

## WHY GOLD?

*Alan Reynolds*

Alternative monetary systems cannot be evaluated in isolation, but only in comparison with other arrangements. The question "why gold?" thus divides into two other questions. The first is "compared to what?" The second is "why not?"

Criticism of gold usually considers the second question first, as though a superior option was known to exist. We will therefore begin by showing that the usual criticisms reflect fundamental misunderstanding about what a gold standard is, how it works, and even when it was in effect. There will then be a brief historical comparison of metallic and fiat money, and a theoretical criticism of hypothetical alternatives. We will also explain why it was in the interests of even *myopic government officials* to return to gold in the past, and why it is also in their interest today.

A gold standard simply means convertibility. Currency is convertible into a fixed weight of gold, and gold can be exchanged for a known amount of currency. Whether the currency is issued by American Express or the Federal Reserve is an important but separate issue, as is the scope of domestic or international convertibility. Free banking periods were gold standards, and so was Bretton Woods.

A lot of confusion comes from vague ideas about what determines the price level under a gold standard. The Gold Commission report, prepared by Anna Schwartz, is full of assorted anxieties about the supply of money (meaning notes and deposits) or the U.S. supply of monetary gold, or the world stock of gold. The first two are irrelevant; the last is unimportant.

Quantity theorists habitually define a "real" gold standard as some sort of rigid reserve requirement, or gold cover, that ties the "supply of money" to a nationalized gold hoard. This is not a gold standard,

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but a primitive quantity rule. Such rules began in 1913 and were rarely binding, but the idea has produced much mischief—such as abandoning convertibility in order to protect the mercantilist treasure.

There is no need for more than a precautionary reserve of gold, because policies must change to stop any sustained outflow. Under existing institutions it would then be necessary to make it more attractive to hold dollar-denominated liquid assets by raising the discount rate or selling bonds to mop up cash and acquire gold. A large reserve can be a liability if it allows procrastination, as in the 1960s, which eventually threatens convertibility.

It is not necessary to deflate to stop a gold drain, but only to refrain from inflating. Nonsterilized conversions into gold cannot be persistently deflationary, with prices expressed in dollars, because remaining dollar balances would then become more and more scarce and valuable. The fear of massive conversions has always been misplaced because *marginal* shifts suffice to correct imbalances.

What Milton Friedman calls a “pseudo” gold standard is, in fact, a real gold standard. He wrote that “a note promising to pay gold . . . issued under fractional gold reserves is essentially fiat currency.”<sup>1</sup> On the contrary, a note promising to pay gold obligates the issuer to pay gold whether out of inventories or acquired by selling assets. Convertibility is a repurchase clause in which those who issue notes agree to buy them back with gold. Fiat currency promises to pay nothing, and eventually delivers on that promise.

Unless convertibility is threatened, the “supply of money” has nothing to do with the price level. Prices are, in effect, expressed in ounces of gold. Convertible currency, wrote Adam Smith, “is, in every respect, equal in value to gold and silver money since gold and silver money can at any time be had for it.”<sup>2</sup> Demand deposits likewise do not affect the price level, since they are convertible into currency which is convertible into gold. The supply of notes and deposits is whatever people are willing to hold without converting into gold.

## Gold Supplies

The domestic stock of monetary gold is almost as irrelevant as the money supply, unless there is a binding gold reserve requirement.

<sup>1</sup>Milton Friedman, *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953), p. 226.

<sup>2</sup>Adam Smith, *The Wealth of Nations*, Modern Library ed. (New York: Random House, 1965), p. 308.

From 1879 to 1892, M2 grew by 7.8 percent a year and the monetary gold stock by 8.6 percent a year, but wholesale prices fell slightly (see Table 1). A serious threat to convertibility, such as the Bryan campaign of 1896, may cause foreigners to dump dollars and hoard gold, but the loss of domestic gold is then a consequence, not the cause.

Rates of inflation or deflation cannot differ between gold standard countries because that would imply that merchants were passing up a chance to buy cheap and sell high. The provincial concern about other countries affecting our price level—through the alleged effect of gold flows on national money supplies—is therefore as incorrect as the price-specie-flow theory on which it is based. Instead, changes in the price level in all gold standard countries depend on the global market for gold vis-à-vis the markets for all other goods and services. A movement of gold from, say, Russia to the United States does not affect the global demand or supply of gold, so it does not affect prices expressed in gold-equivalent dollars.

In order to upset the fixed price of dollars in terms of gold, it would be necessary to monopolize the world stock of dollars or gold. It does not matter that a large share of world gold production has recently come from Russia and South Africa, because they hold a tiny share of world inventories of gold. Even if both countries could agree to shut down production for a couple of years, that would have a negligible impact on the scarcity and value of gold.

If the Soviets traded more gold for dollars and used the dollars to buy wheat, that could not contribute to inflation because American

TABLE 1  
MONEY, GOLD AND PRICES  
(Annual Percentage Changes)

	Monetary Gold			Wholesale Prices	Industrial Production
	M2	U.S.	World		
1879-92	7.8	8.6	1.2	-1.1	6.9
1893-96	-0.4	1.9	3.1	-2.4	-1.0
1897-02	11.1	10.5	3.6	4.0	9.5
1903-07	7.3	4.8	3.9	2.2	4.4
1908-14	5.1	1.9	3.7	-1.6	3.5

SOURCES: *Report to the Congress of the Commission on the Role of Gold in the Domestic and International Monetary Systems*, Vol. 1 (Washington, D.C.: Government Printing Office, 1982), Table SC-9 (3) and SC-7; *Historical Statistics of the United States*, Series P-17 and X-415; George Warren and Frank Pearson, *Gold and Prices* (New York: John Wiley, 1935), p. 14.

recipients of the dollars could exchange them for gold. In effect, the U.S. would be trading wheat for gold, if the terms were attractive, and there would then be no effect on the U.S. price level.

A huge increase in total world gold stocks might, however, raise world prices expressed in gold-convertible currencies. Other goods would then become more scarce relative to gold. At the peak of the California gold rush wholesale commodity prices rose by almost 11 percent for two years, 1853 and 1854; but U.S. gold production added 19 percent to world gold stocks in a single year. An identical amount today would add only 1 percent to the larger world stock of gold.

Richard Cooper writes about the "clear correlation between world gold stocks and price movements." Unable to find the correlation, however, he suggests "a delay of about thirteen years before the full impact of increased gold supplies is felt on prices." That is about as far as anyone can go with irrational expectations.<sup>3</sup>

The Gold Commission report seems equally concerned about both huge gold discoveries and a gold shortage. The slowdown in gold production after 1968, however, occurred because fiat money gave owners of scarce resources, such as gold and oil, an incentive to hoard appreciating hedge assets rather than trade them for depreciating paper. A gold standard removes this prospect of deriving real capital gains from leaving resources in the ground.

From a quantity theory perspective, a shortage of gold could generate gradually falling prices only if there was a rapid increase in real output and no offsetting increase in velocity. The inference in the Gold Commission report is that such a secular deflation would prevent a rapid increase in real output, but in that case the deflation could not occur.

Critics do not deny that a gold standard would stop inflation; they deny that stopping inflation is desirable. Phillip Cagan, for example, writes that "the abrupt stabilization of the value of money produced by sudden convertibility would be extremely disruptive."<sup>4</sup> Anna Schwartz says advocates do not explain how "a new noninflationary gold standard can be achieved without bankruptcy and loss of employment."<sup>5</sup>

One answer to the question posed by Schwartz is that we should

<sup>3</sup>Richard N. Cooper, "The Gold Standard: Historical Facts and Future Prospects," *Brookings Papers on Economic Activity* 1 (1982), p. 16.

<sup>4</sup>Phillip Cagan, *Current Problems of Monetary Policy: Would a Gold Standard Help?* (Washington, D.C.: American Enterprise Institute, 1982), p. 2.

<sup>5</sup>Anna J. Schwartz in *Report to the Congress of the Commission on the Role of Gold in Domestic and International Monetary Systems*, Vol. 1 (Washington, D.C.: Government Printing Office, 1982), p. 141.

not have pushed gold down toward \$300 in 1982—that was the modern equivalent of returning to a pre-inflation parity. Instead, convertibility at a relatively high price should be announced for the future in order to allow existing contracts to adjust to eventual stability. Nonetheless, that future gold price will be lower than now expected under fiat money, so the inflation premium in long-term interest rates would decline.

The Commission report says that other countries going onto a gold standard would raise the “demand for gold,” which can only mean that they would give up more goods to acquire each ounce of gold. Since the U.S. holds the largest stock of gold, we would benefit from selling our excess reserves. But other countries already hold a lot of gold too, plus interest-bearing dollar assets that would then be convertible into gold. The Commission report is concerned about “the vast quantity of dollars world-wide with potential claims to convertibility.” Those claims might indeed be exchanged for gold or foreign currencies under fiat money, but would become better than gold under a standard because they pay interest.

Most countries would simply peg their currencies to a gold dollar, as about 50 brave countries still do. Others could float, but that really means sink.<sup>6</sup> Facing more inflation and higher interest costs, there would be a strong incentive for floaters to join the gold bloc. No international agreement pulled nations to gold between 1875 and 1890, although it is a possible route today.

With 70 percent of world trade already denominated in dollars, and most non-gold reserves also in dollars, a gold standard in the United States is not merely a “unilateral” act. If the favorite world money is fixed to gold, the world will be on a gold standard.

## What Is A Dollar?

The Gold Commission report says, “the basic argument that is offered in support of all variants of a gold standard is that gold has intrinsic value.”<sup>7</sup> But economic value is relative and subjective. A truckload of paper has more intrinsic value than a few grains of gold.

The actual argument is that a gold standard provides a relatively predictable unit of account—a numeraire in which debtors and creditors can make long-term contracts with minimal risk of unexpected windfall gains or losses. In effect, all assets and liabilities become simultaneously hedged and indexed against depreciation or appre-

<sup>6</sup>According to Friedman: “A fixed price for gold could, however, be maintained in one country without interfering with flexible exchange rates.” In *Essays*, p. 191.

<sup>7</sup>*Report to Congress*, p. 112.

ciation of the dollar. The abstract unit of account is thus anchored to the real world. Expressing prices in gold-equivalent units is a good deal less arbitrary than using a mere word for a numeraire.

Under the existing non-system, the word "dollar" has no known meaning. Prices are not stated in terms of any known quantity of anything, thus making longer-term contracts similar to lottery tickets. The value of a dollar has become a matter of continual guesswork. Productive resources are wasted in Fed-watching, cash management, hedging, indexing, renegotiating contracts, repricing products, and diversifying international currency portfolios. The costs and risks become formidable beyond a few years, so the maturity of debts gets shorter with experience. Any remaining long-term loans must contain a high risk premium for both inflation and deflation-related default. The world economy loses the efficiencies that flow from using a common accounting unit to measure value and, instead, drifts toward the inefficiencies of primitive barter. These experiences are not unique, but common to all previous experiments with fiat money.

A spurt of unusually rapid real growth has always accompanied every return to a metallic unit of account.<sup>8</sup> Real GNP expanded by 8.4 percent a year from 1879 to 1882, for example, and by 5.3 percent a year in the following 10 years. One reason for this expansion is that guaranteeing the principal in gold restores long-term financing at interest rates that never exceeded six percent and rarely exceeded four percent. This permits greater investment in durable goods by borrowing against their long-term potential output.

Another reason for the prolonged booms that invariably follow monetary reform is that money more effectively performs its basic function of reducing costs of information in exchanging goods and services across time and space. Resources otherwise devoted to avoiding the inflation tax on money and the default risk from sudden deflation can be more productively employed.

A gold standard limits the range of future uncertainty, allowing people to undertake ventures with a long-term payout. As Robert Barro and David Gordon observed, "efficiency requires the potential for advance commitments—that is, for contractual obligations."<sup>9</sup> A gold standard precommits and constrains future actions, and thus permits planning for future production in the same way that patents and property rights do.

<sup>8</sup>Alan Reynolds, "Monetary Reform and Economic Boom: Five Case Studies, 1792–1926," *Polyconomics*, December 6, 1982.

<sup>9</sup>Robert J. Barro and David B. Gordon, "A Positive Theory of Monetary Policy on a Natural Rate Model," University of Rochester, October 1981.

## What Price?

The question of what is the “right price” at which to stabilize dollars, relative to gold, cannot be escaped under fiat money either. The question then becomes, “What is the right price of *dollars* in terms of goods and services?” For example, if asked whether the producer price index should be stabilized at 300 or 400, most people would first want to know where it is right now. The level is less interesting than the direction and rate of change. If we stabilize at too high a level, either for gold or the producer price index, then there will be temporary inflation only until we reach that level. Long-term *expected* inflation could nonetheless be reduced and so would long-term interest rates.

If the price of gold is again allowed to drift up to \$800, there will be at least as much general inflation as there would be if it were announced that it will eventually be pegged at that high level. No relative price change can account for these wild swings. Gold never moves in a different direction than commodities in general.

The markets clearly believe that, under the existing monetary arrangements, gold *will* eventually go to \$800 and beyond. The dollar is sure to buy less gold in the future and less of everything else. If gold is expected to be \$800 in five years, then its discounted present value would be about \$500 at 10 percent, \$400 at 15 percent, and \$600 at 6 percent. This is roughly in line with the prices for gold observed at these interest rates.

It only pays to hold gold at \$500 if you expect its price to appreciate more rapidly than the 10 percent yield on dollar investments. And it only makes sense to expect a five-year yield of 10 percent if you expect inflation to average about that high over the period.

Robert Hall, Gene Fama, David Friedman, and Phillip Cagan have all pointed to the post-1971 gold price as evidence that gold has suddenly become too unstable to serve as a standard. With gold as the numerator of this price, and dollars as the denominator, the argument is that changes must be due to gold rather than dollars. In fact, the gold price has simply been reflecting shifting perceptions about how much and how soon the value of the dollar will decline, and also about the wild swings in the interest rate at which that future gold value of the dollar is discounted.<sup>10</sup>

It is possible to bribe people to hold dollars with an extremely high interest rate. But if they switch back into gold at a 10 percent

<sup>10</sup>Peter Canelo, in his Merrill Lynch “Money and Credit Summary,” January 11, 1983, finds a close correlation between the real price of gold and the real interest rate.

interest rate, then the recent cyclical crunch did little to improve long-term expectations about the dollar's value.

### Historical Comparisons

Recent critical writing on the history of gold standards has been almost as muddled as the theoretical objections. Richard Cooper writes that Britain "was on a full legal gold standard from 1816." But Britain did not, in fact, return to gold until 1821.<sup>11</sup> Such details are important because the fiat money period *before* 1821 was one of chaotic inflation and deflation, tax revolt, and bloody riots.

Allan Meltzer likewise claims that the 1821 return to gold "was followed by a difficult and hard adjustment."<sup>12</sup> T. S. Ashton, London's finest historian of the Industrial Revolution, offers a quite different assessment:

In the early 'twenties,' wrote Ashton, many circumstances combined to produce high prosperity. The currency was established on a foundation of gold . . . Huskinson and his colleagues were active in pulling down tariffs, lowering excise duties, and removing restrictions from industry and trade. . . . A substantial part of the National Debt was converted from 5 to 4 or 3½ percent: in 1820 the yield on Consols had been 4.4, by 1824 it was 3.3 . . . and in the early months of 1825 short-term loans were being placed at a little more than 2½ percent.<sup>13</sup>

Cooper also emulates last year's Report of the Council of Economic Advisers in attributing the U.S. deflation of 1873–78 to the gold standard, even though this was the Greenback era. He points to high real interest rates in 1872 and 1877 without bothering to note that the gold standard cut them in half. All of the great deflations occurred when the gold standard was suspended, threatened, or violated, including the U.K. in 1920–24 and the U.S. in 1929–33.

Several economists have followed Michael Bordo in comparing the 1879 to 1914 gold standard with the entire postwar period.<sup>14</sup> This is unacceptable because the 1946 to 1971 period *was* based on a gold-convertible dollar.

Meltzer even writes that "real per capita income rose a bit faster in the disappointing decade of the 1970s than under gold prior to

<sup>11</sup>Cooper, p. 3.

<sup>12</sup>*Towards A Stable Monetary Policy: A Debate Between Allan Meltzer and Alan Reynolds* (Washington, D.C.: The Heritage Foundation & IRET, 1982), p. 2.

<sup>13</sup>T.S. Ashton in Philip A.M. Taylor, ed., *The Industrial Revolution in Britain* (Lexington, Mass.: D.C. Heath, 1958), p. 53.

<sup>14</sup>Michael David Bordo, "The Classical Gold Standard: Some Lessons for Today," Federal Reserve Bank of St. Louis *Review*, May 1981.

1913.”<sup>15</sup> I cannot imagine how such a calculation could be performed, but it certainly does not hold up through 1982. Real GNP per capita in 1879–88 averaged 46 percent higher than the previous decade, then rose another 72 percent from 1889 to 1912—a rise of 3.1 percent a year. In all the years from 1969 to 1982, real per capita GNP rose by only 18.5 percent—about 1.4 percent a year. If we excluded government purchases and transfer payments and allowed for the unusual increase in workers per household, then real private GNP per employee in 1982 was only 4.2 percent higher than it was in 1969.

Bordo compares the 6.8 percent unemployment from 1890 to 1913 with the 1946 to 1979 experience. From 1971 to 1982, however, unemployment also averaged 6.8 percent, and some semi-official estimates hope for 8.9 percent unemployment from 1983 to 1988.

Unemployment was surely very low in the 1880s, but there are no figures. Unemployment was high from 1893 to 1898 as immigration outstripped continued employment growth. From 1894 to 1896, in particular, the silver movement raised grave doubts about the credibility of the gold standard. There were destructive experiments with an income tax in 1894, high tariffs, and massive harvests that depressed relative farm prices.

From 1899 to 1929, however, unemployment averaged 4.8 percent, for 31 years, compared with a 7.5 percent rate now likely for the 1971 to 1988 period. No gold standard period of comparable length has experienced nearly that high an unemployment rate.

Other statistical comparisons, such as the year-to-year variability in real GNP, create an illusion of precision from extremely rough estimates. The estimates of GNP by Kendrick and Kuznets do not even agree on which years were up or down, and they carry ample warning of errors up to 15 percent over 5 to 10 year periods. They do, however, leave out government spending, which is philosophically appealing.

Victor Zarnowitz recently reexamined the archaic classification of business cycles and concluded that several early “recessions” were merely periods of slower growth. That leaves only one recession, for example, in the 14 years after the U.S. returned to gold in 1879.

The U.S. Gold Commission report of March 1982 says, “the classical gold standard prevailed in a world . . . in which national economic growth and high employment were not given the weight assigned to them today” (vol. 1, p. 131). That was because rapid economic growth and high employment could usually be taken for

<sup>15</sup>Allan H. Meltzer, “An Epistle to the Gold Commissioners,” *Wall Street Journal*, September 17, 1981.

granted. Manufacturing output rose by 534 percent under the classical gold standard, and related employment rose by 142 percent.

### Defining Price Stability

In 1933, two Roosevelt brain trusters, George Warren and Frank Pearson, constructed a wholesale price index for the period 1798 to 1926. They compared that index with the price of gold and decided that it must have been the value of gold that changed relative to commodities, rather than the other way around.

Professors Warren and Pearson heroically gathered prices for 113–146 commodities, mainly from New York newspapers. That is, the “wholesale” prices were mostly spot prices of raw materials, nothing like today’s index of producer prices of thousands of *finished* goods. Although agriculture represented only about 16–20 percent of domestic spending after 1879, farm products, food, and hides were given a weight of 54–67 percent of the wholesale index.

Before the Civil War, the Warren-Pearson index moves in lock step with an export price index developed by Douglass North.<sup>16</sup> What the two indexes have in common is that they are both dominated by cotton, which means the “stability of the dollar” is being judged by the behavior of boll weevils, crop cycles, and trade barriers. Sometimes the index was pushed by other farm goods—wheat prices, for example, rose with the Irish famine in 1847. The wholesale price index therefore records an 8.4 percent “inflation” in 1847, even though prices went *down* in metals, textiles, chemicals, and building materials.

Economists who attempt to find a prolonged two-to-three percent rate of inflation under the classical gold standard always begin or end their “trends” with the unusual year of 1896. Not even the Warren-Pearson index would show as much as a one percent annual change if the comparison began or ended in, say 1893 or 1899; yet the only wholesale prices that declined in 1896 were farm products, foods, hides, and textiles (related to cotton). Moreover, the price index at the beginning and end of 1896 was the same as in 1894, with the deep decline appearing only between the nomination and defeat of Bryan.

Most of the apparent deflation in 1894–96 was actually a relative decline in farm prices, which then accounted for over half of the wholesale price index. From 1892 to 1894, cotton production rose 36 percent, and the price fell 45 percent. In 1895, the supply of oats

<sup>16</sup>Douglass C. North, *The Economic Growth of the United States* (New York: W.W. Norton, 1966), p. 88.

rose 23 percent, barley 41 percent, potatoes 53 percent—prices fell. From 1894 to 1896, the production of corn increased by a whopping 65 percent and the price fell 53 percent.

A statistical analysis by Benjamin and Kochin came to the heretical conclusion that “there is no evidence of persistent inflation or deflation in Britain during the gold standard years,”<sup>17</sup> that is, wholesale price movements were almost a “random walk.” A rise or fall in prices provided no information about whether prices would rise or fall in the next year. Since global prices were tightly linked under a gold standard, this must also have been true of the U.S. The reason for this is probably because the wholesale price indexes were mainly registering changes in *relative* prices rather than changes in the overall value of money. Another common problem with price indexes is that relative prices of manufactured goods typically decline with technological innovation and productivity gains. Raw cotton sold for about 10 cents a pound in both 1812 and 1915, for example, but cotton sheeting in that period declined from \$19 a yard to 68 cents. That was not deflation, but progress.

There were, of course, sizable year-to-year changes in industrial commodity prices that usually paralleled cyclical swings in industrial production (see Table 2). No monetary system has ever eliminated such cyclical changes in spot prices of things like lumber, steel, and coal, and it is not obvious this would be desirable since these price changes are needed to clear markets.

Franco Modigliani has argued that “if one were willing to purge the gold standard era of fluctuations due to agriculture, one should purge the latter era of fluctuations due to oil. This would show the postwar period to be one of fantastic stability.”<sup>18</sup>

To test the Modigliani hunch, I have reconstructed (in Table 3) a *nonfarm* wholesale index for the past decade using the same categories and weights used in the Warren-Pearson index. The comparison is still biased in favor of the recent period because of a much larger sample of more rigid list prices.

If the fuel is included, the *average* inflation rate from 1971 to 1981 was 11.5 percent, according to the same type of index by which we judge the classical gold standard. Excluding fuel and power reduces inflation to 8.1 percent, but the ratio of the standard deviation to that lower average remains equally erratic (43.7 versus 44.7).

The results are compared with an allegedly deflationary period of

<sup>17</sup>Daniel K. Benjamin and Levis A. Kochin, “War Prices and Interest Rates,” National Bureau of Economic Research conference paper, March 1982, p. 5.

<sup>18</sup>Franco Modigliani, “Comment on Cooper,” *Brookings Papers* 1 (1982), p. 55.

TABLE 2  
CYCLICAL VARIATIONS IN INDUSTRIAL PRODUCTION  
AND PRICES  
(Annual Percentage Changes)

	Industrial Production	Industrial Commodity Prices
<u>Expansions</u>		
1880	+ 15.3	+ 16.7
1890	+ 7.6	+ 3.7
1898	+ 13.8	+ 3.6
1899	+ 9.9	+20.5
1902	+ 14.4	+ 4.1
1906	+ 8.6	+ 9.6
1912	+ 19.8	+ 4.5
<u>Contractions</u>		
1884	- 6.0	- 9.1
1893	- 11.4	- 2.7
1904	- 4.0	- 6.3
1908	-22.8	-11.6
1914	- 5.4	- 7.2

SOURCES: *Historical Statistics of the United States*, Series P-17; Warren & Pearson wholesale price index, excluding farm products, food, and hides.

equal length, 1881 to 1892. For those who might argue that the past decade offered high but stable inflation, the absolute difference between inflation in any two consecutive years was never as high in 1881 to 1892 as the 12 percentage point shift from 1974 to 1975. That shift would be 17 points if fuel was included. Inflation rates, by this archaic measure, exceeded double digits in four of the last 12 years, and turned into deflation in 1982.

This is not to argue that assigning such importance to either industrial or farm commodities is an accurate measure of the value of money. On the contrary, the point is that such an index is an equally inappropriate criterion by which to judge either the last 10 years or the previous two centuries. The plain fact is that the Warren-Pearson price index contains no measure of the cost of such vital items as housing, services, clothing, or transportation. Farm products and industrial materials are still at least as volatile as they were in the 19th century despite improved inventory control, communications, and farm technology. Aside from farm products, however, the total increase in the Warren-Pearson price index from 1879 to 1914 was three percent over a 35-year period.

TABLE 3  
A WARREN-PEARSON WHOLESALE PRICE INDEX  
FOR INDUSTRIAL COMMODITIES  
(Annual Percentage Changes)

	Less Farm	Less Farm & Fuel		Less Farm	Less Farm & Fuel
1971	5.7	5.0	1881	-5.0	-5.8
1972	6.0	6.9	1882	2.7	3.0
1973	13.1	13.0	1883	-4.6	-4.9
1974	23.4	14.3	1884	-9.1	-8.1
1975	6.5	2.3	1885	-6.6	-6.7
1976	9.0	9.3	1886	-1.5	-1.2
1977	10.3	8.6	1887	1.5	1.8
1978	9.2	10.3	1888	0.9	0.5
1979	15.2	10.0	1889	-0.9	-0.8
1980	17.1	5.2	1890	3.7	4.2
1981	11.3	4.6	1891	-6.6	-7.4
1982*	0.4	- 0.4	1892	-4.7	-4.5

\*November 1981 to November 1982.

SOURCE: Warren and Pearson, *Gold and Prices*, pp. 14n, 30-32. The 1889 weights for farm products, food, and hides were redistributed among remaining categories. For 1971-82, lumber is substituted for building materials, and the 1889 weights are used.

Every economist since Warren and Pearson has measured the purchasing power of the gold dollar against that primitive index of wholesale commodity prices. Some, like Bordo and Schwartz, have compared the old index to a modern producer price index for finished goods, which is worse than misleading.

Both advocates and opponents of the gold standard have assumed that changes in the Warren-Pearson index reflected changes in the purchasing power of gold. What they actually observed, however, was not the instability of gold against that price index, but instability of the price index against a much broader index of value—namely, gold. There were, and still are, years in which a bale of cotton or a bushel of corn would buy more or less gold, but that does not mean we should switch to a cotton standard.

### Price Rules

Economists who developed the early wholesale price indexes assumed that their indexes were a better measure of the value of money than gold was. As a result, they usually proposed easing or

tightening monetary policy in order to stabilize some bundle of sensitive prices. In 1935, for example, Warren and Pearson suggested using 30 commodity prices as a target. "Since basic commodities change in price more promptly than manufactured commodities," said Warren and Pearson, "they give fair warning for the necessary action before changes have gone too far."<sup>19</sup>

This sort of "price rule" has recently been revived by Genetski, Miles, myself, and others. *The price index serves as a proxy for excess demand or supply of money, thus capturing global changes in the demand for money as well as the supply.* However, it requires almost as much central bank intervention as a quantity rule and is also inferior to convertibility in other respects.

Hall has sometimes suggested using the consumer price index as a target, or four commodities that move closely with it. Back in 1959, Beryl Sprinkel explained why this would not work: "In the past the Federal Reserve sometimes used the consumer price index as a major guide to action. That was probably a mistake because the consumer price index moves upward after business activity starts down, and it continues to be level long after inflationary pressures begin. Monetary policy must be tied to sensitive indicators rather than laggards such as the consumer price index."<sup>20</sup>

Just as any practical measure of money has to be a rough approximation, any workable price target cannot possibly include everything. The prices to be stabilized should be sensitive to monetary disturbances and relatively immune to supply shocks. This principle leaves out prices set by contract or regulation as well as prices of farm products. In short, daily spot market prices for industrial and speculative commodities are apt to be the best "leading indicator" of emerging trends toward inflation or liquidity crises. The idea is based on Walrasian general equilibrium where an excess demand for money is reflected in an excess supply of goods (thus, the 1981–82 "glut" of commodities and future goods—that is, bonds—was a symptom of a shortage of cash).

The fundamental premise of recent monetary procedures has been that experts know better than the markets how much of which kinds of money is too much or too little. In fact, the markets are always first to notice emerging inflation, which invariably shows up in rising commodity prices and, usually, a falling dollar. Conversely, a liquid-

<sup>19</sup>George F. Warren and Frank A. Pearson, *Gold and Prices* (New York: John Wiley, 1935), p. 276.

<sup>20</sup>Beryl W. Sprinkel, "Inflation: Its Cause and Cure," in H.C. Harlan, ed., *Readings in Economics and Politics* (New York: Oxford University Press, 1961), p. 450.

ity squeeze often sinks sensitive prices long before it appears in an unambiguous slowdown in some "M."

The alternative of targeting a *real* interest rate, embodied in recent congressional proposals, suffers from a "Catch 22" dilemma. In order to calculate a real rate, the nominal rate would have to be adjusted by some timely measure of expected inflation. If such a prompt measure of inflation exists, then why not stabilize it directly? That is, if sensitive prices accelerate, then raise the discount rate or slow the growth of reserves. If such prices fall, policy should ease. After all, M1 and M2 are at best rough proxies for prices. There is no reason to assume that measures of money are better guides to price trends than prices themselves.

Replacing "M" targets with "P" targets still captures the supply of money without having to define what money is. Sensitive prices serve as a measure of the change in both the supply of money and velocity relative to real growth. Sensitive prices also serve as a warning when real interest rates are too high or too low.

When the supply of money is excessive, or the real rate of interest is too low, this will invite commodity speculation. Excess cash will be traded for real goods; people will buy on credit in order to beat an expected price increase, to hedge and speculate. Conversely, when the demands for liquidity exceed the supply, or real interest rates are too high, this can only be discovered by the fact that commodity prices fall. By avoiding either liquidation or speculation in commodity markets, the supply of money matches demand at stable prices.

"Since most commodities are substitutes for some others," wrote Eugene Lerner, "a student of price movements usually expects all commodity prices to rise or fall at approximately the same rate."<sup>21</sup> An index creates difficulties when starting from a cyclical disequilibrium, however, because some recovery in prices must be allowed before stabilization. Technological advance may also depress the relative prices of some items in the index over time, creating an erroneous impression of deflation and therefore a slight inflationary bias.

The price of gold could be used as an error signal in place of a sensitive commodity index. Rapid changes in the price of gold would thus indicate excess demand for, or supply of, money, which would then be corrected. This is *not* a gold standard because the market does not directly determine the supply of money through converti-

<sup>21</sup>Eugene Lerner in Ralph Andreano, ed., *The Economic Impact of the American Civil War* (Cambridge, Mass.: Schenkman, 1962), p. 17.

bility. If the gold price were pegged for a sustained period of time, however, it would in some respects resemble a de facto gold standard.

Using gold as a price rule might be a step toward solving the reentry problem, by groping toward a price at which other markets are observed to approach stability. While the London gold pool stabilized the gold-dollar ratio, from November 1961 to March 1968, there was virtually no change in the index of spot prices for industrial commodities.

Although replacing M-targets with P-targets is clearly more timely than using sluggish broader price indexes, as Sprinkel implied, it does suffer from other shortcomings. Relative price changes within a commodity index are much more of a problem than with a single commodity that is relatively fixed in supply, such as gold. Eugene Fama's powerful objections to interfering with efficient borrowing and lending, by manipulating bank reserves, would also still apply. All of the existing price indexes are very poor measures of *future* purchasing power, as Alchian and Klein have emphasized, while gold is quite good in this respect.

The cost of living has a time dimension and so does the value of money. A liquidity squeeze will depress *current* measures of inflation, largely by sinking commodity prices below marginal cost, but this has never been a sustainable solution. If the squeeze also depresses the real value of accumulated assets, like stocks and bonds, it may *raise* the cost of living in the future. People will have to work harder in the future to attain the same standard of living. This is one reason why the proper objective is not merely to see little change in some index of April's prices, but rather a stable unit of account over time.

There can be no strong objection to finally giving the Fed an explicit legislative mandate to maintain the value of its notes. The current multiple objectives simply give the Fed more excuses, reducing its accountability. In the vacuum left by the timely demise of shifted-adjusted M1B, an index of sensitive commodity prices also seems to offer a useful market feedback mechanism. Those price rules and targets could avoid extreme inflations and deflations, assuming good intentions.

These are patchwork remedies, however, that do not offer much to restore long-term credibility. Drastic problems may require drastic solutions.

## Alternatives to Gold

Any proposed change in monetary institutions must be based on implicit assumptions about political feasibility. Milton Friedman, for example, recently said that a gold standard is "very likely preferable

to our present system.” He believes, however, that even better results would come from other reforms that he says are “no more drastic.” Friedman’s alternatives include abolition of the Federal Reserve, free banking, 100 percent reserve requirements, and a constitutional amendment freezing the monetary base at the present level.<sup>22</sup> It is, of course, a matter of opinion as to whether any or all of these reforms are really less drastic than requiring that any currency denominated in dollars be convertible into a fixed weight of gold.

Whatever the merits of such proposals, it may be necessary to have second-best options available that are conditional on failure to achieve perfection. *If it proves impossible to abolish the Fed, for example, then how can the Fed be made more accountable for the value of its own monopoly money?*

I suspect that if Andrew Jackson tried to shut down the central bank today, he would lose the battle. The Fed could simply threaten to dump \$100 billion in government securities in a single week. Details behind the proposed withering away of the Fed have not been persuasively worked out. There are transition problems that appear far more difficult than a legal obligation to convert existing currency into gold. Of course, the government could renege on such an obligation, or the Fed could probably undermine its credibility by sterilizing gold flows if open market operations were allowed; but the government can violate *any* monetary system, including a competitive private monetary system. *The best we can do is try to make monetary tinkering conspicuous and subject to social censure.*

Competitive issue of convertible private notes—free banking—would probably work well as an alternative to central banking. If a gold-based private money competed side by side with government dollars, however, the government would presumably shut it down with regulations or taxes. Even if contracts were tolerated in some new commodity unit, that does not help \$5 trillion in existing dollar contracts and instruments. In short, I am more sympathetic with free banking than with competing currencies. In a sense, financial innovation has already given the Fed plenty of competition, since attempts to levy an inflation tax are easily evaded by holding interest-bearing money market deposits.

*A move to 100 percent reserves is a move in the wrong direction, requiring more regulation and inefficiencies of financial intermediation. Banking would move offshore and underground. It is not a viable option anyway.*

<sup>22</sup>Milton Friedman, “Statement for Hearings on Ills of the Nation’s Monetary System,” National Conference of State Legislatures, December 4, 1982.

Freezing the monetary base, or its rate of change, means that all changes in the demand for reserves and currency must be reflected in changes in prices and interest rates. From 1929 to 1933, the base grew by 3.4 percent a year. The public had a good reason to hold more currency and fewer deposits, and banks had a good reason to hold extra reserves. If Friedman's monetary base proposal had been in effect, his famous complaint about the Great Contraction would have to be retracted. So would his recent complaints about slow growth of M1 from January to June of 1982, when the base grew at nearly a 10 percent annual rate.

As Cagan suggests, the base is roughly linked to nominal GNP only because changes in retail sales produce passive changes in the currency supply, not the other way around.<sup>23</sup> The procyclical movements in M1, which monetarists point to as the Fed's causal role in the cycle, have usually been matched by *countercyclical* changes in the rate of growth of the monetary base. If we must have required reserves, then it is obvious that the Fed must, in some sense, "control" the monetary base. It does not, however, follow that the experts know what rate of growth of the base will always be suitable under all conditions. It is somewhat ironic that the original reason for creating the Fed—to provide an "elastic" currency by discounting commercial paper—has gradually evolved into a plan to keep the Fed, but make the base immobile.

## Returning to Gold

This is by no means the first time that a major nation has attempted to maintain the value of the unit of account by regulating the volume of some media of exchange. The United States was on such a system from 1776 to 1792, for example, and again from 1860 to 1878. Britain used managed money from 1797 until 1821. France tried it before Napoleon and again after World War I.

During the U.S. Greenback era, William Graham Sumner wrote:

Nearly every nation which has ever used paper money has fixed its amount, and set limits which it has solemnly promised again and again not to pass, but such promises are in vain. A man might as well jump off a precipice intending to stop half way down . . . . In its more general effects, the paper currency with a fixed limit produces a steady advance in the rate of interest, and also a reduction in prices . . . .

If we had a currency of specie value, we should get just as much

<sup>23</sup>Phillip Cagan, "The Choice Among Monetary Aggregates as Targets and Guides for Monetary Policy," *Journal of Money, Credit, and Banking* 14 (November 1982), p. 674.

as we need, and then we should know how much that is, but then, too, we should no longer care.<sup>24</sup>

Elsewhere I have prepared a detailed history of five past periods of chronic monetary instability, and the forces that very gradually led back to restoration of a metallic standard.<sup>25</sup> Periods of fiat money—those that stopped short of runaway hyperinflation—had several features in common.

- A return to gold was always initiated during the deflationary aftermath of a relatively moderate inflation.
- Government budgets were an acute concern, usually with a combination of deficits, growing interest expense, and tax resistance.
- There had already been many years of experience in trying to regulate or limit the quantity of money.
- Interest rates were always historically high, particularly in real terms.

The immediate results of returning to gold were also similar.

- Real output always expanded very rapidly for at least four years, thus solving the budgetary problems.
- The money supply grew even more rapidly, usually at annual rates exceeding 10 percent.
- There was no sustained inflation or deflation.
- Interest rates were always reduced, stock markets always rallied, and long-term rates never exceeded five to six percent.

The practical answer to the question “why gold?” is that it always works; nothing else ever has. The burden of proof is not on gold.

Gold is easy to identify and sell; it is universally accepted over time and distance. Failures to convert into gold are conspicuous and unambiguous, unlike the ways money supplies or even price indexes behave. The supply of notes and deposits can freely expand to meet the added demand that always comes from honest money—something that would be impossible with a rigid quantity rule. A gold standard also separates the question of maintaining the unit of account from the process of financial intermediation, thus eliminating reserve requirements and other inefficient regulations.

The more abstract case for gold rests on the need to link the word “dollar” to something real, something of reasonably predictable value. Doing so reduces information costs, lengthens time horizons, and strengthens property rights.

<sup>24</sup>William Graham Sumner, *A History of American Currency* (New York: Holt, 1884), pp. 215, 223.

<sup>25</sup>Reynolds, “Monetary Reform.”

The case for gold is not simply to depress some price index—an ordinary credit crunch can do that. The purpose of a firm monetary standard is to utilize money's potential for facilitating economic progress—the case for gold is the case for growth.

## A Classical Counterrevolution

There is a classical counterrevolution going on in monetary theory. It began with a few seminal thinkers like Robert Mundell, Jurg Niehans, Benjamin Klein, and Fischer Black. It has evolved, with colorful variations, to include, among others, Robert Hall, Gene Fama, Leland Yeager, Larry White, Axel Leijonhufvud, Phillip Cagan, Robert Barro, and Tom Sargent.

Most of these innovators walk right up to the edge of endorsing some sort of gold standard, and then step back. For example, Fama would rather talk about a hypothetical single commodity. Hall prefers a plywood standard, although a few plywood manufacturers were recently prosecuted for trying to put the Hall plan into practice. Black would vary the gold price according to some price index so that “the government can choose any rate of inflation or deflation it wants.”<sup>26</sup> Sargent says there may be another way.

This reluctance to suggest a golden numeraire, among those who have rediscovered the reasons for it, can only be explained by decades of intellectual intimidation. Gold is anathema to a generation of economists trained to believe that money is something that economists should manage. Academic fashions, like economic forecasts, naturally gravitate toward a comfortable consensus; but the median is constantly shifting.

Economists did help to rationalize what politicians already wanted to do in 1968–71, namely, break the golden chains. Countries did not, however, return to the gold standard in the past because of academic arguments. Economists were always divided on the issue and always promoted a variety of pet schemes. Instead, the usual motive for returning to gold was to reduce the interest expense on government debt by guaranteeing the principal. For example, interest on the U.S. debt dropped from 35 percent of the budget in 1875 to 22 percent by 1882. There also was a need to ward off angry lenders who had been robbed by inflation and debtors who faced bankruptcy from deflation.

<sup>26</sup>Fischer Black, “A Gold Standard With Double Feedback and Near Zero Reserves,” M.I.T., December 1981.

In the past decade, the United States repudiated part of its obligations by issuing bonds at an interest rate that was below the subsequent rate of inflation. This is not a game that can be played many times because it undermines the national credit rating. Similarly, using inflation to tax cash balances yields very little today because increasingly competitive private financial institutions have developed good cash substitutes whose interest rates keep pace with inflation. Tax bracket creep has probably also passed the point of diminishing returns, even if indexing is not instituted in 1985.

If the Fed monetized a few billion of added debt, that would have a trivial effect on reducing new federal borrowing. It could, however, have a sizable effect on raising the inflation premium on the interest rates at which the government must roll over a much larger volume of outstanding debt every four years or so.

It is no longer obvious that there is such a thing as unanticipated inflation. It also is increasingly doubtful that even the government can profit from anticipated erosion in the value of the dollar.

When faced with a similar predicament in the past, even myopic politicians found it in their narrow self-interest to guarantee the value of money. Such a guarantee freed them from the alternating ire of debtors and creditors, while allowing the government to lengthen its debts at a declining rate of interest. Recent arguments for gold-backed bonds, after all, are equally applicable to notes and bills. In that way, all dollar-denominated assets and liabilities are equally protected.

Another political incentive for returning to gold is to end the economic stagnation that invariably accompanies fiat money. Government cannot keep growing while the private sector is shrinking. Eventually, as we are learning, the austerity spreads to the State. Big government is a luxury that only a strong economy can afford. To those of us who prefer a small government this might appear to be a case against hard money. However, the *relative* burden of government always declines with brisk economic expansion, which is in the interest of both the political and market systems.

During the death throes of the last U.S. experiment with managed money, 90 years ago, William Graham Sumner offered a passionate plea to his peers. I can do no better than to end with his advice:

For us, the currency question is of the first importance, and we cannot solve it, nor escape it, by ignoring it. We have got to face it and work through it, and the best way to begin is not by wrangling about speculative options as to untried schemes, but to go back to history, and try to get hold of some firmly established principles . . .

No one can justly appreciate the natural resources of this country until, by studying the deleterious effects of bad currency and bad taxation, he has formed some conception of how much, since the first settlers came here, has been wasted and lost.<sup>27</sup>

<sup>27</sup>Sumner, p. 227.

## GOLD: A STANDARD AND AN INSTITUTION

*Roger W. Garrison*

Alan Reynolds's paper, "Why Gold?," is a far-ranging discussion of historical, theoretical, and policy issues. Taken as a whole it bolsters the case for some kind of a monetary system in which paper (or something) is convertible into gold. In his own words: "A gold standard simply means convertibility." His case appears to be independent of who is converting what. As a result of this rather broad conception of the gold standard, the particular reforms that Reynolds might support and the particular monetary systems that he might endorse span a considerable range. Accordingly, his case for gold is more in the nature of a series of hints that gold and good times go together. I have much sympathy for many of the viewpoints offered in his paper, but I have great difficulty reconciling these viewpoints with such exclusive attention to the issue of convertibility.

To provide the greatest contrast between Reynolds's ideas and my own, I will focus on those issues in which the institutional arrangements matter just as much, if not more, than mere convertibility. First, I will focus on the existing institutional arrangement and reconsider the old issue of the central bank's *will* and *ability* to control the money supply. This will set the stage for a contrast between gold as a monetary institution and the type of monetary institution advocated by monetarists. Second, I will deal with the relationship between a strong central bank and a workable gold standard, arguing that we can have one or the other but not both. My views run directly counter to Reynolds's position that the issue of the appropriate monetary standard and of the appropriate institutional arrangement are separate issues. Third, I will show how policy recommendations can take

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into account the interconnectedness of these two issues. And last, I will deal with the opponents of gold who base their arguments on the costs of reinstating and maintaining the gold standard.

## The Question of Will and Ability

For years the quest of the monetarists has been a central bank that has both the *will* and the *ability* to control the money supply. For most of the history of the Federal Reserve System the ability to control the monetary aggregates has not been in doubt. Only the will has been lacking. In the past two and a half years, though, there have been some signs that the Fed has actually mustered a little will. Unfortunately, it seems to have lost its ability. Monetarists should not console themselves by attributing this turn of events to bad luck. The simultaneous gain of will and loss of ability is not the kind of coincidence we find in a Thomas Hardy novel; it is a predictable result of the kind of incentives and institutional constraints the Fed faces.

This is not difficult to understand. During the interval of time between monetary crises, the demand for money is stable and money markets are well behaved. Nobody is watching the Fed. Maintaining control of the money supply is easy under such circumstances. But these are precisely the circumstances under which monetary expansion has its maximum potency. The Fed, encouraged by both the President and Congress, cannot resist the temptation to inflate. The resulting monetary crisis will eventually draw attention to the Fed's policies. Sooner or later, as in the present period, practically all economists, most cab drivers, and even some journalists come to understand that the Fed's monetary expansion is responsible for inflation. By this time all eyes are on the Fed.

Mustering the will to control monetary growth is a result, not of a change in the character of the central bankers, but of a change in incentives. When inflation gets sufficiently out of control, it becomes politically popular to try to control it. But these are precisely the circumstances under which control is difficult to achieve. The demand for money is unstable, and money markets are unpredictable. While *maintaining* monetary control would have been relatively easy, *regaining* control is another matter. The current volatility of monetary aggregates is a good measure of the Fed's inability to regain control. And if our current money managers do find a way to stabilize the monetary aggregates without a major institutional change, I predict they will once again lose the will to maintain that stability.

Hence I call on monetarists and nonmonetarists alike to begin

thinking of will and ability, not as the assumed qualities of a wise central bank, but as alternative characteristics of a worldly central bank. From this perspective we can avoid question-begging comparisons of alternative monetary systems. A system of fiat money in which an angelic central bank increases the supply of paper money at a slow and steady rate is, of course, preferable to almost any *actual* monetary system. But what conceivable set of institutional constraints would cause the central bank to behave like an angel?

Endorsing monetarist policy involves a fallacy that is easily recognized in other contexts. For instance, the statement can be made that a perfectly planned economy is more efficient than a market economy in which there is a constant groping toward the coordination of individual plans. This statement is true, but only in a definitional and trivial sense. Ideal planned economies compare favorably on efficiency grounds with real-world market economies, and ideal fiat-money systems may compare favorably with real-world gold-based systems. *But these comparisons are misleading and have no policy implications.* It is time that monetarists begin reevaluating their policy prescriptions in this light.

## Gold Instead of a Central Bank

Some reformers see gold as an instrument that can help the central bank do a better job—an instrument that can help the Fed behave *as if* it had both will and ability. I think this view involves a fundamental misdiagnosis of the problem. Using gold as a monetary base, for instance, would improve neither of these characteristics. Technically speaking, the Fed has the ability to keep the monetary base within a more narrow tolerance than would be exhibited by a gold base. And the Fed's will would be no stronger than its promise that monetary policy would be constrained by the amount of gold in its possession. The *implicit* promise that the central bank would be so constrained *used* to be effective when breaking that promise would have triggered a public uprising. But that was another day.

Today the Fed cannot stabilize the money supply until it regains some credibility; it cannot regain credibility until it demonstrates that it can maintain monetary stability. In a phrase, the Fed has crossed back over to the primeval side of the chicken-and-the-egg problem. And no marginal adjustment in the design or use of its monetary tools is capable of extricating the Fed from this predicament. A more drastic measure is required. Monetary reformers must force this institution, which is now utterly lacking in credibility, to perform an act that is *inherently* credible. The imagery that comes

to mind here is the final scenes of the old western movies in which the posse is closing in on the bandits. When they finally come face to face, the bandits are not ordered “promise not to shoot”; the order instead is “throw down your guns.” Monetary reformers must not be so naive as to confront the central bank and order “promise not to inflate”; the order instead must be “throw down your monetary tools.” Only when the central bank’s instruments of inflation are dismantled will it become credible that the bank will cease to be the engine of inflation.

It is with this understanding that the gold standard is put in the most favorable perspective. Gold is not the material with which we patch up a faltering central bank; it is a monetary commodity that can ensure confidence and hence stability in the *absence* of a central bank. Under a gold standard nature, not government, limits the size of the monetary base; competition and prudence govern the amount of money that the gold base will support. In such a system there is nothing left in the way of monetary policy that the central bank needs to do or can do. Thus, I urge the supporters of gold to offer the gold standard as an alternative *to* central banking and not as an essential element *of* central banking.

### Prediction and Policy Recommendation

Some may balk at the prospect of such a drastic institutional change. Let me suggest, then, that recommending a return to the gold standard is just one short step from making no recommendation at all. During my darkest moods I see the return to gold as a prediction rather than a policy recommendation; that is, I simply predict that, sooner or later, the central bank will do itself in. It will lose control of the money supply to such an extent that the entire monetary system becomes hopelessly unstable and suffers complete collapse. In the aftermath some medium of exchange will emerge anew as a result of the market process Carl Menger described over a hundred years ago. On the basis of our theoretical understanding we can predict that the new money will be a commodity money; on the basis of our historical insight we can predict that the commodity will be gold. (I might add here that if the new commodity money turns out to be paper, or plywood, or something else, I would not oppose it or even lament it. But I certainly would be surprised.)

We can transform this rather gloomy prediction into a policy recommendation by recognizing that if we act now, we may be able to bring about the transition to gold in a way that would be much less disruptive and less costly than simply letting the economic forces

play themselves out. The transition to gold requires the same institutional adjustments that are required for competing monies. First, the government returns all gold currently in its possession to private hands. (The particular way in which it accomplishes this step should not concern us for the moment). Second, the central bank ceases its efforts to manipulate the money supply, while legislation removes all institutional barriers to competitive money and banking. Then, as private competitors grow in size collectively, the erstwhile central bank withdraws from the business of producing money. The essential difference between a transition to gold and a transition to competing monies lies in the prediction that the market will choose gold over any other alternative. And again, if it does choose some other alternative (or alternatives), so be it.

### The "Costs" of a Gold Standard

Several observations about the "costs" of undergoing a transition to gold can now be made. The first point is the rather elementary one that the transition costs should be compared with the consequences of *not* making the transition. If the gloomy scenario described above is likely or even plausible, then the costs of a preemptive transition to gold are mild by comparison. But I think that we can say more about the costs if we break them down into identifiable components.

One component consists of the political costs of bringing about the transition to gold. It may seem less costly to make the Fed behave responsibly than to make it pack up and get out of town. The transition to gold, however, involves a one-shot cost that can compare favorably with the continual (and increasing) costs of maintaining and monitoring an ill-behaved central bank. And, in any case, there should be no illusion about maintaining a fiat standard indefinitely. The transition question is a matter of when, not whether. We simply need to recognize that the stronger and more widespread the support for a gold standard, the sooner and smoother the transition will be.

Another cost component consists of the costs of the economy-wide structural adjustments that a return to gold would entail. The adoption of sound money and the consequent fall in long-term rates of interest would dramatically alter capital values. Changes in relative prices of different kinds of capital goods would bring about fundamental modifications of the economy's capital structure. The costs of this capital restructuring are undoubtedly high, but they are bound to become even higher so long as investments continue to be made in an environment of unsound money. More important, the magnitude of these costs is also a measure of the distortions the economy

has suffered under fiat money. Thus, the higher this component of the transition costs, the more beneficial a return to sound money will be.

Many opponents of gold point to “resource costs” as a reason for recommending against returning to the gold standard. Maintaining a gold standard requires that gold be mined, stored, and guarded. This uses up real resources that could be better used for other purposes. Proponents of gold typically counter that incurring the resource costs is a small price to pay for sound money. Although I share these sentiments, it is better to demonstrate that the resource-cost argument against gold is fatally flawed. The decisive point is that none of these resource costs are avoided by the adoption of a paper standard. All the gold continues to exist and continues to be guarded, and additional quantities continue to be mined. In fact, if anticipating and hedging against inflation drives the price of gold high enough, the resource costs associated with paper money may well be higher than those associated with the gold standard. The only way to count resource costs against the gold standard is to assume that the alternative fiat system engenders so much confidence that gold ceases to have any monetary value. Not only is this assumption naive, but it completely begs the question about which monetary system is to be preferred.

Finally, let us recognize that, in an important sense, it is meaningless to talk about the “costs of sound money.” We must have sound money before we can compare costs or make meaningful economic calculations. The theory of the evolution of money provided by Carl Menger, together with the history of past and present paper-money episodes, suggests that sound money means gold. The only real issue is the strategic one of how to hasten its return.