CHAPTER EIGHT—FEBRUARY, 1933

Monetary Inflation

BY GEOFFREY SHEPHERD AND WALLACE WRIGHT

The more drastic inflationary proposals considered in this chapter are (1) currency expansion and (2) reducing the gold content of the dollar. We will deal with currency expansion first.

Currency Is Only a Small Part of Our Total Money

Programs of currency expansion have serious limitations. To begin with, currency is only a small element in our total circulating medium. Ordinarily, only 10 percent of our total circulating medium is currency or cash money; the other 90 percent is credit money. There usually is about 10 times as much deposit or credit money in existence as there is currency.

Some advocates of currency expansion, observing the 10 to 1 ratio that ordinarily exists between currency and credit money, believe that currency is the base or foundation, and that credit money is a sort of 10-story superstructure built upon it. They believe further that if the base were broadened the superstructure would widen proportionally; the issue of 1 billion dollars of currency would then result in an expansion of 10 billion dollars of credit money.

But this belief is not correct. The foundation of the credit superstructure is not currency, but gold. The amount of credit money outstanding is not determined by the amount of currency in circulation. It is determined by two other things, (1) by the stocks of gold in the country, and (2) by the state of business confidence, which determines how closely the limits set by the gold supply will be approached.

The stocks of gold in the country set the outer limits beyond which credit expansion cannot go, because the law specifies that our bank reserves (i.e., monetary foundation) shall be based ultimately on gold; and the law further specifies definite legal minimum reserves of gold that cannot be exceeded except under penalty. Ordinary country and city banks that are members of the Federal Reserve System must maintain a 10 percent reserve with their reserve banks (the percentage ranges from 7 to 13

according to the size of the city in which the bank is located) behind their deposit or credit money outstanding. They cannot expand their credit money, i. e., their deposits, to an amount more than 10 times as great as their reserves except by borrowing from Federal Reserve Banks. And the Federal Reserve Banks must maintain a 35 percent reserve of gold against their deposit liabilities, which consist mainly of the reserve accounts of the ordinary city or country banks that belong to the system.¹

The stocks of gold in the country, therefore, are the foundation on which the superstructure of credit money is built. Because of the legal minimum reserve requirements mentioned above, the gold foundation ordinarily will not support a credit money structure more than 12 stories high—that is, more than 12 times the size of the gold foundation.

It is the second factor, the state of business confidence, however, that determines whether we will build our superstructure of credit up to that limit, or whether we will stop short of it. When confidence reigns, people ask freely for credit, feeling confident that they can repay it; and bankers lend it freely, for the same reason. It makes very little difference whether people take the credit money they borrow in the form of currency, or whether they prefer to leave it on deposit and write checks on it.

At the present time, our gold foundation is ample; but business confidence is shaken, and our credit superstructure has shrunk from 12 stories until now it is only 9 stories high—only 9 times the size of our gold foundation.²

Small Effect on Total Money

The factor determining the amount of credit money outstanding, then, is not the amount of currency or paper money in circulation, but the stock of gold in the country, which sets upper limits beyond which credit expansion cannot go; and the state of business confidence determines how closely the limits set by this stock of gold will be approached. Expanding the currency would not increase either of these two controlling factors. It might simply displace an equivalent amount of other money. The most that can be expected of an increase in the currency is that it will result in an increase in total money of the same amount. That is, if we were to increase the currency 1 billion dollars,

the most we could expect would be that it would increase our total money 1 billion dollars.

Figure 17 on page 114 shows that in the United States at the present time there is 41.8 billion dollars of credit money outstanding,³ and 5.7 billion dollars of currency. The total money, then, is 47.5 billion dollars.

Some proposals for currency expansion have recommended the issue of 2 or 3 billion dollars of additional currency. These represent rather large amounts of currency, but they constitute rather small additions to our total money outstanding. Three billion dollars is only 6 percent of our total money of 47.5 billion dollars. The direct effect on prices of only a 6 percent increase in the total money would not be large; in fact it might be offset by other contrary effects. It is evident in fig. 17 that during the past three years our currency in circulation has increased from 4.5 to 5.7 billion, but our credit money has decreased from 55 billion to 41.8 billion. This is a net contraction of 12.2 billion.

The 1 billion dollar increase in currency since 1929 has not kept prices from falling, because it has been much more than offset by the 13 billion dollar contraction of credit money. To restore 1925-1929 average prices we would have to expand our currency at least as much as our credit money has contracted, say 12 or 13 billion dollars.

This is a pretty big order. It would mean expanding our present currency to three times its present volume. There is not free gold enough in the country for that. Most of our currency requires a backing of 40 percent gold; 40 percent of 13 billion is about 5 billion, and there is not that much gold in the United States; our total stocks of gold stand now at about 4.4 billion dollars, and most of it is already tied up as backing for currency and credit.

This gold-supply limitation is not insurmountable. It could be handled by reducing our minimum gold reserve requirements from their present 40 percent to say 20 percent, or by abolishing gold reserve requirements entirely. These possibilities are considered in later sections of this chapter.

A Surplus of Currency

A second difficulty confronting programs for currency inflation is that we are not a currency using nation; we are primarily a check-and-deposit using people. We make 9/10 of our payments by check. We do not like to carry large amounts of currency around; it is bulky and inconvenient and is likely to be lost or stolen. We prefer to deposit most of our currency in the bank and write checks against it.

Accordingly, if a substantial amount of additional paper money were issued, it would not stay out in circulation. Most of it would be deposited in banks, and the banks would send it in to the central banks to be counted as reserves. It would simply build up the reserves of banks.

This would not do us any good. Our banks at the present time already have more reserves than they feel they can profitably loan out. The open-market operations of the Federal Reserve Banks in 1932 resulted in a great surplus of bank reserves, but these large reserves have not caused prices to rise. Building up these bank reserves still further by expanding the currency would not be any more effective.

There is one respect in which an expansion of the currency could help prices. If the currency were issued in such a way that it placed additional income and purchasing power in the hands of people who at present lack purchasing power, the spending of this additional purchasing power would increase the demand for goods and would raise prices. A great deal depends upon how the currency is issued and who gets it. We will consider that question next.

Putting the Currency in Circulation

If the federal government simply paid out the new currency in the ordinary course of its operations, the effect on prices would be nil. Government employees, war veterans and other recipients would simply deposit the currency in the bank, and draw checks on their accounts as before. Any currency that was not thus exchanged for bank deposits would merely render an equal amount of already existing currency excessive and cause it to be retired. No new purchasing power would have been brought into the market, and there would be no reason for prices to rise.

The only way to make the issue of additional money affect prices is to place it in the hands of people who will go out and buy things with it, things which otherwise they would not have bought. The new buying must be additional buying. It is this increase in purchasing, this increase in demand, that raises prices. There is no use in issuing more money unless this will result in additional purchasing power in the market. Prices rose during the World War, not simply because the government issued more money, but because it went out and spent it.

This means that new government money issued now would raise prices only if it represented additional spending on the part of the government—spending for unemployment relief, for example, through a program of public construction work, or directly as subsistence payments to unemployed families.

Now there are only three sources from which the federal government can get funds for additional spending. One is increased taxation; the second is the sale of bonds, i. e., borrowing; and the third is the issue of paper money.

Increased taxation would meet with great popular objection at the present time, and in any case would probably fall short of supplying all the funds required. The second or third method would have to be used; the government would have to issue more bonds in order to make its budget balance, or else resort to paper money.

The prospect of issuing more bonds inspires alarm in some quarters. It is pointed out that already the federal deficit for the first seven months of the 1932-33 fiscal year is 1,272 million dollars,⁴ and that this has had to be met by issuing an equal amount of bonds; and if the government increased its expenditures still further, the budget would be still further unbalanced.

Should the Budget Be Balanced?

Opinions differ, however, as to whether an unbalanced budget in time of depression is necessarily an evil. Some economists believe that during depressions the government should not balance the budget, at least not by reducing expenditures. They point out that during a boom, industrial expenditures are greatly increased, and during a slump, they are greatly curtailed. If government expenditures were decreased during a boom and increased during a slump, this would offset some of the fluctuations in business expenditures, partly stabilize employment and reduce

the severity of the swings from prosperity to depression and back again.

During the present depression, then, some argue that it would be good policy for the government to anticipate its construction expenditures for the next 10 years and embark upon them heavily now rather than 5 or 10 years from now. The government is already loaning or spending large sums for unemployment relief. If these sums were spent instead on self-liquidating projects and other construction work, the government would have a definite addition to its physical plant to show for its money, and would be able to spend less money on construction work in the future. We would then have, not a currency inflation, but a mild form of government credit inflation.

Probably the greatest limitation of this policy is that it requires financing by the sale of federal government bonds, and there is a limit to the amount of these bonds that the market can absorb. During 1932, the amount of United States government securities outstanding increased 3 billion dollars, from 17.5 billion to 20.5 billion.⁵ During 1933 the amounts are expected to increase still further.

Opinions differ as to how many additional billions could be issued without burdening the market for all bonds, or perhaps arousing fears as to the ultimate solvency of the government. All that we can say is that somewhere a limit to additional security issues does exist, that a program dependent upon additional flotations of United States securities has limits, and that these limits probably lie this side of pronounced price inflation.

Inconvertible Paper Money

We have dealt with two sources of federal funds, increased taxation and increased borrowing by issuing bonds. Both of these have limitations. The third source would be free of these limitations, and it would not unbalance the budget. The federal government could issue currency that would not be convertible into gold. This currency would be inconvertible paper money, like the greenbacks that were issued during the Civil War.

Inconvertible paper money, however, is subject to two or three serious disadvantages. If only a small amount were issued, it

would simply displace an equivalent amount of our present currency. If a large amount were issued, it would not stay out in circulation any better than a large amount of convertible paper would. And finally, it would involve our going off the gold standard.

Now there is nothing sacred about the gold standard. A large part of the world is now off gold, and in view of the present world situation, is much better off than if it had tried to stay on. England went off gold in September, 1931, and its general price level has remained practically stable ever since; but price levels in the United States have fallen 10 percent and in France have fallen 13 percent.⁶

The gold standard may be judged, like anything else, simply on its merits. It may be that the merits or advantages of the gold standard are greater than its disadvantages; it may be that they are less. Let us see what these advanages and disadvantages are.

What the Gold Standard Does

When the gold standard is permitted to work freely, it has three merits. It serves as a check on extreme inflation, it facilitates international trade by keeping exchanges stable, and it keeps the value of the different nations' currencies in line with each other.

We have spoken of the superstructure of credit that is erected upon the foundation of gold. In the United States, the legal minimum gold reserve restrictions make it difficult to build this superstructure more than 12 or 13 stories high. Beyond that point, inflation is checked by the limitations of the gold supply.

Furthermore, if prices in one country rise more than those in other countries, that country becomes a good market for the sale of other countries' goods. Additional goods therefore flow in, and gold flows out to pay for them. This outflow of gold pulls prices down in line with their former relationship to prices in other countries, and equilibrium is restored.

Finally, international trade is facilitated when nations are on the gold standard, because goods can then be paid for in terms of currencies which remain fixed in relationship to each other.

Gold Standard Difficulties

These are the benefits that are usually associated with the gold standard. Since the war, however, the gold standard has appeared to be attended with great disadvantages. For example, England's return to her pre-war gold standard in 1925 appeared to be one of the factors that dragged her into financial and industrial troubles; her situation finally became so acute in 1931 that in order to get partial relief, she had to go off gold.

What appear to be shortcomings of the gold standard today, however, are almost entirely the result of arbitrary restrictions and regulations that have kept the gold standard from working; these restrictions in turn are a result of conflicting international trade and financial policies after the war. The trouble with the gold standard since the war is that it has been almost smothered by tariffs, exchange restrictions and other measures designed to keep it from working out its normal effects. Each country has attempted to regulate the operation of the gold standard to its own advantage. As a result, more than half the world has been drained dry of gold and is now off the gold standard; and the rest of the world has such a surplus of gold that its gold has lost many of its functions.

England benefited by going off the gold standard; her action relieved the pressure which foreign drains of gold were exerting upon her slender gold resources. But the United States is burdened with an excess of gold. It would not be any advantage to us to go off the gold standard in order to issue greenbacks; that would not relieve us of any adverse effects of gold, and it would rob us of what advantages there are in being on the gold standard today.

MEASURES TO REDUCE THE GOLD CONTENT OF THE DOLLAR

Currency expansion is only one of the many different methods of price inflation. Another method for attaining price inflation is the proposal to reduce the gold content of the dollar from its present figure, 23.22 grains of gold, to, say, 16 grains.

Some people reason that since the general price level has fallen one-third since 1929, the value of the dollar in turn has risen

one-third;⁷ and that reducing the gold content of the dollar one-third would lower its value and restore the general price level to its former height.

There is a rather serious question about the second step of this reasoning. The gold content or gold price of the dollar has not changed for generations; it has remained fixed at 23.22 grains since 1837. It is the goods purchasing power of the dollar that has increased since 1929. Lowering the gold content of the dollar is only one step in the direction of lowering the goods purchasing power of the dollar; it would not lower the purchasing power directly, but only indirectly; and this indirect effect would follow only under certain conditions.

Let us try to trace the chain of cause and effect by which lowering the gold content of the dollar might lower its purchasing power, that is, raise the general price level.

Action Needed to Prevent Heavy Movements of Gold

The first effect of reducing the gold content of the dollar would be this: As soon as it became evident that the government was going to reduce the gold content of the dollar, the natural thing for people to do would be to take currency—five-dollar bills, etc.—to the bank and ask for gold in exchange. They would get 23.22 grains of gold for each dollar of currency presented.

After the gold content of the dollar was reduced to 16 grains, people who had previously presented currency and demanded gold in exchange for it would then reverse the process; they would present the gold they had obtained and demand currency for it. For each 23.22 grains of gold they presented, they could then demand \$1.45.8 The operation of exchanging currency for gold before the gold content of the dollar was reduced, and then reversing the process afterwards, would net them 45 percent on their money. People in foreign countries could do the same as our citizens.

Accordingly, the first effect of reducing the gold value of the dollar would be a general scramble for gold. A great internal and external drain of gold would take place. The temporary withdrawals of gold would be heavier than our stock of gold could meet. For the time being, the United States would have to refuse to pay out gold—that is, it would have to go off the

gold standard. She would have to take this action early, because people would start to draw out gold as soon as reducing the gold content of the dollar began to be seriously considered in Congress—long before the reduction could actually go into effect. Business confidence would be somewhat disturbed by the United States going off gold, but how much disturbed, no one can say. In any case, the United States could return to the gold standard without delay as soon as the reduction of the gold content of the dollar was effected.

Suppose, then, that the United States Treasury announced its intention to reduce the gold content of the dollar from 23.22 to 16 grains. Suppose also that it went off the gold standard until this reduction had been effected, and then returned to gold. Would this action raise the general price level in the United States?

The answer depends upon two things—upon the reaction of people in the United States, and upon the reaction of people in foreign countries.

Reactions Abroad

Let us first consider the reactions abroad.

We can use France's response as an illustration of what would be likely to happen abroad if we reduced the gold content of the dollar. At the present time, 25.6 French francs have the same gold content as one United States dollar. Both countries are on the gold standard. The ratio between the gold values of the two currencies is therefore fixed, and the gold behind 25.6 French francs will buy \$1.00 worth of goods in the United States.

If the gold content of our dollar were reduced from 23.22 grains to 16 grains (a reduction of about one-third) the gold behind the 25.6 French francs would then be worth \$1.45 instead of \$1.00. French importers could therefore buy gold in France, send it to the United States, and get nearly one-half more United States cotton or wheat for it than they could have obtained previously (unless prices in the United States had already risen).

If the French government permitted French importers to ship gold out of France to the United States for this purpose, French purchases of United States cotton and wheat would increase. As a result, the price of cotton and wheat in the United States would rise. This rise in prices would soon spread to other commodities, directly because of substitution and competition, and indirectly because of the stimulating effect that a rise in prices of one group of commodties would have on all business.

The prices of United States industrial stocks might be stimulated by foreign buying. This buying would be purely speculative; it would be based on an expectation of United States industrial stocks rising as a result of the gold content of the dollar being reduced. It would not be based on the knowledge that foreign gold would now buy more United States stocks than before, because the dividends paid on those stocks would be worth less than before in terms of foreign gold.

Objections from Foreign Governments

These things would happen, as we have said, if the French government would permit them. It is most unlikely, however, that France would let them happen. There are two reasons for this.

In the first place, France already has a high tariff against wheat, in order to protect her own wheat producers from foreign competition. Her wheat producers would protest if a lowering of the gold value of the United States dollar should enable United States wheat to climb these French tariffs and compete with French-grown wheat. Her farmers would ask for a 50 percent ad valorem increase in the French tariff on wheat, enough to offset the reduction in the gold content of the dollar; and if this were granted, United States wheat exports to France would not increase, and United States wheat prices would not rise on that account.

Even if the French government did not listen to the complaints of its wheat producers, it would probably give attentive ear to objections from its treasury. If French importers started to ship gold out of France for purchasing goods, gold would flow out of France to the United States. Now France does not like to lose gold. She would probably either raise her tariffs or prohibit exports of gold (i. e., go off the gold standard) or ration and restrict her foreign exchange. Other countries, both those that were on the gold standard and those that were not, would do the same thing.

If foreign countries did not take these steps at once, they would sooner or later be driven to take them by the march of events. Unless prices in the United States rose 45 percent at once, gold would flow from the rest of the world to the United States. We would be offering more goods per grain of gold than before. But we already have more gold than we need and other countries have less. They would quickly act to stop their gold draining out. France is notoriously tenacious of gold, prizing it as a "war chest" as well as for peace-time monetary purposes. The simplest way for them to stop gold flowing to the United States for the purchase of goods would be for them to raise their tariffs 50 percent ad valorem. That would more than offset the reduction in the gold content of the dollar.

The interests of the foreign nations in this case would coincide with the interests of the world as a whole. From the world point of view, an additional flow of goods from the United States and an additional flow of gold to the United States would be extremely undesirable. It would accentuate a condition that has played a leading part in bringing on the present depression, and would run directly counter to present and pending negotiations between the United States and foreign countries, designed to work out measures which will reduce the flow of gold to the United States and get it out in the rest of the world where it is needed.

If some foreign countries permitted gold to be shipped out for the purchase of goods in the United States, some stimulation of our export commodity prices would result. If all foreign countries refused to let gold be shipped out, we would not get any additional foreign buying of our commodities, and we would not get any upward stimulus to our prices from that source.

It seems likely that most foreign countries would refuse to let gold be shipped out. We would therefore have to depend chiefly upon the reactions of our own producers and consumers. Let us study what reactions we might expect from our own people.

Domestic Reactions

To the extent that people in the United States looked at their five-dollar bills and other currency and said, "Well! This money is worth one-third less gold than it was yesterday. I had better

spend it before it depreciates any further," a rise in prices would result. The increased velocity or turnover of money, i. e., the increased purchasing of goods, would increase the demand for goods and raise prices generally.

Perhaps, however, people would not act so hastily. They might reason to themselves, "After all, the purchasing power of my dollar has not changed. They have knocked a third of the gold out of it, but my dollar will buy the same amount of goods today as it would yesterday. The English pound will buy as much goods in England today as it would when England went off the gold standard entirely in September, 1931. I think I'll wait and see what prices are going to do before I do any extra buying." If this became the prevailing attitude, there would be no reason for prices to rise. We already have a great surplus of gold in this country, and economizing in the use of gold by reducing the gold value of the dollar would not directly and of itself make prices rise.

A final alternative should be given consideration. People might reason still further, "I realize that the goods value or purchasing power of my dollar has not changed. But whether or not the quantity theory of the value of money holds in the short run, I believe that the commodity theory holds in the long run. I believe that sooner or later prices will rise, because, regarding gold simply as one important commodity, the decreased gold value of the dollar will eventually develop into a decreased value or purchasing power of the dollar for all commodities. That means higher prices eventually. I shall therefore go out and buy now, before prices begin to rise," and this increased buying would cause prices to rise. Therefore, to the extent that people believed that money is valuable fundamentally because of the intrinsic value of the gold behind it, they would expect a reduction of the gold content of the dollar to lead sooner or later to a reduction of the general purchasing power of the dollar, i. e., a rise in prices.

Nobody can say with assurance which of these three alternatives would result—an immediate rise in prices, a slow rise in prices, or no rise at all. Some people would probably react one way, some would react another way. There is no reason to suppose that a rise in prices equivalent to the reduction in the gold content of the dollar would immediately and automatically result,

but it seems probable that some general rise in prices would develop.

Furthermore, no one can say with assurance how far the general rise in prices would go. A few weeks ago New Zealand reduced the exchange value of her currency 25 percent, and the prices of her speculative commodities—wheat, etc.—rose at once, almost by the full amount of the reduction in the value of the currency. But that rise in prices came through the effect of increased foreign buying of New Zealand goods. The volume of New Zealand products is comparatively small, and other countries did not take steps to prevent their purchases of New Zealand goods from expanding. But as we have seen, they would probably take steps against a large country like the United States.

Furthermore, New Zealand went off the sterling standard for much the same reason that England went off the gold standard in 1931—lack of sufficient gold and other means of payment to meet her foreign obligations. New Zealand's going off sterling, like England's going off gold, relieved the financial pressure on prices. But the United States is in the opposite situation; we are not suffering from a shortage of gold or other money.

Accordingly, the rise in our prices would depend chiefly upon our domestic reactions, and it might be less, or more, than an amount equivalent to the reduction of the gold value of the dollar. The amount of the rise in prices would depend upon the extent to which the rise fed on itself; it would depend upon the extent to which rising prices stimulated more buying, and the increased buying caused a further rise in prices, and so on up.

It is possible that the rise in prices might get out of hand. It is unlikely, however, that this would happen. The country is now awake to the danger of uncontrolled inflation and deflation, and public opinion would support measures for keeping the inflation under control. It is easier to curb inflation than it is to stop deflation. The Federal Reserve Board had difficulty in checking inflation in 1929, not because its powers were inadequate, but because the public did not want inflation to stop.

IF PRICES ROSE, WOULD THE RISE ENDURE?

The question may be asked whether a rise in prices induced by monetary measures would be likely to endure, or whether it would be only temporary. The answer to this question depends chiefly upon whether other measures were put through, designed to correct or offset the fundamental causes of our present low prices.

The world-wide decline in prices since 1929 was not brought on by a shortage of currency nor by a scarcity of gold in the United States, and it is not likely to be permanently cured by expanding currency or economizing the use of gold in the United States. If the decline in prices in the United States had been caused by a shortage of currency or scarcity of gold in this country, measures on our part to expand currency or economize gold might be effective and lasting remedies. But the decline in our prices was not brought on by either of these monetary factors, and it is not likely to be cured by the measures proposed.¹⁰

Our disease is part of a world disease; what we and the rest of the world are suffering from is clogged circulation. It was caused by the cessation of the great war-time expenditures, by the outbreak of nationalism after the war, and by the change in the position of the United States from the world's greatest debtor to one of the world's greatest creditors, which conflicts with her role as a high tariff nation and great exporter of goods. Other nations owe us heavy debt and interest payments, but we make it difficult for them to make payments in goods. Accordingly the other nations have had to pay us in gold. For several years after the war we loaned them the money to pay us, but this only partially mitigated the heavy flow of gold to this country. Foreign nations raised their tariffs, not only to protect their producers but to cut down the outflow of gold. When we ceased loaning abroad from 1929 on, that support to foreign purchasing power gave way, and the international economic machinery has been working badly ever since.

Monetary Measures Are Only Emergency Measures

As an emergency measure monetary inflation may help. But it would be only an emergency effort. It would not go to the roots of the trouble.

The evidence seems to be that a reduction in the gold content of the dollar would probably not benefit us for very long, unless it were accompanied by other measures to cure the fundamental causes of the present depression. These measures would include, for instance, a gradual reduction of tariffs all over the world, particularly in the United States because tariffs conflict with our new world-creditor role; some reduction of the debts owed to us by other nations; temporary reductions in United States agricultural production, perhaps by some such measure as the domestic allotment plan. These are remedies for the fundamental troubles, and they cannot be instituted overnight. But full recovery is not likely to take place until they are put into effect.

Numerous other inflationary proposals are engaging public attention at the present time. In the appendixes on the following pages we are merely drawing attention to some of them, without attempting any detailed analysis.

APPENDIX I

Would a Rise in the General Price Level Help Agriculture?

When the general level of prices at wholesale declines, the prices of agricultural products usually fall faster than the general price level, because the costs of distribution from producer to consumer remain relatively constant. Since 1929, for example, the general price level has fallen 48 points, but agricultural prices have fallen 87 points.¹¹

If the general price level were to rise now, would agricultural prices rise more rapidly and perhaps return to their 1929 relation to other prices? Or would they rise only sluggishly, so that agriculture would not be greatly benefited?

The answer appears to depend upon how the rise in the general price level were brought about. If the rise were the result of world-wide recovery, then agricultural prices could be expected to rise more rapidly than the general price level.

If the rise in the general price level were brought about by reducing the gold content of the United States dollar, and if foreign nations permitted gold to flow to the United States for the purchase of goods, then the prices of export agricultural products—wheat, cotton, etc.—would lead in the rise. We have

seen, however, that foreign countries would not be likely to let this happen.

If the rise in the general price level resulted from currency or credit inflation in the United States and was not accompanied by a similar rise abroad, and no reductions were made in foreign tariffs abroad, then the prices of our agricultural export commodities, which are largely world prices, would probably not rise very much. They would be held down by low world prices and low foreign demand, and their rise would probably be less than the rise in the United States general price level.

Any rise in agricultural prices, however, would render it easier for agriculture to meet her fixed charges, and these are one of the most troublesome elements in the cost of operating a farm today.

APPENDIX II

Velocity of Circulation

The discussion in the main body of the bulletin has made very little reference to one important element, the influence of changes in the velocity of circulation of money.

This element is probably as important as changes in the quantity of money. It has not been stressed in the general discussion, for three reasons. First, most of the proposals for price inflation have aimed mainly at increasing the quantity of money rather than the velocity. Second, changes in the velocity of money generally are associated with changes in the quantity of money, so that the analysis based on quantity alone is substantially accurate. And finally, if velocity is left out, the presentation is simplified, and every measure of simplification is needed in dealing with as complicated and technical a subject as monetary inflation.

APPENDIX III

Bimetallism

Proposals have been made for the federal government to broaden the currency base by remonetizing silver and adopting a bimetallic standard.

These proposals call for the purchase of several billions of

dollars of silver by the federal government, which would then issue silver certificates based on the metal purchased.

This method of currency expansion is open to the same difficulties that beset other forms of currency expansion. It has the further disadvantage that the money expended by the government would not result in an addition to the capital equipment of the country. Money spent on roads or other engineering projects would leave the country better equipped than it was before; money spent in the purchase of silver would leave only an empty silver mine in its wake. And finally, bimetallism involves the difficulty of keeping the mint value ratio between the two metals in line with the continually shifting market value ratio. In Bryan's time the market ratio was about 16 to 1; at the present time, the ratio is about 80 to 1.

APPENDIX IV

Symmetalism

Symmetalism is a simpler method of remonetizing silver than bimetallism. When a country is on the gold standard, the standard of value is gold. When a country is on a symmetallic standard, the standard of value is a fixed combination of gold and silver, for instance 80 percent gold and 20 percent silver. Under symmetalism, we would have lying in our bank vaults, not bars of gold, but bars of 80 percent gold and 20 percent silver.

Adopting symmetalism is not very different from reducing the gold value of the dollar. It simply allows a given amount of gold to go further. It has the disadvantage that it involves the purchase of additional monetary metal, but it has the advantage that it would, at least in some sense, provide a full metallic backing for the currency. Probably reducing the gold value would be the better plan for any one nation to adopt, but symmetalism would be the better if world action were being considered.

APPENDIX V

Reducing Gold Reserve Requirements

The twelve Federal Reserve Banks are required by law to carry a minimum reserve of 40 percent gold against their note

issues, the other 60 percent being commercial paper (or, since the passage of the Glass-Steagall act, government bonds). They are also required to carry a minimum reserve of 35 percent gold against their deposit liabilities.

These minimum reserve ratios were originally worked out and adopted when gold coins circulated as hand-to-hand currency. The banking system then needed to carry a reserve of gold to meet the demand for gold coins from its own citizens, as well as from the citizens of other countries. It needed to carry a reserve of gold to meet a domestic or internal drain as well as an external drain.

Since the war, however, this situation has changed. Gold coins have largely disappeared from circulation; we use bank notes or checks, instead of coin. Hardly anyone sees gold any more. The need for a reserve of gold to meet an internal drain is much less than it used to be (except under panic conditions when people might start hoarding gold). Our present reserve requirement of 40 percent may therefore be higher than necessary. Some responsible authorities believe that our existing reserve requirements should be lowered.

The Gold Delegation of the League of Nations, for example, after studying this question, summarizes its opinions as follows:

"In our opinion, this whole system of defined ratios has proved itself in the light of the special circumstances of post-war years to be too rigid and inadaptable. Now that gold coin is in circulation only in very few countries and an internal drain cannot take place (except in moments of violent panic or hoarding as bullion), the reserves are primarily required to meet possible deficits in the balance of international payments. Each country in determining the gold reserve required should therefore consider in the first instance what the range of movement in its balance of payments is likely to be.

"We are of opinion that it would be advantageous, as we argued in our first Interim Report, to reduce the reserve ratios from their present high levels. If this were done, the immediate effects would be to free the hands of the Central Banks by enlarging the free margin of their gold reserves which they can use for international payments without endangering the legal minimum ratio." ¹²

What effect would a reduction in these legal minimum reserve ratios have upon prices?

If our stocks of gold were getting low, it would have a very beneficial effect, for when reserves of gold fall close to their minimum legal limit, bankers put up their discount rates. This attracts gold and builds up their reserves, but it also contracts credit, depresses business activity and lowers prices.

If present low prices in the United States could be attributed to insufficient stocks of gold in the United States, then lowering the minimum gold reserve requirements would help. It would relieve bankers of the necessity of raising their discount rates and thus contracting credit. When England suspended gold payments altogether in September, 1931, that action removed the downward pressure which a foreign drain of gold was exerting on English prices.

At the present time, however, gold reserves in the United States are not down close to the legal limit of 40 percent. Our gold reserves at present are 63 percent, and they are still growing. Lowering the legal reserve ratios now would not necessarily have any anti-deflationary effect. It would simply increase our already large surplus reserves. It would permit a substantial inflation, it would raise the "ceiling" toward which prices could rise, but it would not cause any inflation. It would permit prices to rise, but it would not give them any upward push.

The word of caution that was spoken in the part of this chapter that deals with the effect of reducing the gold content of the dollar applies here also. Lowering minimum gold reserves, like reducing the gold content of the dollar, would allow an inflation of prices to go to greater lengths than it could go under present regulations, before being checked by limitations of the gold supply. The danger of too much inflation seems remote at the present time, but it might become a real danger 5, 10, or 15 years hence.

SOURCES OF DATA

- E. A. Goldenweiser. Federal Reserve System in Operation. McGraw-Hill Book Co. 1925. pp. 79 and 86.
- 2. This figure is obtained by dividing the total deposits of all banks in the United States, 41,779 million dollars, by the United States monetary gold stocks, 4,429 million dollars. Data given in the Federal Reserve Bulletin, January, 1933, pp. 11 and 16.
- 3. Federal Reserve Bulletin, January, 1933, pp. 13 and 16. The data used to represent "credit money" are the total United States bank deposits, exclusive of interbank deposits.
- 4. Des Moines Register, Feb. 4, 1933.
- 5. Federal Reserve Bulletin, January, 1933, p. 21.
- 6. Federal Reserve Bulletin, January, 1933, p. 36.
- 7. As a matter of fact, it has risen 50 percent; but a one-third reduction of the gold content of the dollar would increase the gold purchasing power of the dollar 50 percent.
- 8. That is, 23.22 divided by 16 = 1.45.
- 9. The statements concerning New Zealand are based only upon a brief report in Time, Jan. 30, 1933, p. 16. Fuller information is not yet available.
- 10. For a more comprehensive statement of the causes of the present emergency, see Chapter II.
- 11. The Agricultural Situation, February, 1933, pp. 14-15.
- Report of the Gold Delegation of the Financial Committee. League of Nations, Geneva, 1932.

