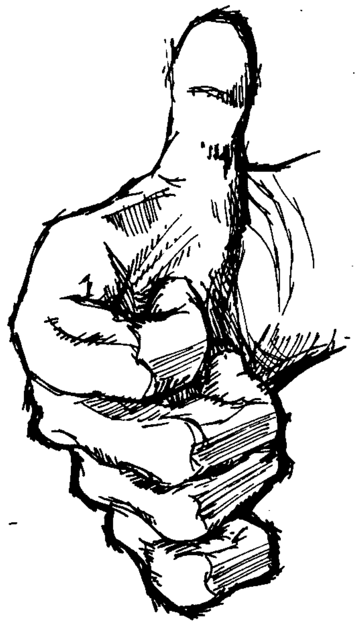

THE ROLE & VALUE

John Exter

One of the few controversies among free market economists concerns the "gold question." Monetarist economists identified with the "Chicago School" have tended to minimize the importance of gold in the monetary system, and to disparage it as an investment. In contrast, Austrian economists and their many followers among investment advisors have emphasized gold as both the ultimate money and the ultimate inflation hedge.

Last October 16 these two points of view shared the same platform, in the persons of economists Milton Friedman and John Exter. The occasion was the Third Annual Monetary and Trade Outlook Conference, sponsored by the International Monetary Market (IMM) of the Chicago Mercantile Exchange. The spirited exchange of views between Exter and Friedman has already become something of a classic. REASON is pleased to present it to our readers (with permission of the IMM).

John Exter has had a long, distinguished career in the world of finance. He has served as acting chief of the Far Eastern Section of the Board of Governors of the Federal Reserve System, Division Chief for the Middle East with the International Bank for Reconstruction and Development, and vice president of the Federal Reserve Bank of New York. He was formerly a senior vice president of the First National City Bank of New York.

I have felt for the last 15 years as though I have been watching a prolonged Greek tragedy. The players are the principal financial officers of our government and our central bank. The theme of this mid-20th century tragedy is the attempt to substitute paper for specie, paper money for commodity money, particularly gold. There have been many attempts in the past but this surpasses all others in its audacity and in its scale. In its audacity because it has been mounted despite the failure of all others. History told us that this one had to be a failure too. A tragedy. In its scale because all others were in single countries, individual currencies. This one is worldwide, in all countries, all currencies. Inflation everywhere. It has even embraced the International Monetary Fund set up after World War II to restore and preserve a stable exchange-rate system based on the convertibility of paper money into gold at $35 an ounce. The Fund violated its basic purpose of promoting exchange-rate stability when it permitted itself to become the vehicle for substituting paper gold for gold—the most preposterous attempt to substitute paper for gold that the world has known.

Why this attempt in our generation? I think it was the experience of the Great Depression. I remember it well. Most economists blamed it on the rigidities of the gold standard. We were "crucified on a cross of gold." They argued that we could have prevented it if only we had printed more paper.

I think it was the other way around. Central banks in the 1920's, particularly our own, printed *too much* paper. They did not accept the discipline of the gold standard. Instead, they used the gold exchange standard which allowed them to use the same gold twice. Also, the British made a costly mistake. They restored the prewar value of the pound in 1925 at too high a value, a value that did not take into account the enormous expansion of sterling debt that had occurred during the war. It brought depression, unemployment, the dole; so in September 1931, they went off the gold standard, floated the pound, and naturally felt an immediate sense of relief. The experience made gold a four-letter word in Britain. If we had printed more paper after 1929, depression would have been postponed but worse when it came.

THE KEYNESIANS

Two schools of thought based on paper money grew out of this experience. The first was fathered by John Maynard Keynes in the 1930's. The Keynesians called the gold standard a barbarous relic, said it made no sense to dig gold out of the ground in South Africa and put in back in the ground in Fort Knox.

Keynes assumed a closed economy, one

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)F GOLD: 2 VIEWS

Milton Friedman

With respect to gold, I am delighted that U.S. citizens will be able to own, buy, and sell gold. I have always been opposed to the prohibition of private ownership, purchase, and sale of gold. I have always thought and argued that the introduction of that prohibition in 1933 was wholly unjustified. There never was a monetary justification for prohibiting the private ownership of gold. Private ownership of gold was prohibited in 1933 because the Federal Government was planning to raise the price of gold from $20.67 an ounce to $35 an ounce and it wanted to make sure that no private individual profited from that rise in price. It was solely a desire to prevent private profits and not any more fundamental monetary reason that led to the prohibition of the ownership of gold. On that score, I believe John Exter and I are in complete agreement. Where we differ is on precisely what we regard the gold standard as being.

The most important distinction is between a real honest-to-God gold standard and a pseudo-gold standard. A real honest-to-God gold standard is one in which people use gold as money, in which, when you buy something you hand over an ounce of gold—or some other amount—and when you sell something you receive an ounce of gold; in which, if paper circulates, it is in the form of literal, 100 percent warehouse receipts for gold.

A pseudo-gold standard is the kind that we had, particularly from 1934 to 1971. A pseudo-gold standard is one in which the government fixes an official price for gold. That's not an honest-to-God gold standard. That's a program for fixing the price of gold, and it is strictly on a level with the programs that the government has adopted for fixing the price of wheat or any other commodity—it is a price pegging program. It is not a true gold standard because it is a situation under which what people are actually using as money are pieces of paper and in which the only relation between gold and those pieces of paper is this promise to pay $35 an ounce.

John Exter says that until August 15, 1971, the paper money was a promise to pay gold. That is not so. Paper money did not carry on its face the statement that "I owe you" something. I found in my pocket (fortunately) a $20 bill dating back to Series 1963E signed by Henry Fowler. That was before the 1971 date, and if you look at that money, it is a Federal Reserve note. It says, "This note is legal tender for all debts public and private," and it says on the back of it, The United States of America, In God We Trust, the White House, $20.

There is nowhere on this piece of paper "I O U Gold." Before silver was completely demonetized, there were pieces of paper saying "I owe you a dollar in silver." There were gold certificates. "I owe you an ounce of gold," but those became illegal for circulation in 1933. From that date to this, the paper money which has been issued has at no time whatsoever been a promise to pay gold to any private individual in the United States.

The U.S. did have a commitment to peg the price of gold for central banks, it did have a commitment to buy gold at $35 an ounce from central banks and to sell gold at $35 an ounce to central banks. What happened in August 19, 1971, was the closing of this gold window. The only mistake was that it should have been closed much earlier. We should not have had that commitment at any time.

The difference between a pseudo-gold standard and a true gold standard is that under a pseudo-gold standard, there is

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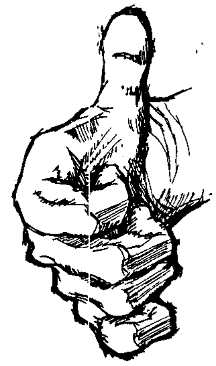

EXTER *(continued from page 86)*

with no transactions with the outside world. In this 20th century interdependent world of rapidly growing trade, unequal distribution of resources—particularly energy—and massive foreign exchange losses, it was an unrealistic and devastating assumption for economic thinking. It made Keynesians think primarily of the domestic economy. The balance of payments became something apart, to be dealt with later. They have treated it recently with benign neglect, the tragic present-day heritage of that 40-year-old assumption by a famous economist.

Keynesians became strong government interventionists, especially through deficit financing and easy money, debt expansion by government and the Fed. If expansion created problems requiring more interventions they did not hesitate. They embraced a whole long string of them, including interest-rate controls, exchange controls, import and export controls, even wage and price controls. Most of all, they promised we need never have another depression. One Keynesian, Walter Heller, as Chairman of the Council of Economic Advisors, even talked of "fine tuning" our enormous American economy. He wrote me recently that he meant "*gross* tuning." But the point remains.

The Keynesians ignored the debt problem that their expansionism created. They argued that debt did not matter, that we owed it to ourselves (a typical closed economy argument, by the way), that it could go on and on growing because in total it never had to be repaid. As we read of Penn Central, Rolls Royce, and Franklin National, we begin to see that it *does* matter!

THE MONETARISTS

The second paper money school, the monetarists, led by my distinguished friend, Milton Friedman, came later. In most areas of economic life, Milton is a strong noninterventionist, as I am. He has no equal as an eloquent and persuasive defender of the tradition of Adam Smith and the benefits of free markets and laissez-faire. But in money, which he says matters most, he would have government intervene strongly. I have never understood why he makes money an exception. I agree it matters most, but for that very reason I regard money intervention as the most pervasive, mischievous and dangerous of all government interventions, the more so because its mischief can be so long delayed. He defines money as paper—paper currency notes and paper bookkeeping demand deposits—and admonishes the Federal Reserve to intervene, principally through open market operations, to increase this paper money supply at a certain constant rate, a rate with a magic I have never understood. He argues that constant expansion of his paper money supply will produce continuous economic growth and, like the Keynesians, says we need not have another depression. He does not, as far as I know, promise fine tuning.

> *"I have felt for the last 15 years as though I have been watching a prolonged Greek tragedy."*

He has not seen the need for convertibility of paper money into gold at a fixed price. In fact, he would have the treasury slowly sell off its gold stock in the free market. He does see, and very clearly, that without gold there can be no fixed exchange rate system. In fact he has long advocated floating exchange rates. So in foreign exchange he is a noninterventionist; the dollar should be left to fetch what it will. Like the Keynesians, he focuses primarily on the domestic economy by way of the domestic money supply. In international transactions, he relies on the forces of the marketplace. This smacks, to me, of a closed economy model, like the Keynesian.

I differ with both schools of thought. In my view, advocates of paper money do not look carefully enough at what money is.

MONEY

Economists do not decide what money is. It is people, like us, in the marketplaces of the world. It is we who decide what money we are going to use and hold. Even governments cannot decide, although they may think they can by declaring paper legal tender and prohibiting the holding of gold.

Money serves three functions. First, it is a means of payment, second it is a standard of value—we quote prices in it—and third it is a store of value.

The store-of-value function is by all odds the most important function of money. If any kind of money does not serve as a good store of value, it cannot survive. It will ultimately cease to serve as money. We want money to be a good store of value because we work for it. That is what the hue and cry about inflation is all about. It is the reward for our labor, our enterprise, our imagination, our thrift, our initiative, the employment of our capital and our lands. Scarcity and desirability are the keystones of store-of-value money. Paper standing on its own feet cannot serve as a good store of value; it is far too abundant. It can only be a good store of value if it is kept scarce, and as a practical matter the only way to keep it scarce is to keep it freely convertible into some scarce commodity like gold at a fixed price. That, to me, is the nub of it, the whole point of the gold standard.

Before President Nixon closed the gold window, gold performed all three functions. It was the only ultimate means of payment among countries. It was the standard of value. The entire monetary system, or most of it, was tied to gold at $35 an ounce. And, of course, it was the best store of value. Since the closing of the gold window, no kind of money has performed all three functions. Paper currencies are being used as a means of payment and standard of value, but they are not serving as a good store of value. They are all losing value day by day in terms of goods and services in the marketplace. Gold, on the other hand, has been driven out of circulation among central banks by Gresham's Law—"Bad money drives out good"—that's a simple definition—so it no longer serves as a means of payment, even among countries. And it is no longer a standard of value because paper in terms of gold fluctuates in world markets minute by minute. The $42.22 official price is no more than a bookkeeping entry. It still serves, however as the supreme store of value, the best humankind has found in all of history.

Paper money under the gold standard is promises to pay, I O U's. Before Nixon closed the gold window on August 15, 1971, each dollar said, "I owe you gold at $35 an ounce." The "you" was, at that time, any central bank. Since that date, the dollar says, "I do not owe anybody anything in the way of good store-of-value commodity money at a fixed price." It has become an I O U-nothing; indeed, so have all currencies. Through the International Monetary Fund our governments tried to substitute paper gold, the Special Drawing Right, or SDR, as the principal international reserve asset. But the SDR is not a promise to pay anything; it does not even have an obligor. So it is not even an I O U-nothing; it is a who-owes-you-nothing? And with no fixed maturity date it is a who-owes-you-nothing-when?

August 15, 1971, was a watershed date. We went from a world of fixed exchange rates to one of floating exchange rates, to a world in which our dollar I O U-nothings trade in foreign exchange markets, at different rates, minute by minute and hour by hour, against the I O U-nothings of all other countries.

We tried to reestablish the fixed exchange-rate system at Smithsonian in December 1971, but without basing it on convertibility as it had to be, so Smithsonian broke only a little over a year later.

A floating exchange rate world is a no-pay world. An oil producer, like Saudi Arabia, has no alternative but to run a dirty float and accept dollar I O U-nothings for its oil. If it did not, the Saudi Arabian riyal would, of course, go through the roof. So the central bank of the 8 million Saudis now holds well over 10 billion paper dollar I O U's in its reserves and they are climbing month by month. What is it to do with them?

A floating-exchange-rate world becomes basically a world of competitive exchange rate depreciation which means competitive monetary expansionism, which, of course, means competitive inflation.

DEBT MODEL

It also means a world of unbridled growth of debt. To me, this is by all odds the most serious problem of all. My emphasis of it is a key difference between Milton Friedman and me. So, I am going to give you my model. It is a debt model and is quite unlike the Keynesian and Friedmanite models.

Please think of the monetary system of the entire world as an upside-down pyramid. The pinnacle becomes the base, and the base is gold, gold in the vaults of the central banks. Everything above that gold base is paper, a vast complex of paper I O U's, of debtor-creditor relationships, not only within the dollar but in all currencies and across all currencies as well.

So this is an open, not a closed, economy model. It includes every central bank in the world, every currency, indeed all debt, and therefore all debtors and creditors, in the entire world. Under the gold standard all creditors in the pyramid can, through markets, freely convert the I O U's they hold in any one currency into I O U's in any other currency at fixed exchange rates, and into gold at the base at a fixed price.

The pyramid's shape is another way of saying that as the pyramid grows, debt grows faster and faster, at an exponential rate. So the bigger the pyramid, the faster debt grows. Today's pyramid is by far the biggest in history, far bigger than the one in 1929, and the fastest growing.

How did it get that way? The serious trouble, as I see it, started in the early 1960's when our Federal Reserve began to increase its own debt, its note and deposit liabilities, at a more and more rapid rate. Look at the curve of Federal Reserve credit and you will see what I mean. You all know that the Fed creates note or deposit liabilities whenever it acquires an asset. The principal asset acquired has been United States Government securities. The growth of Federal Reserve debt stimulated the growth of dollar debt throughout our system. New Fed debt provides excess reserves to member banks, so they can then expand their debts. But others expand, too: savings banks, savings and loans, governments, all of us. Anyone can create debt as long as he can get someone else to accept his I O U. You make the pyramid grow each time you use a credit card.

"New debt without equivalent saving means more purchasing power."

Expansion of debt also spread to other currencies because, under the fixed exchange-rate system of the gold standard, foreign central banks bought our dollars to prevent their exchange rates from appreciating or upvaluing; thus the gold exchange standard grew. It is a pity. If they had observed the discipline of the gold standard and converted those dollars into gold, the growth of the pyramid would have been checked at the very beginning. As it was, their massive dollar purchases caused debt in their own currencies to expand and made the pyramid grow the world over.

Much debt was created without saving. There is no act of saving when our Federal Reserve buys a billion dollars of U.S. Government securities by creating a billion dollars of deposit liabilities on its books.

A continuously expansionist monetary policy stimulates debt to grow faster than production. It is a relatively simply economic proposition that debt in general must be serviced and repaid from rising production and rising productivity. But when central banks underwrite rapid growth of the pyramid, debt grows faster than production. It can then no longer be serviced and repaid out of rising production and rising productivity,

PAYING UP

But even today debt in general still continues to be paid. The smooth functioning of our economy, of our entire economic system, depends on it. We must all pay our debts.

If debt is growing so much faster than the economy, how in the world does it get paid? Only because the Federal Reserve banks, indeed all central banks together create more of their own debt each year than in the preceding year, and so stimulate more rapid growth of debt throughout the dollar, and the world, economy. In other words, the Fed must stimulate and underwrite the creation of enough new debt each year to enable old debt to be serviced and repaid by new. It underwrites a massive operation of borrowing from Peter to pay Paul. Ever more Peters must be found to lend to those who have to pay the Pauls.

As the pyramid grows, however, the Peters become harder and harder to find and must be given bigger and bigger incentives to lend in the form of higher interest rates. So interest rates rise far above the rate of increase in productivity (the prime rate recently was in the 11.5 to 12 percent area). The cost of servicing the debt rises, too, adds to the demand for credit (borrowers must borrow more just to pay interest), and contributes to the growth of the pyramid.

New debt without equivalent saving means more purchasing power. You get it when you borrow to buy a house or car, or use your credit card. The growing purchasing power makes the economy press against available resources, then prices of houses and cars, and also costs, begin to rise—inflation. It may cost you half again as much to build a house today as it did 10 years ago, so you must borrow half again as much. Inflation, like rising interest rates, adds to the demand for credit and stimulates faster growth of the debt pyramid.

The debtors in the pyramid do not all go into debt at the same rate. Some stay liquid, others borrow too much. You may array them in the pyramid according to their liquidity, with the most liquid debtors down near the gold base. Most liquid of all would be anyone who held only gold and had no debts. As you go up the pyramid, the debtors get less and less liquid, so the least liquid are at the very top, those who have borrowed short term and lent long term, particularly at fixed interest rates, and more particularly, across today's floating exchange rates. As the pyramid grows, the number of illiquid debtors grows too, and also the proportion of illiquid to liquid debtors.

The money supply is only a tiny slice of this debt pyramid, only the note and demand deposit liabilities part that serves as means of payment. I think it can be more important at times to watch the turnover of that money rather than to watch the supply itself. I am reminded of when I joined Citibank about 15 years ago. Demand deposits turned over about once a week. Today they turn over more than once a day.

Money supply also neglects the Eurodollar market. Yet it is a most important part of the pyramid. I suggest that it is far more important today to watch the Eurodollar market than to watch the money supply. In fact, to look at money supply alone is like putting blinders on an open field runner in football.

DEFAULTING

The pyramid can continue to grow only as long as the Peters have confidence in the illiquid debtors at the top. But rising interest rates make the illiquid debtors ever less liquid. They get caught in a massive liquidity squeeze and have more and more difficulty borrowing and paying their debts. Then they begin to default or fail.

Central banks were the first to default. They became so preoccupied with keeping debtors in their own currencies alive that ultimately they could no longer redeem their own liabilities in gold. The first partial default came in March 1968, when they closed the gold window to private people; and the complete default came in August 1971 when President Nixon closed the gold window to other central banks. So the international monetary system broke first. The gold standard ended and we entered a world of floating exchange rates.

Central banks are still trying to keep debtors in their currencies alive.

Until now, our authorities have had to deal only with a Penn Central here and a Rolls Royce there, and they have succeeded in containing each big failure by finding new Peters in the system. When Penn Central failed, other large corporations could not roll over their commercial paper, so the Federal Reserve suspended Regulation Q ceilings through 89 days and widened the discount window. Commercial banks found new Peters in the CD Market and they in turn became the Peters for the illiquid debtors in the commercial paper market. So Penn Central was contained.

To contain the Rolls Royce failure the Federal Government became a Peter and guaranteed $250 million of Lockheed bank credit.

The Franklin National Bank failure had to be contained by the lender of last resort, the Federal Reserve itself. As the ultimate Peter it lent $1.77 billion first to Franklin National and then to the Federal Deposit Insurance Corporation. So the failure was contained and the debt pyramid continues to grow, but with more difficulty.

Our authorities have only postponed the problem, not solved it. There is an ever growing number of illiquid debtors at the top of the pyramid. Many cannot possibly pay, so we face the inevitability of debt liquidation, not just in the dollar, but in many currencies. We are in the last act of the play and it must grind to its tragic end. More paper money cannot avoid it.

HYPERINFLATION

This is a decidedly unpleasant prospect. Debt liquidation is painful. History shows it comes in either of only two ways. The first I shall call the hyperinflation way. Every central bank wants to keep its part of the pyramid growing, for to falter would precipitate failures. So our Federal Reserve, indeed all central banks, are locked into an expansionism they dare not stop, prisoners of their own expansionism. They must try to keep illiquid debtors in their currencies alive, or at least prevent failures from snowballing. To succeed, they must create ever more of their own I O U-nothings until ultimately they become worth nothing as they say they are. Then all debt denominated in them becomes worth nothing, too. All debt is liquidated, and the authorities must start over again either with a new currency or by knocking zeros off the old. I have seen three German marks in my lifetime and may live to see a fourth. Even the youngest among you has watched President De Gaulle knock two zeros off the light French franc to convert it to a heavy one, and I have a Brazilian 10,000 cruzeiro note overstamped 10 new cruzeiros in 1967.

"Confidence is suspicion asleep."

Many central banks will succeed in going the hyperinflation route, particularly those whose currencies have few illiquid debtors. Brazil, for example, has experienced inflation for so long that no one lends a fixed amount of cruzeiros long term. Everything possible is indexed, given monetary correction for inflation. There are no long-term bonds, long-term mortgages, or long-term life insurance contracts, as we know them, in Brazilian cruzeiros. Long-term cruzeiro contracts have long since been paid off with cheap cruzeiros. So the cruzeiro economy is a current-account economy—a cash-and-carry economy. It is on a payday-to-payday basis. There are few or no illiquid debtors. No one lends a fixed amount of cruzeiros long term. I often say any Brazilian peasant knows better how to live with inflation than any chairman of a New York bank. With virtually no illiquid debtors, the central bank of Brazil can easily avoid a squeeze on illiquid debtors and go the hyperinflation route.

But in currencies in which there has been a great deal of long-term lending, and particularly a great deal of borrowing short and lending or investing long, and more particularly across these floating exchange rates, the problem of keeping the debt pyramid growing becomes enormous. If you think of the Brazilian cruzeiro at one end of a spectrum—a currency with few illiquid debtors—you may think of the dollar as being at the other end, with by all odds the most illiquid debtors. We have hundreds of billions of dollars of long-term bonds, mortgages, life insurance contracts, pension commitments, cross-currency loans, and so on outstanding, and the long term lending still goes on.

FED'S PROBLEM

To go the hyperinflation route our Fed has the most formidable job of any central bank. It must bail out not only the Franklin National Banks in the domestic-dollar market, but also all of the illiquid debtors in the Eurodollar market, and they are legion, plus even all the illiquid central banks, like the Bank of Italy, if it is to keep the dollar pyramid growing, a task that boggles the mind.

I am not at all sure the Fed sees the problem clearly, and even if it did, does it have the statutory authority, or could it get it, to do the job? To illustrate, the Fed can readily bail out Franklin, or branches of any American bank in the Eurodollar market, for their head office would have access to the Fed, but could it bail out a Herstatt (a German bank) under the jurisdiction and control of the Bundesbank? One wonders whether the Fed even knew the dimensions of the Herstatt problem when it surfaced.

So the entire monetary system is in this massive liquidity squeeze, but the squeeze is already far more intense in the dollar than in any other currency and will become even more so at some point. Rising interest rates will cause a failure that cannot be contained and it will snowball. The most vulnerable spot that I see is the Eurodollar market, though it need not start there or even in the dollar; no one can know. The question is, when? It depends on confidence. I have often said that confidence is suspicion asleep. Suspicion in this case is not like a tiger in the jungle that awakens at the snap of a twig: it is more like a big roomful of people, of Peters, all of whom have been drugged for years and years with paper money economies, plus a constant battery of statements by governments that we are demonetizing gold, phasing it out of the system.

I wonder whether we have ever thought that the Federal Reserve System is the most perfect gold-standard system that has ever been invented. I have been spending my New York Fed dollars in the Chicago Fed district at par. All Federal Reserve notes circulate at par; we should ask why. The reason is that all of the Federal Reserve banks settle among themselves, in gold certificates, which are warehouse receipts for gold, day by day, through the Inter-district Settlement Fund. So they never have significant balance of payment problems among themselves. If the gold were sold off, could the Federal Reserve System continue to work?

For the time being the system keeps finding new Peters. The oil producers are now the principal Peters, but more and more they are the central banks themselves, as in the case of Franklin. The former are reluctant. They lend their billions in the Eurodollar market, much only at 48-hour call. When the Peters awaken, net debt liquidation will begin, at least in the dollar. Inflation will turn to deflation, so even oil prices will come tumbling down, and the Fed will find itself pushing on a string. In the most intense part of the squeeze, dollar interest rates will go to new highs and the dollar will become, by all odds, the strongest currency. A few currencies may follow the dollar pattern, like the Swiss franc, but I should expect most to go the hyperinflation route.

WHAT TO DO?

What should our authorities do? There is little they can do. That is the tragedy of it.

In the last act the painless choices are gone. They talk of slowing inflation, but, as a letter writer recently said, that is like trying to prick a balloon gradually.

My own answer is irrelevant because no one listens, but I give it to you in broad terms. We need less government intervention, not more. More will only make matters worse, especially in money, the continued creation of paper I O U's. We must have debt liquidation of the deflationary kind if the dollar is to survive as a currency. I would free the economy of all possible controls and let market forces do the job. It would be a drastic operation, like removing a cancer, but the patient would recover faster and live, and live better. I would free us to make contracts in gold in the hope that we might ultimately—years later, after the debt liquidation—get back to the gold standard.

It will not go that way. Keynesian interventionism will prevail, government debt will be expanded to offset the contracting private debt, and every effort will be made to arrest the debt liquidation and get the pyramid growing again.

What do *you* do? For you it is easier. I suggest you go down the pyramid and remember gold is at the base as the enduring store of value money. In my view, we are in the greatest rush out of paper into gold in all of history. If I am wrong about my forecast of deflation, and inflation continues to hyperinflation of the dollar, the price of gold will go to infinity. Then, of course, it would obviously be good to hold. But if I am right, the precise course of the gold price is more uncertain, though in the end I am confident gold will be as good a hedge in deflation as in inflation.

In deflation, many dollar assets lose value. Some even disappear, like Penn Central commercial paper, or Franklin National Bank stock, so the Peters seek safety rather than a high return and some will find it in gold. Moreover, in deflation government changes its attitude toward gold. After all, our government holds the largest gold stock in the world and will want a higher price to restore the liquidity of the Federal Reserve, not a lower one. And remember, if you hold gold in the ground in such an environment, mining costs would fall.

Finally, remember that we are in an open-economy world and inflation is likely to continue in many other currencies, despite deflation in the dollar. Their holders will want to store value in gold as much as dollar holders. The gold price will not rise continually. No price ever does. In fact, during the transition from inflation to deflation, I am not sure what people will do. As commodity prices start to tumble, gold could tumble, too. But you should not get butterflies in your stomach. You will need to take the long look. ◘

FRIEDMAN *(continued from page 87)*

extensive government intervention to maintain the price of gold and I am opposed to such intervention. I am opposed to a price-fixing program that fixes the price of gold, just as I am opposed to government price-fixing of wheat or oil or of anything else.

TRUE GOLD STANDARD

On the other hand, I have a great deal of sympathy for an honest-to-God gold standard. A world in which you had an honest-to-God gold standard would have many desirable qualities. Its greatest virtue would be, of course, that if it could exist, there would be no government intervention into the process of creating money. There would be a discipline exerted by gold.

But such a gold standard has never existed, and will not and cannot exist under the present circumstances. Every time a gold standard like that has been started, it has been destroyed, and it didn't take the invention of paper to destroy it.

The record of history is clear. A few years ago when I was writing an article for the *Encyclopedia Britannica* on the history of money, I was reading up on Roman monetary history when the chief coin was the denarius which was originally 100 percent silver. The process at that time was not to substitute paper for gold but to substitute copper for silver. I read about how, emperor after emperor, the denarius was depreciated; it was mixed with more and more nonsilver alloy. It was the same size coin, but instead of being silver, it was mixed with other things. I remember very well the sentence which said, "Until finally in the reign of Diocletian the once proud denarius became little more than a copper coin washed with silver."

That was just about the year in which the U.S. Government was converting its silver quarters and half-dollars into copper coin, except that instead of washing them with silver, they washed them with nickel. So it didn't take the invention of paper to destroy gold standards. The process I described happened over and over again. It is not an accident. Gold is a very expensive money.

If you are going to use gold as money, people have to dig gold out of earth in one part of the world in order to bury it under the earth somewhere else. There is a strong incentive for people to try to avoid that process, and that's why they add fiduciary elements. That's why all gold standards deteriorate into credit standards, and that's why you cannot really have an honest-to-God real gold standard.

There was more of a chance of a real gold standard, and there was a close approximation to one in the 19th century; but in the 20th century, with the emergence of governments as they have, the possibility has become even less. Now, I deplore the emergence of those strong governments. I would like to see them weakened, but we have to talk about the world as it is and not the world as it might be. There is little point in recommending a policy for the U.S. that might have worked in Great Britain in 1730. We have to recommend policies for the U.S. as the U.S. is today. As the U.S. is today, I do not believe that there is any possibility that a government will accept the discipline of gold, that it will in fact give up its authority to print money. I believe that we nonetheless have to discipline governments. The question is, if we cannot discipline them through gold—because the mythology of gold does not exist, because the public opinion which would back government in accepting the discipline of gold does not exist—then how can we discipline them?

DISCIPLINE

The only way I have ever been able to see to discipline them is by adopting a mechanical rule to which they are required to adhere, provided it is a rule that can be checked on. That is why I have always been in favor of a rule under which the monetary authorities would be required to increase the quantity of money by five percent per year every year, day in and day out—week in, week out.

Of course, I would go much further. I have long been in favor of abolishing the Federal Reserve System. I don't want *any* discretionary action. I am in favor of a 100 percent reserve system, a completely automatic system administered by a minor bureau of the Treasury which would see to it that the quantity of money increased at a steady rate. But it seems to me unwise to say that I am only willing to recommend whole hog. You have to recommend in pieces. We have a Federal Reserve System, and pending our being able to persuade people to make major reforms, we have to push less extensive reforms. That is why I have always proposed a fixed rate of growth in the quantity of money.

Before I get to the rest of what I really want to say, let me comment on one other matter. John Exter is wrong as a factual matter in his interpretation of the Great Depression. The problem was not *before* 1929, as he indicates; it was *after.* He said that before 1929, in the 1920's, the U.S. central bank did not accept the discipline of gold. That's true. They did not accept the discipline of gold, but in the sense that they created *less* money than the gold standard called for. If the U.S. Federal Reserve System had accepted the discipline of gold, the quantity of money would have been increased much more rapidly from 1922 to 1929 than it was. Sometime in 1925, for example, the Federal Reserve System adopted the explicit policy of paying gold coin and gold certificates over its counters in return for paper money in order to reduce the officially calculated reserves on their books. They did this to enable them to get away politically with a policy of a slower rate of expansion than the gold standard would have called for. If the Federal Reserve System had operated on the rules that John wanted them to in the 1920's, there would have been significant inflation in the 1920's which there was not. The price level in 1929 was lower than it had been in 1923.

When it comes to the Great Depression, the problem was that the Fed went out of its way to destroy money. It did not follow the rules of the gold standard. On the contrary, as I have already said, from 1920 to 1929, the quantity of gold reserve accumulated by the United States would have justified a much more rapid increase in the quantity of money. In 1933, the gold reserves held by the United States were higher than they were in 1929. But the total amount of money was one-third lower. In four years, the Federal Reserve followed a policy that destroyed one-third of the amount of money in the country. That's why we had the Great Depression.

The Great Depression was produced by monetary mismanagement by the Federal Reserve. It was produced, not by their timorousness in printing money to paper over debt; it was produced by their recklessness in destroying money, in reducing the quantity of money, and those are the facts about the Great Depression. You may interpret those facts as you want, but you have to face up to those facts and not talk about some imaginary Great Depression that didn't exist.

Now, let me go back to the question that was posed in the title—"The Value of Gold as Money and an Inflation Hedge."

"I am opposed to a price-fixing program that fixes the price of gold, just as I am opposed to government price-fixing of wheat or oil or of anything else."

PRICE STABILITY

In the first place, I want to disabuse you on some myths. It is not true that a gold standard means stable prices. The United States and Britain came as close to having a real gold standard in the 19th century as I suppose any country has at any time.

Let me give you some facts. Between 1808 and 1814, wholesale prices in the United States went from 115 to 182, so in that six year period, they rose at an 8 percent per year rate. In the next 10 years, 1814 to 1824, they fell at an average annual rate of six percent per year. In 1897, the price index was 68, in 1910 it was 103, a rise of 30 percent in the course of 13 years, 3 percent a year. That was all while we were 100 percent on the gold standard of the kind that John Exter is proposing. In World War I, we stayed on the gold standard throughout the War. We never went off the gold standard as other countries did. The price level, as you know, more than doubled during World War I, going from 99 to 226, 15 percent a year. We were on a gold standard in 1920, we were on a gold standard in 1930. In that 10 year period, wholesale prices came from 226 down to 126; they fell at six percent a year on the average. That's the United States.

Let me give you some figures for the United Kingdom. From 1789 to 1800, an 11-year period, the price level went from 117 to 194—five percent per year on the average. After the Napoleonic War, the price level went down by about 50 percent. That was always on a gold standard. Similarly, if we come to a later period, in 1873, the price level in Great Britain was 134 and in 1896 it was 74; prices fell at three percent a year on the average for something like 23 years.

In the next period, 1896 to 1912—16 years—prices went from 74 to 103. If we take this period, when the U.S. and Britain were on a gold standard, the price level varied over a range of about three to one. Sometimes it was about three times as high as other times. That's not a bad record as price levels go. I don't want to mislead you—I think that's a pretty good record, but it is very far from the kind of perfect stability of prices that some of the idealistic, gold-plated views of the gold standard would lead you to believe.

Now I want to ask the next question. Does the gold standard mean a stable economy, does it mean economic stability? If we judge from that record, the answer is "no." We had repeated business cycles, prosperity, depressions on the gold standard. The Great Depression occurred while we were on the kind of gold standard that John Exter favors, the pseudo-gold standard. But even when we were on something much closer to a real gold standard before 1914, we had depressions and we had expansions. The depression of the 1890's was a very severe and serious depression, one of the most severe on record. We had inflations, so that a gold standard historically has not guaranteed stable prices, and it has not guaranteed stable economic conditions.

RESTORATION OF GOLD

What is the possibility of a restoration of either a true gold standard or a pseudo-gold standard in the United States by official action? The answer in my opinion is zero. I think anybody who really believes that the U.S. Government is going to assume the obligation to buy or sell gold at a fixed price, whether the fixed price be $42 an ounce or $420 an ounce, must be living in a dream world.

We would be foolish to do it. Now, I admit governments sometimes do foolish things, so maybe I am giving too much credit to our government if I think they are incapable of doing so foolish a thing as that, but I don't think so. What do we gain by it?

We might be very well advised to sell off some of our gold at the present price of $150 an ounce. That would get rid of a frozen asset and might enable us to turn Fort Knox into some useful purpose, but

I don't really see what we would gain by pegging the price of gold. We would only be setting ourselves up again for going through the process that we went through once before. From the day in 1933, when F.D.R. prohibited the private ownership and holding of gold, it was inevitable that we were ultimately going to close the gold window and go out of the business of pegging the price of gold. It was only a question of how long it was going to take to do it. I do not believe that you can have a viable gold standard without private ownership and the right to convert paper into gold, on demand. I do not see any chance whatsoever of the U.S. Government being willing to do that, or any reason why it *should* be willing to do it.

What about on the private side? I believe the possibility of a restoration of a gold standard on the private side is negligible but not zero. I can envision the possibility of individuals starting to trade with one another in gold. You might build up, over the course of time, a private money based on gold. Under what circumstances would that occur? It would occur only if governments are completely irresponsible in respect of the issuance of money, but there still remains a world in which gold can be traded.

That is not an easy assumption to accept. If governments are so irresponsible in their monetary policy that paper money becomes completely unreliable and is eliminated, I find it hard to believe that the governments themselves will exist or that you will have a kind of a world in which it will be possible for people to dream of trading on the basis of gold. This is where it seems to me people are so unrealistic. I can conceive of the disaster that all of our countries become collectivist and authoritarian. If we really do have unrestrained inflation, we shall not end up with a democratic system; there is no doubt about that. We cannot maintain democracy, in my opinion, if we go through hyperinflation or hyperdeflation. If John Exter is right, democracy is done for. If democracy is done for, it is not going to do you much good to own that gold. What are you going to do with the gold when the Gestapo comes and knocks on your door?

THE FUTURE

So, let's face up and be a little realistic. I believe that the doomsayers who are saying we are going to go in either of those directions are doing an enormous amount of harm because we are *not* going to go in either of those directions. There is not an ounce of a chance that any of the major western nations is going to have a hyperinflation. If you look at the record of history again, the large number of hyperinflations have all been characterized by one feature, which is necessary for hyperinflation, real hyperinflation, the German type. I am not talking about high inflation rates, I am not talking about inflation rates of a mere 100 percent a year; I am talking about *hyperinflation.* These are times when prices double every day. A student of mine who did the classical work on hyperinflation defined a hyperinflation as beginning when prices are rising more than 50 percent a month. And that's the early stages. When they get going, employers pay wages to people morning, noon, and night—three times a day—so they can go out and spend them before prices rise some more. That kind of a hyperinflation occurs only when countries, after military defeats, do not have a governmental structure capable of collecting taxes. That is the necessary condition for such hyperinflation. We are not facing that prospect and we are not going to have hyperinflation, and let nobody tell you otherwise.

"It is not true that a gold standard means stable prices."

I can conceive of a great depression more readily; that doesn't require these conditions. And maybe we will have a great depression if we let ourselves go and get into a real inflation—not the kind of piddling 8 or 10 or 12 percent one that we have now, but one that is going at 30, 40 and 50 percent a year. I can imagine the public getting sufficiently excited about inflation to be willing to accept policies that would produce a great depression. But we are not going to have a great depression until that happens and that is not going to happen in the course of two or three years. It *may* happen; if it does, it will be 10, 20 or 30 years from now.

In between those extremes maybe I'm wrong, maybe people will trade back and forth with one another in terms of gold, maybe they will decide that that's a preferable money to the paper they use. If so, fine—more power to them. If a private gold standard money arises, fine. But a government commitment to convert paper into gold would destroy the possibility of a private gold money. The kind of a system John wants would make a private gold money utterly impossible, because if governments are going to enter into the commitment to convert paper into gold, they are also going to impose restrictions on what you can do with gold, who may hold gold, where you may hold gold.

INFLATION HEDGE

Let me go to the second question. The present status of gold and gold as an inflation hedge. Today gold is a speculative commodity like soybeans. Its price rises and falls from day to day by large amounts. It is a lousy store of value when its price can go up by 30 percent in the course of a month or two or down by 30 percent in the course of a month or two. Is *that* a good inflation hedge?

To judge gold as a store of value, we must look at the evidence over a long period, not just over a few years, so my calculations cover the period from 1929 to the present. Also, we must allow for the cost of holding gold, which consists both of literal storage costs and the interest use of capital tied up. For the present purpose, I have treated the cost of holding gold as three percent per year to cover both costs—certainly a minimal estimate.

Finally, in judging gold as a store of value, we must look not at its nominal price but at its purchasing power in terms of goods and services, since the whole purpose is to judge how good an inflation hedge gold is.

Suppose you had bought gold at \$20.67 in 1929 and, let's say, you sold it just after F.D.R. raised the price of gold to \$35 an ounce in 1934. Of course, to do that you would have had to conceal the gold and have sold it illegally, but a lot of people did that. It wasn't very hard. You would have done very well. In 1934, you would have had an 87 percent gain in purchasing power. You would have gained because the price of gold went from \$20.57 to \$35 and in addition because prices in general fell sharply, roughly by one-third during the depression. So, in that five-year period, you would have done very well. Now, let's suppose you had bought gold in 1934, at \$35 an ounce, and held it to 1968, which is the next point of interest. That is, you held it for 34 years. In that case, you would have ended up in 1968 with 14 percent as much purchasing power as you started with in 1935. Six-sevenths of your wealth would have been eroded away by price increase of other goods over that time and by the storage costs.

Now we come to another brief bonanza. In 1968, suppose you had bought gold at \$35 an ounce and had held it until today. Today the market price of gold is \$150. You would have done very well—enormously well over that six-year period. Today, your purchasing power would be 2½ times as great as in 1968. That would have been a very good deal.

Suppose, however, that you add the six years on to the prior 34 years. Suppose you had held gold from 1934 to 1974. You held it through the dry period to benefit from the bonanza. At the end of that time, you would have ended up with 36 percent as much purchasing power as you had at the beginning. The gain in the six years doesn't begin to eat up the loss in the 34 years. Suppose you had held it for the whole period 1929 to 1974. That would have been perfect foresight. You bought it at its low dollar price and you are now holding it at its high. You would have lost one-third of your purchasing power. You would now have two-thirds as much as you started with.

If you call that a good inflation hedge, I find it hard to follow that reasoning. It's a very unreliable inflation hedge. If I am going to have an inflation hedge, I don't want to have to wait 30 years before I can cash it in. I want to have something which is pretty good over a shorter period of time.

Everyone has been talking about what a poor hedge stocks are against inflation. If you make these same comparisons for stocks over the same period, stocks have been a far better inflation hedge than gold. That isn't true for every year. It isn't true for the past six years, but when I hear these gold bugs talk, they seem to be saying that all of American history is divided into two parts—1492 to 1968 and 1968 to 1974. That doesn't seem to be to be a very sensible way to extrapolate the past.

GOLD'S FUTURE

What of the future? That's the record of gold up to date. Up to date, only those people who held it from 1968 to 1974 have really done very well; all the other people have lost their shirts. What about the future? Is gold going to go up to $200, $500 an ounce? Is it a sure-fire way to make your riches? Well, let's look at the facts again. I want first to leave out all speculative elements and just look at it as an inflation hedge.

There is no reason why gold, along with other commodities, should not participate in the general inflation. Copper rises in price with inflation, iron and steel rise in price, gold will rise in price with inflation. If, as I expect, price inflation continues, so will the price of gold continue to rise.

But let's ask, how does the price of gold stand now in light of earlier dates taking into account inflation? I told you that in 1929 the official price of gold was $20.67. At that price of gold, over half of the total gold production was going into monetary stocks. Only half of it was being purchased for other uses, so the price was the price at which the private market only wanted to absorb half of it. The price level today is a little less than three times as high as it was in 1929, 2.86 times. On that basis, a price of gold today which would be comparable to the $20.67 price in 1929, allowing for inflation, would be $59.12.

All right, that's one comparison. Now let's go to 1934, just after the price of gold was raised to $35 an ounce. We know that that $35 an ounce was way above the true market price for gold, because gold flowed into the United States and we ended up with an enormous gold reserve. Not only did we absorb all of the new production, we absorbed a large part of the gold that had been outstanding, so $35 was obviously much higher than a price that would have cleared the market without the government purchase program.

"I do not believe that you can have a viable gold standard without private ownership and the right to convert paper into gold, on demand."

From 1934 to date, the price level has risen about 3-2/3 fold, that is, prices are a little less than four times as high now as they were in 1934. If I multiply $35 by that, I get $128.10. I submit that there is no way in which, in terms of inflation adjustment, you can say that a price outside that range is a reasonable price for gold which is not being purchased by monetary authorities. And today, at the present speculative price of $150 an ounce, a large fraction of current output is not being purchased for commodity uses. About half of it is going into commodity uses, and the rest is going into either private or official hoards.

Obviously, all of these numbers will be raised if we have more inflation. What I am saying is that the price range for gold that can be justified in terms of inflation alone is well below the present price of gold. That doesn't mean the present level is wrong; the right market price is whatever the market price is. If people are willing to pay $150 for an ounce of gold, that's the price of gold. I am not quarreling with the market; I am only saying if you are looking at it as an inflationary hedge, that price cannot be interpreted as an inflation-hedge price.

Let me add to this the fact that the monetary stock of gold in the hands of central banks alone—leaving out private hoards of gold—is 30 times as much as one year's production, and that gold is overhanging this market. Central banks in distress are going to be strongly tempted to sell some of that gold to realize on it. Italy has already started; it has pledged $2 billion worth of gold at a collateralized value of $120 an ounce for a loan from Germany. When it can't pay off that loan, if the market price is $150, do you mean to say it isn't going to be strongly tempted to sell off its gold? It certainly isn't going to hand it over to Germany for $120 an ounce. Is there anybody here who thinks that some central banks around the world aren't going to get itchy fingers and try to take advantage of that high market price? I conclude that the market price of $150 is a speculative price and not one that you can regard as immune from all sorts of contingencies.

In my view, an honest-to-God gold standard would be, among the imperfect monetary standards that are available, a pretty good standard. But we have almost never had it and there is almost no possibility of having it. A pseudo-gold standard of the kind that we had before 1971 is far worse than an honest-to-God paper standard. Gold has not been a reliable inflation hedge. There is nothing in the realm of theory or present empirical evidence to give you any reason to expect that it will in the future be any better an inflation hedge than it has been in the past. ®

LUCIFER'S LEXICON
by L. A. Rollins

collective security, n. A system for the maintenance of world peace through world war.

security, n. Freedom from freedom.

self-contradiction, n. The act of asserting both A and not-A as in the statement, "I am the President, and I am not a crook."

single-taxer, n. One who advocates one tax too many.

Stars and Stripes, The, n. The Blood-Spattered Banner; Old Gory.

statute, n. A man-made law, i.e., a transgression of natural law, i.e., a crime against nature, i.e., an unnatural act of Congress.

subsidy, n. Government aid to a private commercial enterprise deemed beneficial to the public—but not by the public. Government aid to the Plunderprivileged.

supplicant, n. One who has the independence to stand on his own two knees.

tax, n. A payment made to a government for servitude rendered.

tax, v.t. To fleece the sheep; to pluck the geese; to milk the cowed.

tax dodger, n. One who keeps his own money: a term of opprobrium. One who cheats a bloodsucker.

taxpayer, n. One who renders unto a seizer what is not the seizer's; one who feeds the mouth that puts the bite on him; an April fool.

theocracy, n. Blind faith employing brute force.