million still remaining. He says further that "the remaining total will have to be reduced another \$25,000 million unless there is a material increase in the

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/1 Information furnished by Professor Harold Howe, Department of Agriculture Economics, K. S. C.

/2 Lutz, H. L. Public Finance. p 53.

/3 Report of National Industrial Conference Board, January 1931. Financial and Commercial Chronicle, Feb. 4, 1933, p 722.

price level." <sup>/1</sup> In order to reach the same proportion between price level and debts, after the reduction he suggests, there would need to be a 16 2/3 per cent increase in the price level.

The information available would tend to indicate the following conclusions as to the effect upon trade.

1. Reduction would cause a temporary stimulation of American export trade and a reduction to imports due to the fact that the American dollar would purchase less abroad while foreign money would purchase more here. As a result the American balance of trade would be further unbalanced.

2. To the extent that gold was used in making up the balance of payment to the United States, there would be a corresponding depreciation of the paying nation's currency.

3. Eventually a new equilibrium would be reached at a point near the old ratio of balances but with the currency of both countries depreciated. The escape from this would be a further reduction.

4. Stimulation of exports and curtailing of imports would stimulate domestic trade and industrial activity.

5. Any increase of exports would tend to decrease

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<sup>/1</sup> Johnson, Alvin. "Debt and the Devil." Yale Review, Spring 1933 pp 451-54.

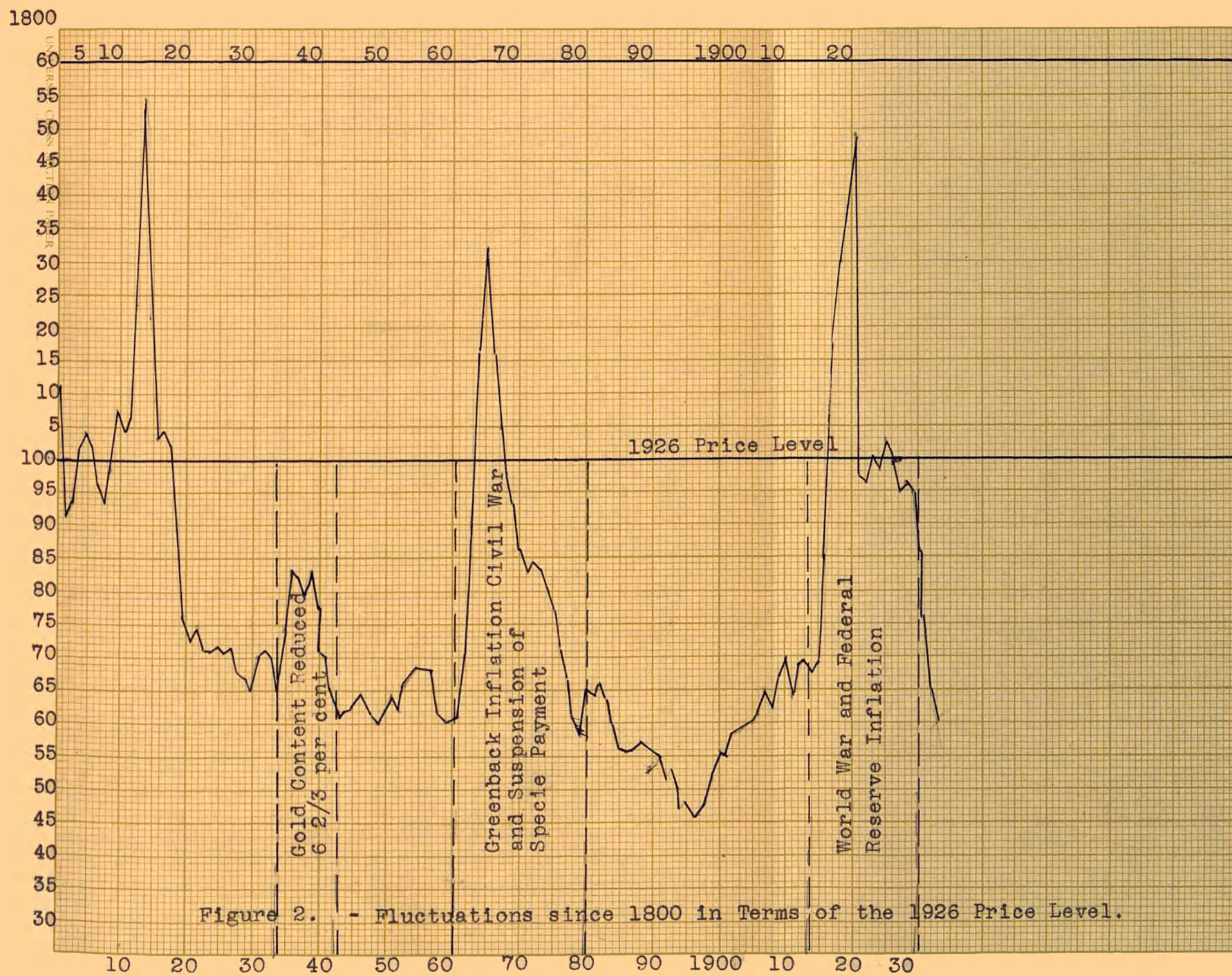
production and also price in the importing country. Pressure would be brought to bear to raise barriers to exclude this increase.

#### The General Price Level

About the best criteria as to what would possibly happen is to see what has happened under similar circumstances in the past. (See Figure 2.) Since 1820 there have been three important inflations and peaks in the price level. Two of them have been major peaks, the third represents the time when the United States reduced the gold content of the dollar --the period 1834-1837.

In 1834 congressional action changed the ratio, for coinage of gold and silver, from 1:15 to 1:16. This action was taken because gold was under valued at the mint and therefore was coined but sparingly if at all. The change was made by reducing the amount of gold rather than increasing the amount of silver. The reduction amounted to  $6 \frac{2}{3}$  per cent. An examination of Table IV shows that in the period following the wholesale price level raised from 65.6 per cent of the 1926 price level in 1834 to 83.5 per cent of the 1926 price level as an average for 1837. A first glance at this would make it seem that even a  $6 \frac{2}{3}$





per cent reduction had a tremendous inflationary effect. Professor Dewey, however, mentions a number of things influencing and helping contribute to higher prices and the resulting Panic of 1837.

1. Failure of the United States to renew the Charter of the United States Bank.
2. Tying up, especially of western banks and their credit facilities, due to the new requirement that land brought from the government must be paid for in specie.
3. Drouth in 1835 and again in 1837.
4. Distribution to the States of the National surplus nine million at a time.
5. The over speculation that always comes as a result of too rapid expansion.
6. An era of rapid canal and railraod expansion.
7. An unfavorable balance of trade. /1

The next great rise in prices came in the Civil War period. In this period there was a rise of from 60.9 per cent of the 1926 price level in 1860 to 132 per cent as an average in 1865. This is an increase of 61.1 per cent above the 1860 average price. However the payment in specie

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/1 Summarized by the Writer from Dewey D. L. Fin History of the United States, pp 224-31.

had been suspended /1 and the paper money with which everyone was paid began to depreciate reaching a low at one time in 1864 when the gold was 285 per cent of the value in green backs. /2 Any increase in price was here more than counterbalanced by a decrease in value of the paper money in comparison to gold. This depreciation was to about one third its gold value or face value while the price level doubled.

The third great inflation came in 1914 with the establishment of the Federal Reserve Act. This liberalized the money to provide for varying needs of different seasons. The final result was a liberalizing of the credit structure. But here again were to be found several factors entering in beside just the inflation. However the wholesale price level reached 154.4 per cent of the 1926 level in 1920 with money inflation one of the causes of the higher prices. Other causes common to this period and the other peak during the Civil War are:

1. Dislocation in industry due to the war.
2. Demand for labor due to the war.
3. Withdrawal of men from productive industry.
4. War consumption of goods.

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/1 From Dewey, J. L. Financial History of the United States p 281.

/2 Seligman, E. R. A. Currency Inflation and Public Debts. Table X, p 75.

From these the conclusion can be drawn that inflation, or specifically, decreasing the gold content of the dollar would tend to increase prices. The extent to which price will be increased will depend partially upon the amount utilized and this in turn will depend upon increase in business activity or purchasing. Mr. Ogden L. Mills says that "business proceeds on a basis of expectations. Expectations as to volume of sales, prices, costs of production, and ability to make collections. The whole structure is extended on a basis of credit." <sup>/1</sup> Also, Mr. J. M. Clark cautions "be it noted that mere expansion as such may not automatically bring about an increase of purchasing power; it must be of a sort that puts added funds in hands that will use them to buy goods." <sup>/2</sup> Referring again to Table III farm prices for example have declined faster than the general wholesale price level. Any gaining of the former equilibrium between farm prices and general wholesale prices that would be due to a rise in price would bring about an increase in the farmer relative purchasing power, and through this, the farmer's ability to buy more goods and paying existing debts. Also the increase in price of

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<sup>/1</sup> Mills, Ogden L. Speech before Missouri Young Republicans, Feb 11, 1933.

<sup>/2</sup> Clark, J. M. Convulsions in the Price Structure Yale Review Spring 1933. p 508.

any commodity to pay existing debts.

1. Past inflations would indicate that reduction would bring about an increase in price.
2. The American inflations have always been accompanied by other factors that tend to obscure the effects of inflation.
3. Any increase must be so arranged that it will put added buying power in the hands of those who will spend it.

#### PROBABLE EFFECT UPON PRICE PAID FOR LABOR

Should inflation be brought about by gold reduction and if experience of the past is followed, the laborer would go ahead receiving the same number of dollars or cents per hour or day and paying the same amount for the things that were bought. However as prices of commodities advanced purchasing power of labor wages would make a relative decline due to the fact that wages tend to follow increases in price slowly. The immediate hope then, for labor, rests in increasing the total number of days of employment due to stimulation in trade activity. This would be distributed in one of two ways either in additional hours to the individual which would increase total individual income or in hiring additional workers and thus reduce the number of unemployed. Either would increase the total income to labor and would depend upon the extent to which increase in price brought about an increase in

the amount of labor. However, as the price of commodities increased the total real wages to labor would decrease due to the fact that labor wages lag behind changes in the price level.

Summary:

1. The actual price paid per unit for labor in the domestic market would not be increased.
2. The total price paid for labor would be increased only to the extent that foreign demand for our goods at the lower exchange price would stimulate domestic trade and through that, a demand for labor.

REDUCTION OF THE GOLD CONTENT OF THE DOLLAR  
AND ITS PROBABLE EFFECT UPON  
REDUCTION OF DEBTS

Since, as has been shown, there would be some increase in price the effect would be to decrease the present debt. This decrease would not take place by an actual reduction in number of dollars of debt but in terms of the goods or commodities with which it must be paid. That is if prices of commodities were raised 25 per cent from present levels an amount of goods that would pay \$100 debt under present conditions would pay \$125 as the amount of the debt in dollars and cents is fixed or if raised 40 per cent then \$140 of debt could be cancelled with each original \$100 worth of goods. If the quantity theory

worked perfectly and the per cent increased in price level was equal to the possible increase in the money structure there would be a 40 per cent increase. The effect would be the same as though the debt were actually scaled down in dollars 29 per cent. This would bring about the effect of a reduction in the public and private debt of from \$150,000 million to \$106,000 million or a reduction of \$43,500 million. This would bring the reduction far below the 25,000 million reduction estimated necessary by Professor Johnson, and might be worthy of serious consideration.

#### The Gold Clause

In a political speech delivered at Des Moines Iowa, in October 1932, former president Herbert Hoover made the statement that " --- all of our government, most of our state and municipal bonds, and most other long term obligations are written as payable in gold." 1

In an effort to determine the wording of this clause and the extent to which it has been used inquiries were sent out to thirty two insurance companies, mortgage companies, banks and trust companies and twenty-seven replies were received. Of these twenty-seven, three did not state,

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1 Garis, Roy L. "The Gold Clause." Extracts from Speech of Herbert Hoover, Annals of Am.. Ac. Jan. 1933, p 220.

nine reported their contract as having no gold clause, and fifteen used contracts or bonds containing this special clause.

Wherever an explanation was given, it contained one of the following or a similar statement:

- (1) "Payable in United States gold coin of the present standard of weight and fineness."
- (2) "Payment in current legal tender equal in value to gold coin of the same weight and fineness of the standard gold dollar of the United States at the date of execution of the note."

This would make it seem that most all of the companies that were particular enough to specify "payable in gold" also took the additional precaution and added "of the present standard of weight and fineness" or words to that effect.

Two questions that immediately arise are:

1. How extensively has the gold clause been used?
2. Can the gold clause be enforced in case of a reduction of the gold content of the dollar?

In answering the first of these (See Table IV.) the data were compiled by the following procedure. The 1932 edition of "Moody's Investors Service Books" were used as the source of information. Only bonds and funded debt were tabulated. Because there was no indication as to



Table IV. - Bonds or Funded Debt (Not Stocks) in the United States that do or do not Contain a Gold Clause.

|                                   | :Value of bonds<br>:or funded debt<br>:having Gold Clause | :Value of bonds<br>:or funded debt<br>:without Gold Clause | :<br>:<br>:Total value | :Per cent hav-<br>:ing Gold<br>:Clause | :No. of Co's:<br>:having<br>:Gold Bonds | :Total<br>:Number<br>:of Co's. |
|-----------------------------------|---|--|------------------------|--|---|--------------------------------|
| Federal Government <sup>x</sup>   | : 9,513,542   | : 5,353,022  | : 14,866,564           | : 63.3                                 | : ----                                  | : -----                        |
| States #                          | : 2,297,763   | :  | : 2,297,763            | : ----                                 | : ----                                  | : -----                        |
| Cities and *                      | :   | :  | :                      | :                                      | :                                       | :                              |
| Municipalities #                  | : 24,027,860  | : 24,027,860   | : 24,027,860           | : ----                                 | : ----                                  | : 7710                         |
| Total (Gov't'l.<br>Agencies)      | : 35,839,165  | : 29,370,882   | : 41,192,187           | :                                      | :                                       | :                              |
| Public Utilities                  | : 11,054,930  | : 1,658,190  | : 12,713,120           | : 87.7                                 | : 1690                                  | : 1840                         |
| Mortgage and<br>Finance Companies | : 1,058,130   | : 383,490  | : 1,441,620            | : 73.4                                 | : 270                                   | : 720                          |
| Real Estate Mortgage<br>Bonds     | : 1,189,520   | : 36,820   | : 1,226,340            | : 97.0                                 | : 660                                   | : 820                          |
| American Industrial<br>Companies  | : 5,222,260   | : 107,140  | : 5,329,400            | : 97.9                                 | : 2320.                                 | : 5970                         |
| Railroads                         | : 16,406,880  | : 266,880  | : 16,673,760           | : 98.3                                 | : 680.                                  | : 1330                         |
| Investment Trusts                 | : 242,350   | : 2,050  | : 244,400              | : 99.0                                 | : 40.                                   | : 440                          |
| Total Private<br>Agencies         | : 35,174,070  | : 2,454,570  | : 37,628,640           | : 93.4                                 | : 5660                                  | : 11,120                       |

- (x) President Hoover in his Des Moines speech Oct. 1932, made the statement "all Federal Government bonds and most of our State and municipal bonds -- are written as payable in gold."
- (\*) This includes the total for California. In all other states it only includes issues of bonds or funded debt of which the total still outstanding on Dec. 1, 1931 was \$100 thousand or over.
- (#) As to whether these contained a gold clause was not listed.

whether they contained the gold clause, stocks or debt not listed as funded were not included. The United States Government, the States and Municipalities, Public Utilities, Mortgage and Finance Companies, Real Estate, Mortgage Bonds, American Industrial Companies, Railroads and Investment Trusts. Separate tables were made of each. Doctor W. E. Grimes head of the Department of Agricultural Economics, Kansas State College, obtained from Mr. W. B. Brown of the Municipal Department of Moody's Investors Service, certain confidential information that would enable the writer to identify those bonds and funded debts, (not stocks) containing the gold clause.

#### Gathering the Data:

Quotations were for the latest date prior to December 31, 1931. In the case of the Federal and State issues all were included in the tables. In the case of the municipalities and the private companies each tenth company was taken and its bonds and funded debt listed in order as they came in the service company books. When complete the bonds and funded debt of each table were totaled. With the exception of Federal and State totals the figures were multiplied by ten and this figure used as the total in each case. The probable error has not been figured however,

when it is considered that some 11,120 private companies were involved in the figures then the actual should vary from this but little. In the case of municipalities, with the exception of California for which a total was obtained, a large number of bonds were not included due to the fact that issues were not listed unless their total outstanding on December 31, 1931 was \$100,000 or over. No real estimate was obtained as to the amount of the municipal bonds or funded debt omitted. (1) The Federal issues - \$5,353 million of this had nothing to indicate as to whether they did or did not contain the gold clause, and were listed as Treasury Notes. In the case of the authority used both state "all Federal Government Bonds" therefore the writer assumed that they did not contain the gold clause and listed them as such. This gave a per cent of 63.3 of Federal indebtedness written with the gold clause which should be quite conservative. However, since the debt now is 21,000 million it was assumed that 63.3 per cent of these issues contain the gold clause. This would give a total of \$13,293 million of Federal indebtedness payable under the gold clause.

According to George H. Hamilton, Governor of Federal Reserve Bank of Kansas City, these government bond issues

specify "payable in gold of the present standard of weight and fineness." This would mean that should the gold content be reduced 33 1/3 per cent they would automatically become increased by 50 per cent or \$6,646.5 million. This would increase the National debt to \$27,646.5 million which would be the largest debt the United States has ever had. Of course the United States could just declare that the bonds would be redeemed at their face value in dollars and nothing could be done about it, and if the public sentiment of the country were in the right mood little objection would come outside of those holding the bonds. (2) States, Cities and Municipalities -since there are no figures available as to the per cent containing the gold clause little definite can be said except that referring again to former president Herbert Hoover's Des Moines speech, he includes "most state and local bonds." If the percentage is as high as the percentage used on the Federal debt then this total of \$26,325,623 would suddenly be increased by 50 per cent of 63.3 per cent of the total or \$8,332,059,600. If on the other hand only half of these contain the gold clause then, and with the former president including "a majority" that estimate would surely be quite conservative, there would be an increase of indebtedness of \$6,581,405.800. (3) Private Issues - A little explanation possibly is necessary, particularly in regard to the

total number of companies in the case of Mortgage companies, American Industrial Companies and Investment Trusts. At first glance, for example, it may not look logical to show that 99 per cent of the investment trusts bonds have the gold clause with only 40 companies out of 440. This is because so few of the companies had bonds or funded debt listed. The same thing is true of American Industrial Companies and Mortgage and Finance companies. The impression might be left that only the larger companies had this clause. However in going over the issues, there seemed no indication that the companies with the gold clause were larger concerns.

With 93.4 per cent of private bonds and funded debts payable under the gold clause it would seem to be of great interest should reduction actually take place. Especially since these bonds are found distributed to represent so many different kinds of enterprises. It should be noted also that, if we accept the total indebtedness of the country at \$150,000 million then considerable of our national debt is not included in this table. The total here of all public and private is \$78,820,827,000. This would leave another \$71,000 million that was not listed. Of the 30 companies written to six reported the complete gold

clause but were not listed in Moody's Service so that some of the debts not included have the gold clause. However with the companies 93.4 per cent show that at the same time the bonds were issued some one or something had created a suspicion in the minds of the people that there should be protection against inflations of one kind or another.

Finally should a 33 1/3 per cent reduction in the gold content occur there would be, on a basis of this table, about \$61,539.8 million of indebtedness involved directly. This would automatically be increased by 50 per cent or would become a debt of approximately \$92,000 million if the gold clause were enforced.

No doubt the contract was made to protect against possible loss to the buyer rather than as to permit the buyer to make an exorbitant profit or capital increase on the note or bond. To permit collection under the gold clause would mean a tremendous increase in the amount of money one person receives and another has to pay in settlement of debt, whether it is rent, profit, wages or just unearned increment. Were collection permitted under the gold clause and the reduction was made the effect would be to bring about further dislocations in two instances. The first of these would be between the payor and payee against possible loss when the repayment is made. By

government action the man who has to pay is given an additional assessment equal to 50 per cent of the value of the bonds or funded debt and for the benefit of the person who bought the bond or extended the money for the debt. No doubt some readjustment would have to be made. The second dislocation comes between the holders of those bonds and funded debt with the gold clause and those without. It is equal to 50 per cent of the value of the bond or debt. The greatest dislocation shown in this study is between debt and farm prices which is at present 59 per cent. The debt has remained fixed while farm prices for February were 41 per cent of the 1926 level. Granted that the quantity theory worked perfectly the total increase in money (currency and credit) was 40 per cent, and that the rise in price was 40 per cent this would help counteract the dislocation in the first of these but not in the second. In the first case every rise in price would mean an increase in buying power or rather paying power of the things the payor had to sell but would not mean an increase in the debt. In the second dislocation any rise in price would apply to those who did not have to pay under the gold clause, in the same way.

**Conclusions:**

1. If the gold clause held and a reduction in gold

content of the dollar were made (a) the public debt would be increased to the largest in history. (b) The total indebtedness of the United States (public and private) would be increased by approximately \$32,000 million assuming a reduction in gold content of 33 1/3 per cent.

2. About 40 per cent of the total public and private debt of the United States would be directly affected.

3. The dislocation in the cases affected would be greater than any increase in price should the quantity theory work perfectly.

4. Additional serious discrimination would be set up between those debts payable under the gold clause and those not to be paid under the gold clause.

5. Rise in price would not tend to equalize this last discrimination or dislocation.

2. Can the clause be enforced in case of reduction? The question here divides itself into two parts. The part reading "payable in gold," and second part "of the present standard of weight and fineness." The solution of both evolve around the validity of contract and it seems fair to assume that should one part be enforceable the other would be also.

Under present conditions with the United States indefinitely off the gold standard with no gold in circu-



lation, and possession of gold money a federal misdemeanor punishable by \$10,000 fine, it would seem a physical impossibility to enforce the gold clause. As long as public faith in the paper money remains unshaken and the present gold standard remains, there is no occasion to demand payment in gold. However, should the public faith be shaken, or should the gold content of the dollar be decreased then the question of its validity would soon be tested.

Of course there is not enough gold to pay all these contracts at one time but that is not expected. The expectation is that the gold used in paying one obligation would go back into the banking channels and be used to pay another and so on. They are not all due at one time anyway. No doubt many of them run for fifty years. The author noticed one issue listed that was due in 1979.

The validity of gold contracts came up in the period during and just following the Civil War period when payment in specie had been suspended. "By the Legal Tender Act of 1862 United States notes were issued and given legal tender qualities. No doubt congress meant that these notes should be legal tender for all debts just as the words convey. Of course any contract involving the gold clause would be contrary to this act so the question had to be

decided in court in different sections of the country. The Supreme Court of Oregon "held unanimously in the case of Lane County vs. Oregon 7, Wallace 71 (1868), that the legal tender acts of 1862 and 1863 did not apply to taxes imposed by the authority of the state." 1 "The Supreme Court of Tennessee in 1871 decided, that in an action upon a note calling for payment of so many dollars in gold, the creditor has a right to demand the gold in specie, that there was no pretense of anything either immoral or impolitic in gold contracts, and that the Legal Tender Acts by strong implication sanctioned contracts for payment in gold, referring to the language of Chief Justice Chase in Butler vs. Horwitz, 7, Wallace 258, decided by the United States Supreme Court in 1869." 2 If the first part were upheld it looks reasonable that the second would be also. In an opinion handed down by Salmon P. Chase, Chief Justice of the United States Supreme Court in 1869, in the case of Bronson vs. Rhodes, the court upheld the gold clause. 3

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1 Information furnished Doctor W. E. Grimes by Colonel L. P. Ayers, Cleveland Trust Company.

2 Garis, Roy L. "The Gold Clause," Annals Am. Academy, Jan. 1933 p. 224.

3 Garis, Roy L. "The Gold Clause." Annals of Am. Academy, Jan. 1933, pp 222-23.

Of course this is only an opinion. The question could only be determined finally by a case going through the court system and ending up for a decision by the United States Supreme Court.

The apparent purpose of the gold clause is to protect against inflation either intentional or unintentional. Should the clause not be upheld then the action would nullify gain to the creditor in this case. Since the Supreme Court could only hear a case involving this clause by appeal, it would be sometime before a final decision could be rendered. During this time economic conditions would likely be rendered more uncertain and about the only reason for favoring reduction would be to speed up economic recovery.

However according to Mr. Roy S. Garis, "were the Gold Clause deemed valid, it would mean the passing of practically every company which had embodied it in their obligations into the hands of a receiver." <sup>1</sup> If under present conditions, the gold could not be obtained or used if obtained. In any case it would mean an increase in the value of those obligations just proportional to the amount of reduction and no doubt any reduction made would be sufficient that it would absorb the profits of those companies for several years.

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<sup>1</sup> Garis, Roy L. "The Gold Clause." Annals of Am. Academy, Jan. 1933, p. 222.

In the case of the public debts having the gold clause the Federal Government and the states might declare this part of the contracts invalid. Several states have enacted legislation making contracts payable under the gold clause, payable in lawful money; of this Professor Laughlin says: ---"that this phase of the question has more than academic possibilities is evidenced by the fact that a number of the states have passed such legislation. Kansas, March 9, 1883; Colorado, April 5, 1893; Idaho, March 1, 1893, but repealed in 1899; Tennessee in 1899 and South Dakota in 1891. --- such statutes doubtless have been urged on the grounds of a faulty theory of the relation of gold to prices; because it has been assumed that the fall of prices has been assignable to a scarcity of gold, and that to pay in gold is a burden from which the state should relieve the debtor." 1

The Federal Constitution provides that "no state shall" ---make anything but gold and silver coin legal tender in payment of debts ---pass any bill of attainder or ex post facto law, or law impairing the obligation of contracts."

2 This would seem to preclude the possibility of any state legislation being effective in eliminating any

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1 Laughlin, J. L. Principles of Money, p. 436.

2 U.S. Constitution, Act 1, Sec. 10, clause 1.

requirement under the gold clause in so far as it affects private contracts. In so far as government issues are concerned some form of repudiation, which this would be, has been used. Examples of this are, the states of the Southern Confederacy that repudiated their war debts; France's deflation method of partial repudiation; Russia's outright repudiation; Germany's low rate redemption of a billion (trillion in our money) to one or, among the States of America "Michigan, and Minnesota" 1 who engaged in some partial repudiation.

Conclusion on enforcement of the gold clause:

1. The action of state courts in the past and an opinion by former Chief Justice Chase, would indicate that the validity of the clause would be upheld.

2. Pending a decision indications are, the uncertainty in conditions that would prevail would tend to offset any advantages to be gained.

#### SUMMARY AND CONCLUSIONS

1. (a) Under conditions as at present, with the United States off the gold standard indefinitely, with most of the monetary gold of this country in the Federal

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1 Moody's Investors Service "Governments" pp. 1597 and 1641.

Reserve and Treasury vaults, and with no gold being paid out there would be little difficulty in making the change.

(b) There would be an increase of 50 per cent in the total number of gold dollars were a  $33 \frac{1}{3}$  per cent reduction made. This would appear as unearned and would be absorbed as profit to someone.

(c) Under conditions of unlimited redemption due to withdrawals, the United States would have to stop payment in specie, banks would many of them be closed, the United States would be off the gold standard before a change could be made.

2. (a) The value of the American dollar would be depreciated and therefore the United States would buy less foreign goods. Foreign money would purchase more American goods so export would increase for a time. The cutting down of imports and increasing of exports would stimulate internal industry activity. This in turn would increase demand for local goods, for production and for labor. The result would bring about a rise in the price level.

(b) The income to labor in dollars per hour or day would remain about the same but there would be an increase in total income to labor due to increased hours or number of workers.

(c) American reduction of imports and increase of exports would tend to slow down production and force down price in the countries with which the imports and exports were carried on. Internal pressure would likely be brought to bear in those countries to raise tariff barriers.

(d) Gold exported to the United States by these countries to meet this unfavorable balance of trade would further depreciate their currency. A new ratio of exchange would finally be established at about the same ratio as the ratio before the United States reduced, except that both moneys would be depreciated.

3. (a) To the extent that prices would rise, there would be a reduction in existing debts. This reduction would not be in the form of scaling down the total indebtedness. It would be in the form of an increase in the relative ability, of the commodities with which the debtor must pay, to purchase these debts.

(b) The gold contracts would likely be upheld in private bonds and funded debt. About 40 per cent of the total National debt is payable under the gold clause. A reduction in the gold content of the dollar would mean a

proportional increase in the debts represented in this 40 per cent. This would bring about further discriminations and dislocations, the thing that any reduction had set out to reduce.

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