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Control of the General Price Level

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Without question, one of the gravest defects in our present economic system is the unstable value of our money. Whenever the value of money changes, it works harm either to debtors or to creditors, and sometimes does damage to both; it takes purchasing power from one class and gives it to another, dislocates existing business relationships, and (in the case of an increase in the value of money) throws our whole economic machinery out of gear. One has only to look about him at the present time to see full evidence of the terrific havoc that an abrupt change in the value of money can work.

During the past 20 years, the value or purchasing power of the dollar has varied tremendously. If we regard the pre-war period as normal, we can say that before the war the dollar was worth 100 cents. Then came the war time inflation; the value of the dollar in terms of the amount of goods it would buy fell to 44 cents in 1920; it recovered part way to 68 cents by 1926, and finally (October, 1932) has risen to 106 cents.

Now a change in the value of the dollar is the same thing as an (opposite) change in the general level of prices. If we prefer to talk in terms of changes in the price level, we can say that the price level started out at 100 before the war, rose to 225 in 1920, fell to 151 by 1926, and from 1929 onward fell rapidly to 94 by October, 1932.¹

The decline in the general price level after 1920 was accompanied by a world-wide business depression that was severe but comparatively short lived. The decline in the price level that started in 1929 has been accompanied by a still more severe depression, that is by no means short lived. It is now entering upon its fourth year, and no one knows when it will end.

Effect of Declining Price Level

A sudden decline in the general price level has a disruptive effect on our whole economic machinery, because all prices do not decline equally. The prices of raw materials decline farther than wholesale prices; wholesale prices, in turn, decline more than retail prices; rents and taxes follow with a good deal of lag, wages descend rapidly in some cases and slowly in others,² while many charges—capital and interest payments on debts, railroad rates, etc.—decline very slowly indeed. As a result, the productive machinery of the country is thrown out of gear and cannot work properly, with some classes bearing an unduly large proportion of the general burden.

A decline in the general level of wholesale prices always bears heavily on the producers of raw materials, because the costs of distribution from producer to consumer do not decline as rapidly as other prices. The heaviest part of the burden is therefore passed back to the producer. Furthermore, a great decline in the commodity price level is generally accompanied by a business depression and a general reduction in demand, and most industries reduce their production accordingly. But farms cannot be shut down part-time like factories; in spite of the reduction in demand that has occurred during the present depression, agriculture has continued to produce as much as she did before the depression began.³ This has laid an additional burden on agricultural prices.

The extent of the decline in the prices of agricultural products is clearly shown by the price data of the United States Department of Agriculture. The recent 34 percent decline in the general level of wholesale prices has been accompanied by a 60 percent⁴ decline in average agricultural prices for the United States. For Iowa, the decline has been even greater; the prices of Iowa farm products have been cut 66 percent.⁵ That is, Iowa farm products are now selling for one-third of their 1925-1929 prices.⁶

Where Prices Stand Now

The height of the general price level in the United States today, in relation to past years, is shown in fig. 16. The line shows the movements that have taken place in the general average level of commodity prices at wholesale during the past 130 years. In the preparation of this chart, the period of years from 1910 to 1914 was taken as the base period, and the changes in the price level are expressed as a percentage of that base.⁷

CONTROL OF THE GENERAL PRICE LEVEL

The price line in the chart shows three bold peaks. They resulted from inflation during the War of 1812, the Civil War and the World War.

The chart shows further that the general price level has now returned approximately to pre-war levels. In fact, during the latter half of 1932 the price level fell to 5 to 7 points below prewar.



Some observers have noted this return to approximate prewar levels with approval. They regard it as an evidence that the world has finally got the war and post-war inflation out of its system and returned to the sound monetary conditions that existed just before the war.

This opinion has very little basis in fact. It is now 19 years since the World War began, and the world monetary situation has passed through some revolutionary chances since then. The United States and France together now hold 60 percent of the world's monetary stocks of gold.⁸ Most of the other countries of the world went off the gold standard during 1931; if they return to gold, they will probably revalue their currencies at lower gold values than before the war. France revalued her currency at one-fifth of its pre-war gold value, in 1928, before

the depression began. In fact, the United States is the only important country whose currency has the same gold value now as before the war.

Furthermore, the establishment of the Federal Reserve system in the United States has altered the monetary efficiency of gold; and in both England and the United States, gold has almost completely disappeared from hand-to-hand circulation, being now held in the vaults of central banks.

Along with these monetary changes have gone great dislocations in world relationships and reversals in financial and trade policies. These upheavals have altered debtor-creditor relationships and resulted in a heavy "one-way traffic" of payments to the United States and France. This has resulted in a great maldistribution of gold in the world, so that the world's stocks of gold at the present time are not able to exert their full effect on prices.

What the net result of these conflicting changes will be, nobody can tell. They may give us higher price levels, or lower price levels, than those which existed before the war. It is only by chance that they will give us levels the same as pre-war. We can regard present price levels as only a temporary resting place, not as bed-rock. Fig. 16 shows that after the Civil War, prices declined to roughly pre-war levels for a few years, and then declined 27 percent during the ensuing 15 years. Nobody knows whether history is likely to repeat itself now, or to reverse itself.

Some cyclic recovery of prices from the bottom of the depression may be expected to take place, but the disturbing thing is that nobody knows whether we have yet reached the bottom. The general price level, after falling almost continuously since 1929, stopped falling in June, 1932, and by September had risen more than a point. Observers then breathed easier. They hoped that the dollar, having returned roughly to its pre-war value, was going to stabilize at that point. But since September the general price level has been declining again, one or two points a month.⁹ As this is being written, hogs at Chicago are making a new low since December, 1878,¹⁰ and grain in Liverpool is smashing bottom records extending back 344 years.¹¹

We have no assurance that our general price level has yet reached bottom. We cannot say that because prices are now back to their pre-war levels, they will not go lower. We cannot assume that our price levels will remain stable at their present height in the future, any more than they have in the past. There is no certainty that if things are left to themselves, the price level will stabilize of its own accord. Unless the world intends to let its price levels drift up or down to whatever point the supply of gold, the distribution of gold, credit policies and other forces carry them, some form of control of the general price level is imperative. Several different plans for accomplishing this end have been advocated. Since we are now suffering from a fall in prices, the first objective of these plans is to inflate or reflate present price levels toward the levels existing a few years ago.

THE VALUE OF MONEY

The intent and purpose of reflation becomes clearer if we consider for a moment what the dollar really is.

The dollar is to the economist and the business world what the foot rule is to the engineer. It is the standard unit of measure, the yard-stick by which value is measured. Suppose that all engineering foot rules had increased in size during the last three years so that they were now 18 inches long instead of 12 inches; confusion and breakdown in the engineering world would immediately result. No new machinery or implements or tools would fit in with those already in operation. The obvious remedy would be, not to stretch the size of every product in existince to fit the stream of new goods made with the new 18-inch foot, but to shorten the foot rule down to its original length. That is what the reflationists purpose to do with the dollar; they propose to reduce its length or value or purchasing power to its previous status.

Changing the Purchasing Power of the Dollar

But how can this objective be achieved? How can the value of the dollar be reduced part way or perhaps all the way to its 1922-1929 level?

The reflationists answer this question by saying that as far as changes in its value are concerned, money is like other goods its value rises if the supply decreases, and falls if the supply in-

creases. They say that since a decline in the general price level is nothing but an evidence of an increase in the value of money, the thing to do is to decrease the value of money; and this can be accomplished by increasing its supply or quantity.

With proper qualifications (chiefly concerning changes in velocity of circulation as well as in quantity of money) this reasoning is sound, and price history bears it out. From the Civil War on to the 1890's, the amount of gold in the world was not increasing as fast as the production of goods. The general price level declined steadily, culminating in the depression of 1892-96. Then came great discoveries of gold in South Africa and the Klondike, and the development of the cyanide process of extracting gold from low grade ore. A stream of new gold poured into the markets of the world. The general price level ceased to fall, and, instead, began to rise. This rise continued until the outbreak of the World War.

During the World War and afterward, all of the belligerent nations demonstrated how inflation (i.e., increasing the quantity of money) can send prices sky-high. Russia and Germany allowed the inflation to run on until the bubble burst; the supply of their money was so excessive that it became worthless. France was able to catch herself in time to prevent disaster, but her franc now is worth only one-fourth of its pre-war value. England and the United States also inflated their currencies, but less drastically; the English pound and the United States dollar have now returned to roughly their pre-war purchasing power.¹²

The argument is not whether inflation would raise prices; without any question, it would do that. The question is whether a policy of inflation should be undertaken; and if it should, whether inflation once started could be controlled. Many observers fear that inflation as a remedy for the present depression would lead to results that would be worse than the disease; some, because they are afraid that it would force the United States off the gold standard; others, because they believe that inflation would soon get out of hand and go too far; and others, because they consider that it would not last and that sooner or later another deflation would follow.

These questions should be thoughtfully considered. The answers depend largely upon the method or methods by which inflation is brought about. A number of different methods have been proposed. Roughly speaking, they may be grouped under three heads: (1) those which would work through credit inflation, (2) those which would work through currency inflation, and (3) those whose aim is to increase both currency and credit by reducing the gold value of the dollar.

This chapter deals with the first of these three methods, credit inflation. The next chapter will discuss the other two.

WHAT MONEY IS

In order to avoid confusion in our discussion of credit inflation, we must first get a clear understanding of what money is.

Currency or Cash Money

The business of this country is transacted with two kinds of money. The first kind is the everyday cash or currency that passes from hand to hand and back and forth over the counter. It is mostly paper—dollar bills, five dollar bills, and so forth with some gold, silver and copper coin. The composition of this kind of money in circulation on Oct. 31, 1931, is shown in table XXXV.

TABLE XXXV. KINDS OF MONEY IN OIRCU: (In Millions of Dollars)	LATION ¹³	•	
Oct. 31, 1932			
Kind of money Gold coin	Amount 445 286 113 2,689 2,095	844	
		4,784	
Total money in circulation		5,628	

The table shows that about 85 percent of our currency in circulation ordinarily consists of paper notes; the other 15 percent is made up of gold, silver and other coin.

Credit Money, the Major Element

The second kind of money is different from this physical cash money or currency; it is simply credit money. A merchant who borrows \$1,000 from his bank in order to buy goods does not

draw out the money in cash. He simply signs his note to the bank for \$1,000 and pays for his goods by checks on the bank. No currency changes hands, but \$1,000 of credit money came into being when he raised the loan, and that \$1,000 of credit money disappeared when he sold his goods and paid back his loan.

This kind of money—credit money—is just as real as cash money; and in its effect on prices it is many times as important as cash money, because there is about 10 times as much of it in use. Only about one-tenth of our total payments in this country are made in currency; the other nine-tenths are made by check.¹⁴ When we look at the figures showing the changes that have taken place in our credit money during the last three years, we find that this credit money has decreased from 53 billions in the second half of 1930 to about 42 billions in the middle of 1932.¹⁵ This means that during the last 2 years, 11 billion dollars of this credit money has disappeared. This situation is shown by the upper line in fig. 17.



In view of the tremendous shrinkage that has taken place in our credit money, the most logical inflationary measure would seem to be credit inflation. We will therefore turn first to a discussion of this method.

THE FEDERAL RESERVE SYSTEM

In normal times, the most important agency for controlling the volue of credit money is the Federal Reserve Banking System. The leading nations of the world each have a central bank at the head of their banking systems. In the United States, our central bank is the group of 12 Federal Reserve Banks located in different parts of the country.

Our Federal Reserve System, like the central banks of other nations, has two means of controlling the volume of money outstanding.

Control of the Discount Rate

The first means is the raising or lowering of the discount rate. This discount rate is the rate of interest that the central bank in our case, the group of 12 Federal Reserve Banks—charges the ordinary city or country banks for funds it loans out to them. A country banks charges interest on the money or credit it lends to farmers, storekeepers and other individual borrowers; similarly, the Federal Reserve Bank charges interest on the money it lends to these banks. The rate of interest that it charges is called the discount rate.

Ordinarily, when a city or country bank lowers the rate of interest it charges its borrowers, these borrowers borrow more; when it raises the rate of interest, they borrow less. Money is like other things; if the price of a year's use of money (the interest rate) rises, people will take less of it; if the interest rate falls, they will take more, and the volume of money will expand. (In the case of money as with other goods, these statements hold true only if no changes take place in the demand. Large changes in demand may operate to more than offset changes in the interest rate. This is discussed fully later.)

Open-Market Operations

The second method of expanding or contracting the amount of credit money in the country is referred to as the "open-market operations of the Federal Reserve Banks." This is a formidable sounding phrase, but the thing described is really simple. When the Federal Reserve Banks find that credit money is contracting, and believe that this contraction should be stopped, they go into the open market for United States securities and buy up large quantities of them from the regular city and country banks. The money which the Federal Reserve Banks pay these regular banks builds up the reserves of idle money of the regular banks.

Now banks do not like to have idle money lying unused and drawing no interest. The regular banks, accordingly, extend more credit, make more loans to their local customers. In ordinary times they can lend out 10 times as much as their reserves. This means that if a bank has sold \$10,000 of United States securities to the Federal Reserve Bank, it now has \$10,000 more reserves and can lend out \$100,000 more than it could before; \$90,000 of additional credit money has been created and "pumped into the country."

Conversely, when the Federal Reserve System thinks that credit money is expanding and should be contracted, it sells United States securities in the open market. Country and city banks all over the country buy them up. But this buying reduces the reserves of the country and city banks. If a bank buys \$10,-000 of United States securities, it has to reduce its loans to its local customers by \$100,000; in that process \$90,000 of credit money is destroyed. Thus do the "open-market operations" of the Federal Reserve Banks effect an expansion or contraction of credit money.

These two methods, raising or lowering the discount rate and buying or selling United States securities in the open market, are generally used in conjunction; the one reinforces the other. Central banks in Europe have used this control of the discount rate for generations. The Federal Reserve Banks in this country have been using both methods since the Federal Reserve System was set up in 1913. Bankers in this country have not has as much experience with credit control as European bankers have, but they have been gaining it. The job requires skill rather than effort. It is like driving an automobile along a highway. Under ordinary circumstances, a touch on the wheel now and then is all that is required to keep the automobile in the road; but the driver must keep constantly on the watch, otherwise small errors in direction will accumulate and the machine will leave the road.

The Federal Reserve System Has Tried to Check Deflation

The Federal Reserve System has been making use of these credit control methods during the present depression.

During the 1928 and 1929 boom, the Federal Reserve System repeatedly issued warnings, and raised the New York discount rate slowly from 4 to 5 and finally to 6 percent. They also sold large quantities of United States securities. The general banking and business world, however, did not pay much attention to these actions; some prominent bankers, indeed, opposed them.

Then came the stock-market crash in October, 1929, and the beginning of the depression. The Federal Reserve System reversed its policy and began a program of "easy money." The reserve banks started reducing their discount rates. On Nov. 1, the New York Federal Reserve Bank lowered its rate from 6 to 5 percent; thereafter it continued to reduce it steadily, half a point at a time, until by May, 1931, the rate was 1.5 percent. This was the lowest rate in its history.

The Boston, Chicago and Atlanta Federal Reserve Banks were less prompt and vigorous; they reduced their rates only half a point, and that not until near the end of 1929. The rest of the 12 banks took no action until February, 1930, when they cut their discount rates half a point. Thereafter they all continued to reduce their rates until the early part of 1931; by that time they were all down to 2.5 or 3 percent, and that was as low as they got. After October, 1931, the banks all began to raise their rates again.¹⁶

The reserve banks also used the second method of checking credit deflation, namely, open-market operations. During 1929 they had sold nearly all of their holdings of United States securities in an attempt to curb speculative inflation; in the second and third quarters of 1929 their holdings of these securities amounted to only 150 millions. Immediately after the initial stock crash in 1929 they reversed their policy and started buying heavily. Before the end of the year they held 500 million of United States securities. By the third quarter of 1931 they held over 700 million.¹⁷

International Complications Set In

In normal times these measures should have resulted in an expansion of credit money in the country of 6 or 7 billion dollars. If the United States were as much isolated from the rest of the world economically as it is geographically, these activities of the Federal Reserve Board might have played a large part in overcoming the depression. But in 1931, undermined by the effects of two years of depression, the weakened financial structure of several European countries gave way. In rapid succession Austria, Germany and England were forced off the gold standard. Europeans even began to fear lest the United States should be driven off the gold standard also. Precipitately they drew gold out of the United States, exactly as depositors make a run on a local bank when they think it is getting shaky-thereby often bringing on that which they fear. The international run on the United States drained 700 million dollars in gold-almost as much as the entire British stock-out of the country in two months. The stocks of gold in the United States were so large that we met these heavy drafts without difficulty, but the shock to our confidence was severe.

The Glass-Stegall Bill Releases Tied-up Gold

The situation had elements of danger in it. People in this country were afraid of the banks, and in that fear they began to hoard currency. Much of our gold was tied up as backing for Federal Reserve notes (currency), which ordinarily are backed by 40 percent gold and 60 percent commercial paper. The amount of commercial paper available, however, had become less than 60 percent of the notes outstanding; so the banks were being forced to increase the gold cover of their notes above 40 percent, to fill the gap.

The danger was that, if the hoarding of currency should increase, more Federal Reserve notes would have to be issued, and that would tie up more gold—perhaps enough to embarrass us should another international run be made on the United States. Early in 1932, therefore, the Glass-Steagall Bill¹⁸ was enacted into law, stipulating that the Federal Reserve Banks could use United States securities in place of commercial paper as 60 percent backing for notes, whenever there was not enough commercial paper to go around. This bill made it possible to free large quantities of gold (previously tied up as backing for Federal Reserve notes) if necessary to meet foreign runs; it also permitted the Federal Reserve Banks to buy up much larger quantities of United States securities than had ever been anticipated before.

In April, 1932, therefore, the buying of United States securities was resumed on an unprecedented scale. Holdings rose from 809 millions in March to over 1,800 millions in July.¹⁹ Since then they have remained roughly constant at about 1,850 millions that is, at nearly 2 billion dollars.

The Reconstruction Finance Corporation

From 1931 on, some weak points began to show up in our credit structure. Many banks had been caught with "frozen assets" mortgages and bonds that were good but could not be turned into cash quickly enough to meet the demand for liquid funds. To meet this situation, the Reconstruction Finance Corporation was formed in January, 1932, with a capital of 500 million dollars subscribed by the United States Treasury. Its purpose was to render frozen assets liquid. By the end of September, 1932, the Reconstruction Finance Corporation had authorized loans to the amount of 1,410 million dollars, nearly three times the amount of its original public capital, the additional amounts coming from private sources. Banks received 850 million dollars of this total; railroads got 264 million; building and loan associations, and mortgage and insurance companies got 247 million; land banks and other agricultural credit institutions got 45 million.²⁰

Ordinary Methods Not Effective Now

This is the record of the efforts of the Federal Reserve Banking System and the Reconstruction Finance Corporation to promote reflation, or at least to check deflation. It can be objected that the Federal Reserve System did not move quickly enough nor decisively enough; but after it did start, it carried the regular methods of credit control to extremes never heard of before.

What has been the result? The Federal Reserve System has performed a real service in checking deflation and reducing or at least postponing some liquidation. But the blunt fact remains that as far as raising the price level is concerned the results are *nil*. Indeed, although the general price level flattened out from May to September of this year, it is now declining again.

What is the trouble? Why have these measures not "taken hold?"

The reason is that the forces of deflation are too powerful and widespread for the ordinary methods of bank credit inflation to take effect. We have said that these methods are like steering an automobile, in that ordinarily only a touch on the wheel is needed to keep the machine on the road. There is a further resemblance —these measures will not work if some obstruction pushes the machine off the road entirely. If you are driving an automobile and meet a heavy truck that forces you off the road into a muddy ditch, skillful handling of the controls may keep you from overturning, but it will not get you out.

That is roughly the situation the country is in at the present time. The world dislocations outlined in Chapter Two have forced our economic machine off the highway. Ordinarily, the supply of credit is the factor that controls the volume of money and the general price level; but at the present time the limiting factor is not the supply of credit but the demand for it. There is plenty of credit in the banking system, but the bankers are afraid to let go of it and people are afraid to take hold of it. Even when a manufacturer can persuade a banker to make him a loan, there is no profit in borrowing money to make automobiles, radios, furniture, etc., if the goods cannot be sold after they are made.

In ordinary times, producers and consumers keep calling for more credit or purchasing power than the banking system can supply. When the supply of bank credit or purchasing power is increased, then, it is taken in tenfold amounts by the general public; general purchasing power and demand is increased, and prices rise. But now the general public's demand for funds or credit or purchasing power is less than the supply; so measures for increasing the supply do not have their usual effect on price levels.

Reflation Has Not Yet Been Attempted

The ordinary methods of bank credit inflation are incompetent to deal with a major price decline such as that which we are now going through. They amount to nothing more than an attempt to check deflation. In times like the present, they cannot be considered as reflationary measures; they are only anti-deflationary.

The conclusion to be drawn is not that reflation has been tried and found impossible; the fact of the matter is that reflation has not yet been attempted. If we want reflation, we must turn to stronger measures.

SOURCES OF DATA

- 1. The Agricultural Situation, December, 1932, p. 20. The figures given in the preceding paragraph are simply the reciprocals of those given in this paragraph.
- 2. Farm wage rates are down 49 percent from 170 in 1929 to 87 in July, 1932. The Agricultural Situation, November, 1932, p. 21. But railroad wage rates have been cut only 10 percent.
- 3. United States Department of Agriculture Yearbook, 1932, p. 887. The index for 1931 was 111 (1919-1927-100). This figure has never been exceeded, even by the high years 1926 and 1928, when it stood at 111 also.
- 4. The general level of wholesale commodity prices has fallen from an average of 143.2 from 1925 to 1929, inclusive, to 94 in October, 1932. The index of agricultural prices has fallen from an average of 138 from 1925 to 1929, inclusive, to 56 in October, 1932. Base for both indexes, 1910-1914—100. The Agricultural Situation, December, 1932, pp. 20-21.
- 5. From an average of 144 from 1925 to 1929, inclusive, to 49 in November, 1932. Agricultural Economics Department, Iowa State College. Compilations based on U. S. Dept. Agr. data.
- 6. A fuller exposition of the points in this section is given in the first part of "The Causes of the Emergency," Chapter II in this volume.
- 7. The data plotted are the Bureau of Labor Statistics indexes of the general level of prices at wholesale, converted from their 1926 base to a 1910-1914 base by division by the 1910-1914 average, 68.5.
- 8. Federal Reserve Bulletin, January, 1933, p. 24.
- 9. The Annalist, December 16, 1932, p. 806.
- 10. Des Moines Register, market page, December 22 ,1932.
- 11. Op. cit., December 21, 1932.
- 12. These figures give the value of the different monetary in terms of their pre-war goods purchasing power. The gold value of the franc is now roughly one-fifth of pre-war; the index number of all-commodity whole-sale prices for September, 1932, stood at 413 (1913-100). England's

index stood at 102, and the United States' index for September stood at 95. See the Federal Reserve Bulletin, November, 1932, p. 712, and the Agricultural Situation, November, 1932, p. 21.

- 13. Federal Reserve Bulletin, November, 1932, p. 690.
- 14. Irving Fisher, Booms and Depressions, Adelphi, 1932.
- 15. Annual report of the Federal Reserve Board, 1931, pp. 73-75.
- 16. Op. cit., pp. 9 and 51.
- 17. Federal Reserve Bulletin, March, 1932, pp. 143-144 and 180-181.
- 18. Federal Reserve Bulletin, November, 1932, p. 688.
- 19. Federal Reserve Bulletin, November, 1932, p. 685.