

For release on  
Monday, Aug. 21, 1967  
at 8:30 p.m. EDT

Commodity Money

Remarks of George W. Mitchell

Member, Board of Governors of the Federal Reserve System

at the

Graduate School of Banking

University of Wisconsin

Madison, Wisconsin

August 21, 1967

## Commodity Money

Our ideas about the nature of money evolve much more slowly than the ways in which it is used and the forms which it takes. Fortunately, there is no compelling need to wait for monetary concepts to catch up to monetary practices but there is a hazard that obsolete monetary concepts will hamper the evolution of an efficient money mechanism consistent with today's technology. It is important, therefore, to respect the vital and unique role of money as a transaction and buffering medium when we are considering proposals bearing on its proxy role as a stable measure of value. To do this, we need to be aware of the changes taking place in money's role as a transactor.

Money users are pragmatists--they have repeatedly demonstrated that money can be adapted to cope with a great variety of environmental differences, including such matters as various stages of economic development, diversity in business and commercial practices, changing states of confidence in Government policies and technological evolution--even revolution. For most present-day users, judging from an average turnover rate for demand deposits of 56 times per year, money's dominating quality must be its ephemerality--its short half-life, so to speak--and, of course, its correlative ability efficiently to exchange and transpose goods and services.

In the United States today, the "sovereign's money" is coin and currency and the "bankers' money" is the demand deposit drawn by the check, the draft, the cash-credit bank card, the wire transfer or a giro-type document, such as a preauthorization. "Bankers' money" has three major advantages: it is well proofed against fraud and

theft, it leaves an authentic trail and it can be tailored to specific transactions as small as a gnat and as large as the account holder's balance.

The way in which the banking system operates its money network is now undergoing a drastic technological change. The various money instruments used are being grafted on to electronic accounting and transmission devices at the earliest possible stage in their circulation and all subsequent bookkeeping is being completed electronically. Spectacular as it is, this method of operation is probably just a transitional phase to a system in which every business transaction involving money payments will generate, as it is completed, the machine language for an immediate or subsequent fully automated settlement in the banking system.

The thrust of this evolution in "bankers' money" is toward a vastly cheaper and more efficient system and with unlimited capacity. One of its advantages to the account holder, at least, will be the possibility of more precise timing of income and outgo and the ensuing minimization of a buffering demand deposit balance. The advantage to the banking system will be in cost savings and the opportunities it will create for expanding services into pre- or post-settlement stages of business transactions.

"Bankers' money," in the form of both demand and time dollar deposits, has also been undergoing a kind of technological change abroad where it has earned a vital role in international transactions-- not by agreement or law, but simply as a matter of convenience to international

traders. For example, an importer in a Western European country often uses dollars instead of his country's currency in settlement with an exporter, even from a neighboring country. Even if the importer uses his own currency the ultimate settlement takes the form of a transfer of dollars. Dollar balances in United States banks are the vehicle for consummating such transactions and thus the designation of the dollar as a vehicle currency. About \$3 billions of demand balances alone are now held by foreign private traders and foreign banks in U.S. banks to facilitate transactions all over the world. This does not include so-called Euro-dollar deposits in foreign branches of U.S. banks or in foreign banks.

Coins and currency also have a role in our present money system but it is quite limited and much more pedestrian. While about one-fifth of the money supply actually is in this form, because they have a lower turnover rate than demand deposits, coins and currency are estimated to account for between 7 and 10 per cent of the economy's total transactions.

In recent years, the demand for coin has expanded significantly because of the increased role played by vending machines and metering devices. Coin use, relative to personal consumption expenditures in the economy, has risen by one-third in the 1960's and its proportion of the total of currency and coin in use has increased by 50 per cent.

Significant changes in currency use have also been taking place. As is well known, a huge expansion, particularly in larger

denominations (\$50 and over), occurred in World War II, and the aggregate of all denominations reached a peak of about \$27 billion in 1947-48. In these two years, holdings of large bills, relative to consumption expenditures, were roughly double outstandings as of the mid-1930's. They have now declined to approximately that earlier level. Smaller denomination currency in circulation rose less during the war period but since has dropped off at about the same rate as large denomination holdings; their total in relative terms is about one-fifth lower today than in the mid-1930's.

While our statistics on money in circulation (in this case, currency and coin outside of the Treasury and the Federal Reserve Banks) do not adequately reflect either losses or circulation outside of the country, a correction for both of these factors would strengthen the inference that the relative role of currency in the United States is steadily declining year by year. A continuation of this trend is highly probable as the use of "bankers' money" continues to spread. The decline will doubtless accelerate markedly if the bank credit card develops into something more than just a credit device, i.e., into a convenient, cost-saving system accommodating electronic transmission developments and utilizing cheap and universally available electronic terminals.

Money, in its role as a transaction medium, is thus undergoing constant evolution and change in order to accommodate the size, complexity and interdependencies of an industrial society. We take the varied forms of money for granted in our day-to-day business

existence, not always aware that some of the monetary reforms and suggestions that are advanced to improve money would significantly hamper the flexibility needed for a convenient, dependable and efficient settlement medium.

For example, out of the past is the continuing belief, hope or dogma that to make money an acceptable standard of value it should always be directly convertible into something that is widely usable and stable in value over time. The characteristics associated with such a commodity are those of a "treasure": high value relative to bulk, storability, moderate safekeeping costs and nonmonetary uses of a marginal character, such as ostentation, for which substitutes are available. In most discussions the commodity referred to is gold despite the fact that its stability in price in recent decades is fixed in terms of dollars and its main usefulness in an industrial economy continues to be conspicuous consumption. Nonetheless, the idea of a useful, stable commodity or bundle of commodities into which money can at any time be converted has long persevered as a characteristic of an ideal monetary unit.

A barter-like attribute for money appeals to our naive ideas-- if you don't want to spend it you can eat it, drink it, smoke it, wear it, or whatever. The list of commodities that have at one or another time, or place, served as money is probably endless and ranges broadly over the "animal, vegetable and mineral kingdoms." It would include goats, sheep, slaves, oxen, elephants, pigs, hides, skulls, teeth, feathers, stones (large and small), shells, nuts, tobacco, rice, wheat,

corn, rye, tea, dates, rock salt, iron, lead, tin, copper, silver, gold, pebbles, beads..... As Paul Einzig points out, many of these commodities were or are economically useful in their time and place but others gained status as money out of ritualistic uses or pure ostentation. To our descendents, and not by any means those that will be far removed, adherence to a commodity standard such as gold will probably appear as ludicrous or primitive as the Yapee's stones or the cowries of Timbuctoo appear to us.

No doubt a primitive conditioning, obscurely transmitted, accounts in some measure for our vague yearning for a "treasure". money today. The identification of money with "treasure"--gold, silver and gems in the Western World, and such strange--to us--ostentatious objects as stones, shells, feathers, teeth, in other parts of the world and primitive societies, reflects the belief that unchanging value is an attribute of certain specific commodities even in a changing world. The fact that these commodities do not reproduce and give off at least a low rate of compound interest, and that they are often hidden away and thus unable to provide direct satisfactions, except to a Midas, indicates the persistence and pervasiveness of the urge to preserve symbols of wealth and status in primitive societies and earlier times.

The most recent illustration of nations' efforts to acquire sterile "treasure" was last seen in the discovery of the Americas in the Fifteenth and Sixteenth Centuries. Howard Mumford Jones has capsuled that psychology which may not yet be entirely dead--"The association of the New World with unlimited riches is a commonplace

in the history of ideas, but until one realizes how immediate, coarse, and brutal was the response of European greed to the prospect of boundless wealth, one cannot understand how quickly the radiant image became crossed with streaks of night. It may indeed be true that mere greed for gold will not suffice to explain the superhuman exploits of the conquerors, but it is also true that superhuman exploits would not have been undertaken without the dream of reward. The economic theory of the Renaissance could not think of wealth except in terms of a cash nexus binding man to man, a theory the more persuasive as rulers beheld the wealth of the Indies turning Charles V into the master of Europe and doing mysterious things to prices. Gold, pearls, and precious stones were tangible, were concrete evidence of success, were proof that the New World was, if not the kingdom of Prester John, the empire of the Great Khan, or Asia heavy with the wealth of Ormuz and of Ind, then next door to it, or a passage toward it, or, better still, a richer and more wonderful land. The lust for gold conquered morality, judgment, humanitarianism, and religion. To watch the banal greed for it corrupt idealism is like watching the inevitable march of a Greek tragedy."

Domestically, we have all but completely given up the idea of a commodity money. Nearly all of our transactions are carried on with a money--currency and bank deposits--that has no intrinsic value whatever. Most recently we have found silver--one of the historically important monetary metals--too valuable in science and industry to be used in coinage when other less valuable materials serve equally well as tokens and counters.

Some believe that the assets behind money give it value, and if that were true all of our money is gilt-edge because it is well backed by prime Government, business and consumer paper held by the commercial banks and Government securities and gold certificates held by the Federal Reserve Banks. Unfortunately, the value of money is not determined by the soundness or plenitude of its "backing." Doubling the "backing," other things being equal, would not make money worth more, let alone twice as valuable. But doubling the amount of money, with demand for it and velocity unchanging, would produce a depreciation roughly in inverse proportion. It would do this even though the "backing" were at the same time doubled in paper or gold. These elementary facts are well known however often overlooked in policy discussion about the "backing" of our money.

What commodity money advocates really seek is some commodity or group of commodities whose stock, because of supply and demand conditions, is stable in value and augmentable at a rate appropriate to the growing needs of the economy. Gold has served as a commodity standard in various countries intermittently over a long time--but not always well. It has produced inflations as well as depressions in the wake of discoveries and changes in rates of production. Today, its use is largely confined to that of a sort of international commodity standard, and its inadequacies are becoming evident there, too, as the divergencies in the rates of growth of the gold stock and needs for international money become harder to reconcile.

There are various proposals for strengthening the suitability of gold as an international monetary standard; most of them involve increasing its supply or price, or creating a substitute equally acceptable to supplement the supply of gold. The price increases suggested range from a one-time, every so often, change to regular, small-price, increments at annual intervals. Neither type has much to recommend it and both would have to be put into effect by fiat for no one seems to be advocating an unpegged price for gold because of the great uncertainty about the underlying strength of the effective demand for this metal.

Proposals to increase supply range all the way from extraction from sea water to working low grade ores or using more scientific prospecting methods. Perhaps to this list should be added the manufacture of gold, since we can make it from other metals even though the cost is frightfully high. None of these proposals to use real

resources to increase the supply of a commodity of uncertain value and limited usefulness could be considered prudent on monetary grounds. There are other means of dealing with the problem and the international liquidity discussions that will come to a head in Rio de Janeiro next September provide an important example.

Economists have long noted that a commodity standard could consist of a bundle of goods rather than a single one and thus minimize the hazards of a change in demand, or the costs of production for the standard itself. We have recently seen, in the case of silver, how changes in demand for a single commodity arising mainly from scientific technological changes would have resulted in severe constriction in monetary growth had silver been our monetary standard. A similar breakdown could occur in connection with any single commodity.

If gold in quantity, for example, became indispensable or at least greatly advantaged in some industrial application of great national importance we could not afford to continue to employ it in its present role. Or, on the other hand, should we discover a cheap method of making it we could not afford to permit an ensuing increase in supply, accompanied by a fall in price, to be communicated to a depreciation in the value of money and a world-wide inflation. Any single-commodity standard is starkly exposed to accelerating scientific progress potentially affecting its cost or demand as experience in recent years has amply demonstrated.

Even with a bundle of commodities there remains a problem of costs in real resources, capital and labor, to amass the monetary stockpile. Milton Friedman has estimated that the annual cost just to cover the cost of additions to the monetary commodity already in circulation or warehouses might amount to 2-1/2 per cent of gross national product.

Is it possible to avoid such costs unless we move to a confidence monetary standard? Probably not; there is nothing nearly as convenient, flexible and practical as a managed money unit. It can readily be adapted to shifting needs and technological changes which affect economic growth rates and money requirements. But it must be protected from over and under supply--something that nations are slowly, but surely, learning how to do for their own economies and which they will some day learn to do for the world's truly international economy.

## ##

In these remarks I have emphasized that money's role as a transactor is of primary, unique, and over-riding importance compared to its use as a standard of value. If it should fail to perform as a medium of exchange we would be confronted with some unimaginable barter alternative incompatible with the very nature of present-day economies. If it should fail to serve as an acceptable standard of value the results need not be catastrophic even though they may be seriously damaging to the efficiency of financial institutions, established habits of saving, and the equities of pre-existing money relationships.

In countries where money is poorly managed as a standard of value, or people think it is, defensive arrangements against inflation have been worked out and with endless proliferation. In broad classification they cover: minimizing holdings of money and money claims on others; increasing holdings of equities and goods; increase and deferral in time, of money debts; interest premiums commensurate with inflation exposure on investments in debt assets. Many of these arrangements are so severely hostile to a financial structure on which economic growth depends that the nations of the world must improve their capacity to manage money so that it performs well in its proxy role of a standard of value as well as that of a transactor.