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MONETARY POLLUTION: THE PROBLEM & A REMEDY

Pollution of a nation's money by the subtle process of inflating distorts economic calculations. If great in extent and prolonged, inflating has on some occasions destroyed social order for centuries.

The present century has become an age of inflating. Exchange rates among the currencies of even leading industrial nations have become chaotic. Politicians and money managers spend much of their time and energy trying to patch up a disintegrating economic order.

Developments of the last several decades reflect increasing departure from money-credit arrangements that earlier had facilitated dynamic balance and economic growth. By 1913, all the principal industrial nations had adopted the gold standard and had achieved nearly successful operation of sound commercial banking.

During the decades following the U.S. Civil War, production of the things men desired increased at an unprecedented rate. In only a man's lifetime, about 70 years, the volume and exchange value of things passing through markets in the United States, for example, multiplied more than 50 times although population increased only 4 times. The Nation's gold stock multiplied only 10 times from 1865 to 1940, but the total purchasing media (checking accounts plus currency) in use multiplied 55 times.

Contributing to the enormous increases in production were several major influences:

a. Most fundamental was evolutionary development of a new social order. During preceding centuries, the Common Law had evolved in Great Britain by a succession of Court decisions that fostered freedom, liberty, and justice. To an increasing extent individuals were assured freedom from attacks by others including governments, liberty to engage in undertakings of their choice, and the right to retain and use the products of their efforts. Magna Charta in 1215 and abolishment of Star Chamber proceedings a few centuries later were landmarks in the evolutionary progression. Finally, these advances were codified in the Bill of Rights adopted by several American colonies and in 1779 made part of the Constitution of the United States. The resulting social order, although not perfect, facilitated great advances.

b. Unshackled from the constraints of societies such as those of medieval Europe or of India, or of tribal customs as in much of the rest of the world, humans were free to initiate new procedures and develop new products. In the United States, a succession of inventors found opportunities for their genius, and the fruits of their efforts were new industries that became productive giants within a few decades. Examples were Henry Ford, George Westinghouse, Thomas Edison, and others encouraged by the social order. That such talents could have flourished in India or in most of Africa obviously was impossible.

c. A third significant development was application of energy to supplement that from human muscles plus the muscles of domestic animals, primitive water power, and the wind. During the hundred years after the Civil War, supplementary energy sources multiplied one million times.

d. Also contributing to the astounding increase in productivity were scientific advances. For example, milk production per dairy cow nearly tripled in only 60 years (1910 to 1970), yield per acre of wheat nearly doubled, of corn nearly tripled, and of potatoes nearly quadrupled. For humans, tuberculosis was almost eradicated, typhoid was practically eliminated as also were malaria and smallpox. The expectation of life doubled in the last 100 years.

e. The scientific advances reflected new methods of inquiry, methods applied only haphazardly without long-lasting consequences during the earlier unnumbered centuries of human existence. Fostered by freedom and encouraged by success, the method of scientific inquiry became focused first on the physical and then the physiological problems of humanity. That those methods have not as yet been applied consistently to the behavioral or social problems suggests that humans generally are slow learners, as we all should know.

The foregoing brief comments on the influences that fostered the astounding increase in human productivity help us to see the magnitude of the resulting market problem. The physical volume and value of things coming through the Nation's markets became a flood not only beyond the capacity of humans only two centuries ago to imagine but also beyond the capacity of money-credit arrangements then in existence.

The framers of the Constitution specified gold and silver coinage as the money in a deliberate attempt to prevent the further issue of paper currencies that had so disrupted the several colonies at various times and had nearly precipitated economic ruin during the Revolution.

During the early decades of the industrial revolution there was no money-credit system capable of coping with the greatly-to-be-multiplied number and value of financial transactions. No theory of money and credit then developed offered a solution to the problem; no economists had published books describing how the task could be accomplished; no government planners were prepared to provide the increased flow of purchasing media that would be needed in the decades to follow; and bankers generally were ignorant of the rapidly developing need for the evolution of sound commercial banking.

E. C. Harwood, Director Emeritus of A.I.E.R., prepared the remarks in this bulletin for a forthcoming speech.

Nevertheless, the problem was solved. Unplanned evolutionary development in free markets accomplished a task that might well have seemed impossible to anyone who could have foreseen the need. By the early 1900's, sound commercial banking had evolved to the point where increasing productivity no longer threatened to outrun the capacity of the money-credit system.

Then World War I began. The principal belligerents almost immediately discarded the basic principle of sound commercial banking and began inflating as a means of financing their wartime expenditures. By the time the United States entered the war, abandoning the basic principle of sound commercial banking embodied in the Federal Reserve Act adopted in 1913 encountered little opposition in Congress.

The money-credit vagaries of the next several decades were retrogressions from the advanced evolutionary stage of the gold standard that existed just prior to World War I. The successively greater pollutions of the money supply can be readily understood as increasing divergence from sound commercial banking. Therefore, a summary description of money-credit transactions under the gold standard during the first decade of this century provides the point of departure. (Observation and description of the facts and their relevant relationships are the procedures for successful inquiry.)

THE GOLD STANDARD, 1910

A vast number of markets existed. Transactions were occurring in the retail stores, at the wholesale markets, as manufacturers sold products to jobbers, and as farmers and miners offered their raw materials to buyers.

The purchasing media used were primarily checks and paper currency with a relatively small amount of coins. The numerous markets were, in effect, baggage check rooms where things were left temporarily to be offered in exchange for claim checks. The claim checks could be used to claim anything having the value indicated on the claim checks offered. Thus the money claim checks differed from the familiar claim checks widely used to reclaim baggage left by individuals, which entitled the holder to obtain his own particular suitcase or parcel. Under the gold-standard money-credit system the currency and checking account claim checks entitled the holder to claim *not* a particular item but a specified gold-exchange value of things. In short, the claim checks or purchasing media were denominated in gold, by weight. Paper currency labeled $100, when used as a claim check to buy in the markets, was the equivalent of approximately 5 ounces of gold.

An essential part of the market mechanism was provided by the commercial banks. They also were comparable to baggage check rooms in that they held gold in storage available on demand to whoever offered claim checks (purchasing media) in exchange.

Each monetary unit of purchasing media was used as a claim check to buy in the markets (or baggage rooms) as though it were gold, but only a portion of the claim checks in use actually were gold coins or paper currency representing gold in the banking system. Most of the purchasing media, although used for exchange purposes as though they were gold, actually represented the gold-exchange values of other things in the markets.

The evolution of sound commercial banking made possible the continuing dynamic balance between the purchasing media available in the hands of prospective buyers for use as claim checks in the markets and the gold-exchange values of all things available for purchase.

In order for such a dynamic balance to be maintained, purchasing media had to be created or issued to represent the gold-exchange values of things sent to market. If this were not done, excess baggage would have accumulated in the storerooms because claim checks had not been issued to represent the things available for purchase. Moreover, as things in the markets were sold, the purchasing media (or claim checks) received by the sellers had to be removed from circulation until more things were being sent to the markets.

Sound commercial banking, including a gold monetary unit, provided the mechanism or procedures for creating and maintaining the dynamic equilibrium described above. The principal features were:

a. For gold received the commercial banks issued:

(1) Gold coins equal in gold content to the bullion received. (To the extent that deliverers of bullion took gold coins, the gold did not remain in the banks); or,

(2) Gold certificates, that is, paper currency specifying that it represented gold placed in the banks. This was, in effect, a warehouse receipt that could be used for all purchases as the holder might desire; or,

(3) A credit to the checking account of the person who delivered gold to a bank. (Note that the amount credited was not deducted from someone else's account.) This account was denominated in dollars, which were described by law as one-twentieth of an ounce of gold in an alloy nine-tenths fine. By writing checks, the owner of such an account could buy things in any of the markets, including gold bullion (or coins) continually being offered by the commercial banks.

b. For things other than gold processed by farmers, miners, manufacturers and others, the banks issued purchasing media (claim checks) representing the gold-exchange values of things sent to the markets.

(1) The purchasing media were created by the commercial banks, which discounted the notes to manufacturers, for example, who had shipped things to markets. Thus a manufacturer borrowed from his bank (had credited to his account) newly created purchasing media equal in gold-exchange value to the things sent to market. (Note again that the banker did not deduct the amount of the credit from someone else's account; a net increase in checking accounts occurred.)

(2) The manufacturer then distributed the claim checks (purchasing media) to suppliers of raw materials, wage earners, salaried workers, as dividends, etcetera. When those who thus obtained purchasing media bought whatever they chose, the manufacturer received the proceeds of sales, perhaps from his own dealers or others to whom his products had been shipped. He then repaid his borrowings by having the banker debit his checking account and destroy his note, thereby removing from circulation the purchasing media created earlier.

(3) Some of those who processed things for markets were almost continuously producing. Their successive borrowings gradually became recognized by the banks concerned as justifying a nearly permanent "line of credit." As the evolution of sound commercial banking continued, some manufacturers such as those producing automobiles, paid off their bank loans only once a year. The rest of the time they maintained a continuous flow of borrowed purchasing media that paralleled the flow of things they processed to the markets. However, as long as the new purchasing media created by the commercial banks corresponded closely in dollar amount with the gold-exchange values of things sent to the markets, transactions could continue in dynamic equilibrium.

Occasionally, the commercial bankers in one area

overestimated the gold-exchange values of local products. Local processors perhaps had been too optimistic in assuming that larger quantities produced could be sold without reducing prices, and their bankers had discounted notes and credited their accounts.

When the things were offered in the local markets of area A at relatively high gold-exchange prices, prospective buyers went elsewhere. They bought in other markets such as those in areas B, C, etc., and their claim checks (purchasing media) were deposited in other banks where they constituted claims on the local banks of area A. In order to settle these claims of other banks, the banks in area A had to ship gold. The outflow of gold warned the bankers that an error had been made, lending policies were reviewed, and local processors were forced by developments in the markets to revise their prices downward in order to remain competitive. This principle applied whether the areas concerned were nearby towns, different states, regions, or even nations.

For the most part, such errors on the part of processors and bankers were relatively minor. In free markets, the consequences of such errors became apparent quickly. Gold served as an automatic governor flowing away from the area where errors were made thereby forcing early and automatic adjustments.

Occasionally, during the evolution of sound commercial banking, major banking errors occurred. The "wildcat" banks in the United States during the early 1800's were one example; the earlier bank scandals in Scotland were another. But by 1910, in most leading industrial nations the basic principle of sound commercial banking was generally understood and successfully applied.

WORLD WAR I INFLATING

During World War I, the leading nations were confronted with rapidly increasing expenditures for military purposes. Funds were obtained from three sources:

1. Taxes were increased and some tax receipts were diverted from more usual government expenditures. Presumably, all of the military expenditures could have been financed by increasing taxes, inasmuch as everything used for the war effort had to be available at the time. A nation's citizens acquired claims to all current production, and by raising taxes the things produced could have been diverted to the war effort. However, politicians well knew that greatly increasing taxes might cost them votes. Governments chose to supplement taxes by borrowing.

2. The second source of funds for the war effort was the savings of citizens who could be induced to lend to their governments. War bonds of various kinds were offered accompanied by publicity urging all citizens and savings institutions to support the war effort. Even this supplementary source of funds soon proved inadequate.

3. Governments then borrowed still more from the commercial banking systems as though the governments were producing and shipping things to the markets. Government bonds were stuffed in the central banks, which credited treasury checking accounts. As the newly created purchasing media were spent by each government, the central bank credits became increased reserves for the ordinary commercial banks. They then were induced to use their increased reserves to buy more government bonds. The government was paid for its bonds by newly created credits to government checking accounts at the commercial banks. When each government bought in the markets with the newly created purchasing media that did *not* represent things produced and sent to the markets, effective demand exceeded the usual gold-exchange values of supplies in the markets. Of course, prices rose, an inevitable consequence of inflating the money supply. This particular form of inflating, known as monetizing government debt, is the same in principle as the issue of Continental currency during the Revolution.

Inflating during World War I continued after the 1918 Armistice for several months. (Peace was not formally established until two years later.) The rise in prices continued to a level in 1920 nearly triple that of 1914.

In the United States, the Federal Reserve System (the central banks) stopped monetizing government debt early in 1920 and rapidly disposed of bills purchased in the open market. In a little more than 18 months, the amount of unsound commercial banking facilitated by the Federal Reserve banks was reduced to one-third of the peak reached in the fall of 1920. During the ensuing severe depression, prices decreased to half the 1920 peak but remained 40 percent above the pre-War level.

Then the leading governments and central banks sought a means to alleviate the economic distress that was the aftermath of the prior departure from sound commercial banking. In 1922 agreement was reached on a scheme known as the "gold-exchange standard" whereby gold in the Bank of England, for example, would be counted once as its reserve and again as a gold reserve for other central banks; for example, the Bank of India if the latter held English pound notes or had deposits in English banks.

Some economists whose views then were influential believed that the great decline in prices resulted from a shortage of gold. Apparently, they never understood the significance of the prior monetization of government debt as a departure from sound commercial banking. Not a shortage of gold but a surplus of purchasing media (claim checks) that greatly exceeded the gold-exchange values of things in the markets had been the distorting influence.

During the subsequent years of the 1920's, the double counting of gold provided excessive reserves for the commercial banks. To a small extent, monetization of U.S. Government debt in 1924 and again in 1927 by the Federal Reserve System also encouraged renewed inflating. This provided money-credit fuel for the great speculation in Florida during the mid-1920's and in the U.S. stock market as well as in real estate until late 1929.

Unlike the situation from 1914 to 1920 when monetizing of government debt provided most of the inflationary purchasing media, monetizing of private debt that did *not* represent shipment of things to markets provided the inflationary purchasing media during the 1920's. Prices generally were supported by the increasing flow of inflationary purchasing media as successful speculators bought new homes, new automobiles, and other luxuries for families and friends. Some observers believed that there was no inflating because prices of commodities rose little, but more knowledgeable observers noted that, instead of receding to pre-World-War-I levels, prices were diverging from the typical postwar downward trend.

Not surprisingly, the serious distortions attributable to war-time inflating were not fully corrected by the 1921 depression, and renewed inflating created more and more serious misapplications of economic resources. The end result was the Great Depression.

By early 1932, deflating had removed from circulation by far the most of the inflationary purchasing media. Thousands of banks had failed, but nearly all remaining in operation had relearned the basic lesson of sound commercial banking. The stage was set for recovery, a process that necessarily involved the gradual reorienting of economic activity to progress in sustainable directions.

However, the recovery process was not permitted to continue. In December 1932, the President-elect revealed that he would do something about gold, which many naive persons blamed for depression's ills. Within a few weeks, runs on some of the banks resumed. For the first time during the depression, frightened depositors demanded gold instead of the paper currency that earlier had satisfied most depositors' demands. By March, 1933, Michigan closed its banks, and a nationwide bank holiday quickly followed. On May 1, private ownership of gold was prohibited.

Only banks found to be in sound condition were permitted to reopen. By July 1933, nearly all banks that had closed in March were reopened. This clearly demonstrated that most of the banks in an unsound condition had failed much earlier.

A few months later, after the President and the Secretary of the Treasury had juggled the price of gold from day to day in an abortive effort to push up commodity prices, the dollar was devalued. The amount of gold in the dollar was reduced from one-twentieth to one-thirty-fifth of an ounce.

Various other expedients also were tried to restore prosperity but none produced the desired result. Finally, in 1934, Dr. John Maynard Keynes came to the United States and "sold" the President his panacea. Perpetual inflating was to maintain perpetual prosperity.

A short-lived speculative boom followed the initial use of Lord Keynes' prescription, but by 1937 the stimulative effects ended. The Nation's economy relapsed into severe depression in 1938 with nearly as many unemployed then as in 1932.

In 1939 World War II began. The money-credit experience of World War I was substantially repeated.

However, a major difference occurred. In the United States production of private passenger automobiles was suspended, and construction of new homes was almost halted by divergence of materials to the war effort. Individuals hoarded currency, and businesses accumulated idle checking accounts while awaiting the postwar resumption of production for private needs.

Nevertheless, a postwar depression was widely feared. However, instead of postwar deflating, dishoarding by individuals and activation of idle deposits by businesses put into circulation the hoarded inflationary purchasing media issued during the war with the result a gradually increasing business boom.

As part of the effort to avoid a worldwide postwar depression, the International Monetary Fund was created. In accordance with the Keynesian notions, this was designed as an "engine of inflation" on a world scale. It has functioned in that manner.

Within a few years, gold flowed out from the U.S. Treasury thereby providing the usual warning signal that the basic principle of sound commercial banking was being ignored. The gold reserve requirement was reduced on two occasions and in 1968 was eliminated. Then in 1971, the "gold window" was closed. All pretense of maintaining a gold value of the dollar was abandoned.

Inflating continued and still continues. The principal banking systems of the world, including especially that of the United States, are stuffed with paper representing government and private debts that never can be repaid in their original values. This is true of loans to some undeveloped nations, tanker loans, and real-estate loans on grandiose projects all over the world. Continued inflating and further depreciation of currencies has become the only alternative to wholesale bankruptcies of major cities, nations, and millions of businesses. This is the consequence of forgetting the art of sound commercial banking.

WHAT CAN BE DONE?

Many economists recognize some aspects of the difficulties that confront us, but there is no consensus about a remedy. Few economists have understood how a close approximation to sound commercial banking once facilitated dynamic equilibrium in growing economies having relatively stable price levels and almost unchanging foreign exchange relationships.

Some reputable economists argue that the Nation's purchasing media should be only gold coins or should be backed 100 percent by gold. Others, equally reputable, argue that gold is an anachronism and that growth of the money supply (defined in some way) should be in accordance with a formula they can provide. Others still have confidence in the Keynesian nostrum and believe that under their more expert control, "fine-tuning" could provide the hoped-for perpetual prosperity.

At present, the possibility that enough economists will agree on similar views to influence the politicians in charge seems remote indeed. Is there any other solution to the problem than the possible re-evolution of sound commercial banking? Perhaps the freedom of U.S. citizens to write legal gold-clause contracts will provide an opportunity; and perhaps the new European currency recognizing gold as at least part of a central bank's basic reserve is a first hesitant step toward restoration of the gold standard and sound commercial banking.

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