ALTERNATIVES TO THE FED? Bennett T. McCallum

I must begin by saying that I have been extremely disappointed the word "appalled" may be more accurate—by several developments over the last two years involving the Federal Reserve. It was, I believe, appropriate that the Fed would respond with expansionary monetary policy in the face of a major macroeconomic downturn, which it did. But it did not have to do so by means of operations that incorporated major excursions into credit policy, as well as monetary policy, and thereby into the unauthorized exercise of fiscal policy.¹ By engaging in such operations on a very large scale, the Fed's actions are almost certain to have detrimental effects on the Fed's independence—and thereby on its resulting ability to focus attention on what should be its principal objective, namely, price level stability. Furthermore, the Fed has not been moving quickly—if at all—to explain and correct this situation.

All in all, the recent experience has had the effect of moving the Fed away from the type of policy behavior that mainstream academic analysts have been promoting over the past 15 years—namely, an activist but rule-based monetary stabilization policy that emphasizes

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¹Goodfriend and McCallum (2009) distinguish between pure monetary policy (changes in base money by central bank purchase or sale of Treasury securities), pure credit policy (changes in the composition of central bank assets with no change in base money), and interest-on-reserves policy (with no balance sheet changes). Since the Fed returns to the Treasury the interest received on the Treasury securities that it holds, it is the case that when the Fed sells Treasuries to fund expansionary credit policy the net results are the same as if the Treasury financed credit extensions by selling its securities to (i.e., borrowing from) the public.

the avoidance of significant inflation while also avoiding deflation. In saying this, I do recognize that the term "inflation targeting" has been gradually corrupted so as to permit excessive aspects of "fine tuning" relating to output and employment levels, but by and large I believe that the academic literature has been mostly constructive and that much of the commentary tending to discredit it on the basis of recent events has done so mistakenly.

Monetary Policy and Exchange Rates

In previous writings, I have argued that monetary policy and exchange rate policy are linked together so intimately that they should be considered as two sides of the same coin. From that perspective, it seems an unfortunate anachronism that official exchangerate responsibility is assigned to the Treasury or Finance Ministry in many economies, including the United States, Japan, and—to a small extent—even the European Union. But, in any case, this topic in turn leads us to contemplate other types of monetary regimes arrangements other than fiat money, managed by a national central bank, in the context of floating exchange rates.

In this regard there are, I believe, three main alternatives that need to be discussed. These are the gold standard, private competitive supply of money, and the Yeager-Greenfield plan for an automatically stabilized unit of account. For all three of these, a major outlet for sympathetic and scholarly discussion has been the *Cato Journal.* For this, the *Cato Journal* deserves much credit, even from readers who are basically supporters of the fiat-floating regime. I will attempt to provide some relevant considerations in the remainder of my presentation.

The Gold Standard

There are many critics of the gold standard among economists who are ardent believers that any monetary arrangement should have price stability as its overriding objective; one might mention Allan Meltzer, Anna Schwartz, and Leland Yeager. One reason for criticism is that while a traditional gold standard tends to protect an economy from major inflations or deflations over a decade or more, it permits a substantial amount of variability at the business-cycle frequency (see, e.g., Bordo 1981). The difficulty that I wish to emphasize here is different, however; it is one stressed in Friedman (1961)—one of his less-famous papers. My own way of thinking about this point begins with the assumption that any gold-standard arrangement today would be one in which the nation's monetary authority (MA) stands ready to exchange gold, at a fixed rate and in both directions, for the principal paper medium of exchange-let us use the term "dollars" and also assume that the medium of exchange (MOE) is the medium of account (MOA).² This fixed price is supposed to be maintained indefinitely. But if the MA has the capability of adjusting this price, then there is no *permanent* anchor for the price level even if dollars are at each point of time convertible into gold. The problem is that the population of the United States—like that of other countries-is full of congressmen, businessmen, union leaders, nonprofit organizations, voters, television commentators, and miscellaneous individuals who will be frequently clamoring for the MA to raise or lower the medium-of-exchange price of gold (or whatever is the standard commodity). An increase would then possibly be stimulative but only temporarily and would be followed by price increases for goods in general, that is, by a burst of inflation. Historically, the gold standard provided a reasonable degree of price level stability over long spans of time because the population at large had at that time a semireligious belief that the price of gold should not be varied but should be maintained "forever."³ But today the same political forces that impinge upon the Fed to be inflationary under our present arrangement would work through this alternative channel under the suggested gold system. Friedman (1961) referred to such a system as a "pseudo gold standard" and pointed out that it amounted in the United States of 1913–1961 to a price-support arrangement for gold producers rather than as a desirable monetary standard.⁴

 $^{^2}$ In this regard, I would like to point out that a recent piece by James Grant (2009)—two full pages in the *Wall Street Journal*—in effect adopts the same position (in its final paragraph). This *WSJ* piece has, apparently, been adapted from Grant's highly enjoyable presentation at the Cato Monetary Conference (November 19, 2009).

 $^{^3}$ Timberlake (1989: 317) reports that the London mint price of gold was kept nearly constant from 1665 to 1914.

 $^{^4}$ It should be noted that the present discussion, which focuses on changes over time in the dollar price of gold, does not consider possible variations in the reserve ratio. For an analysis that emphasizes such variations (in a somewhat different model than the one presumed here), see Goodfriend (1988)

Of course, there is the logical possibility of what Friedman called a "real" gold standard, under which actual physical coins or bars of gold would serve as the primary MOE despite the costliness of maintaining such a stock. But as Friedman (1960: 5–7) says, there is a very strong tendency for such a system to evolve into one with "fiduciary elements" and eventually to degenerate into a commodity currency in which the commodity is *paper*—or, today, digital storage capacity. In any event, I have (for simplicity) ruled out this possibility by assumption.

Competing Private Money Suppliers

The second alternative that should be mentioned is the provision of media of exchange by competing private suppliers. The most prominent of writings on this topic is probably the monograph by Hayek (1978), but the most comprehensive review of ideas that I have seen is provided by White (1989). The bulk of his discussion pertains to arrangements under which private issuers of notes and deposits used as MOE are convertible into gold or some other commodity (or bundle). If such convertibility were required by law,⁵ there seems to be little reason why a system of this type would not be viable, but there is also no reason why the legal par value would not be subject to the same pressures as those discussed in the previous section. These would be pressures not on individual banks (i.e., private issuers), but on the national monetary authority.

Next, to change the perspective, suppose that there were no legal restrictions on private note-and-deposit suppliers who could then offer purely fiduciary (i.e., inconvertible) currencies. Regarding this case, Friedman (1960: 7) argued:

Such a currency would involve a negligible use of real resources to produce . . . and would therefore seem to avoid any pressure to undermine it arising from the possibility of saving real resources. This is true for the community as a whole but not for any single issuer of currency. So long as the fiduciary currency has a market value greater than its cost of production—which under favorable conditions can be compressed close to the cost of the paper on which it is printed—

 5 I assume that such a requirement would include specification of a minimum gold/paper reserve ratio.

any individual issuer has an incentive to issue additional amounts. A fiduciary currency would thus probably tend through increased issue to degenerate into a commodity currency—into a literal paper standard—there being no stable equilibrium price level short of that at which the money value of currency is no greater than that of the paper it contains.

In the intervening half-century there have been some formal studies of this conjecture, several of which have been summarized by White (1989). The key analytical result seems to be that of Taub (1985), who finds that, because of the dynamic inconsistency involved, such a system could only be sustainable if the issuer were to provide potential users with a contractual commitment to redeemability in some acceptable medium—and this would require, I would add, general belief that the legal system will enforce such contracts. Given recent experience, it may be difficult to generate such belief.

Nevertheless, this last possibility seems worthy of additional consideration. A governmental agency with the sole responsibility of seeing that redeemability contracts are specified and enforced—and without the power to modify par values itself—might provide a type of arrangement that could withstand political pressures for monetary stimulus and also eliminate the possibility of private bank overissuance.

The Yeager-Greenfield System

The third alternative to be considered is an intriguing but somewhat elusive proposal developed in a number of papers by Leland Yeager (1983, 1985, 1992), plus others that are coauthored with Robert Greenfield (1983, 1989, 1995). The most prominent of these has been Greenfield and Yeager (1983), in which they refer to their proposal as the "BFH" system, as a consequence of its relationship to earlier writings by Fischer Black, Eugene Fama, and Robert Hall. It is my opinion that the system should nevertheless be attributed to Yeager and Greenfield, as they combine various features of the other writers and have championed the resulting product extensively and over a substantial period of time. I will, accordingly, refer to it as the Yeager-Greenfield system.⁶

⁶ This terminology was also used by Dorn (1989).

The central ingredient of the Yeager-Greenfield proposal is the suggestion that genuine price level stability can be brought about by the appropriate designation of a broad-based consumption bundle as the *unit of account* in a monetary system in which there is little or no role for government involvement.⁷ In this system the unit of account (UOA)—the unit in terms of which prices are quoted in most transactions—is based on a commodity bundle defined quite broadly so that movements in the cost of one such composite-commodity bundle closely represent movements in the "general price level." Stabilization of an index number representing the cost of a standard bundle will then amount to general price level stability, and movements in UOA prices of individual commodities will represent movements in the *real* prices of the respective goods; thus fluctuations in output and employment will not be generated by "monetary disequilibria." A second crucial ingredient is the specification of *indirect* redeemability of money-that is, note and deposit claims to standard bundles. The proposal specifies that holders cannot insist on convertibility of notes or deposits into actual, physical standard bundles, but instead only on payment in terms of some agreed-upon "redemption medium" such as gold or securities (Yeager 1992). Accordingly, I would describe the system as one involving a commodity-bundle standard with indirect convertibility-an acronym name might be CBIC. By stabilizing a broad index of prices such a system should provide much more price level stability than a monometallic or bimetallic system; indeed this aspect represents an extended version of Alfred Marshall's (1887) "symmetallism" or Friedman's (1951) "commodity reserve currency"-that is, what one might refer to as "symmetallism on steriods."8

 $^{^7}$ In Greenfield and Yeager (1983), the emphasis is on a economies in which electronic accounting systems have replaced tangible media of exchange, making them in a sense nonmonetary. The present discussion will ignore that feature, which is somewhat extreme and irrelevant to the points at issue.

 $^{^8}$ In my (1985: 32–38) discussion of Greenfield-Yeager (1983), I was under the mistaken impression that it did not call for any redeemability at all, and consequently I made some incorrect statements. My misreading resulted from statements on their p. 303, lines 15–21; p. 304, lines 10–11; p. 305, lines 37–39; and p. 306, lines 7–11. I did not, incidentally, claim (1985: 34–35) that the Yeager-Greenfield system fails to produce a determinate price level; what I argued (in an admittedly confusing way) was that it *would be* indeterminate if there were no specified link between the standard bundle and the unit of account.

The workings of the Yeager-Greenfield system are, experience suggests, not easy to understand, especially for economists who have not spent years in the study of monetary systems with private money provision. It is therefore interesting to find the following passage in a paper of Yeager's entitled "Toward Forecast-Free Monetary Institutions" in which he is discussing possibilities for central banks such as the Federal Reserve:

A modified version of Irving Fisher's . . . compensated dollar would further limit any [monetary] authority's discretion, circumvent the problem of lags, and lessen the need for forecasts or even for continuous diagnosis. The authority would be required to maintain two-way convertibility between its money and whatever changeable amount of some redemption medium was actually worth, at current prices, the bundle of goods and services specifying the target price index. (More exactly, the bundle would *define* the dollar.) If the dollar always exchanges against just enough redemption medium (possibly gold, but probably securities) to be worth the bundle, then the dollar is worth the bundle itself. The authority's obligation to redeem its money in this way at the holder's initiative puts teeth into its commitment to a dollar of stable purchasing power [Yeager 1992: 57].

Suppose then that dollars are paper bills and deposits at the MA. Imagine an episode in which the quoted prices of several commodities rise and none fall, so that the dollar price of a standard bundle of goods and services rises above 1.0. Then a dollar will be worth less than a bundle of the standard composition, so private agents will send dollars to the MA for redemption. The MA will redeem them and in the process of doing so will reduce the supply of dollars, thereby adjusting the money supply in the appropriate direction.⁹ Since it would be infeasible to store actual bundles of goods and services to match the bundle defined by the chosen price level index, the MA will redeem the dollars by paying (to the dollar-selling agents) securities whose current market value (at current prices) just equals the value of a standard bundle.

⁹ This statement assumes that "money" refers to the medium of account, which is also the medium of exchange.

In the initial 1983 Greenfield-Yeager article, the dollars were not tangible bills but, instead, electronic bookkeeping entries—an aspect of the presentation that had been featured in papers by Black (1970), Fama (1983), and Hall (1982). But it does not matter, from the perspective of monetary theory, what the physical form is for the evidence that one owns claims that the system is designed to keep very nearly equal in value to the market price of standard bundles. Greenfield and Yeager had a good reason for focusing upon cases in which there was no tangible medium of exchange—namely, so that it would be easier to imagine that the medium of account would differ from any traditional medium of exchange—but that focus is not essential to the logic of their system's monetary design.

It seems clear that the arrangement just described would, if implemented and maintained, keep the value of dollars, in terms of the broad price index adopted, essentially constant. It is also clear, however, that the same problem as that outlined in my discussion of the gold standard would again be present. Then the next issue would again be whether such a system—with competing private money providers instead of a central authority—would be immune to this problem and also the temptation for private suppliers to overissue. The latter difficulty could perhaps be overcome by means of the type of redeemability requirement mentioned at the end of the previous section.¹⁰

In an earlier discussion of the Yeager-Greenfield system, I considered the possibility that the redemption medium could be Treasury securities (McCallum 2004: 87–89). In that case, since the price of such securities is definitionally related to the interest rate earned by their holders, a MA's policy behavior could be expressed in terms of an interest-rate policy rule, with the rate (and thus the price of securities) adjusted in response to departures of the price level from its target value. One attraction of such a formulation is that it would make possible—at least in principle—quantitative studies of the type used currently by mainstream monetary economists.¹¹ A second feature is that it would indicate a strong formal similarity between the Yeager-Greenfield system and an interest-rate policy rule, for an

 $^{^{10}}$ Greenfield and Yeager (1983) suggest that the ordinary enforcement of contracts would suffice.

¹¹ In practice, however, such studies would be difficult since the relevant time periods would presumably be a few days or hours, rather than the usual quarter-years for which macroeconomic data are available.

inflation-targeting central bank, provided that the latter incorporates a zero inflation rate as its *sole* objective and adjusts its instrument very frequently (e.g., day by day) to achieve that objective.

Conclusion

The results of the foregoing discussion can be summarized briefly. There are two problems associated with a governmentally operated gold standard. The first is that stabilizing the price of gold is not a good substitute for stabilizing a broadly defined price level index. The second is that there are political forces continually at work that tend, whatever the index, to undermine maintenance of the standard. With respect to the first problem, it seems clear that adoption of a much broader index for stabilization is entirely feasible and desirable. For the second the problem is more difficult. It would seem that competing private suppliers of money would not have the same type of temptation to devalue the standard (i.e., inflate) as does a national monetary authority, but a temptation of a different type clearly exists for private suppliers. Some form of regulation might therefore be required, in which case the regulator might be faced with the same temptation to inflate as with a standard monetary authority. The best that can be done, probably, is to adopt institutions that are less subject to temptation than others and that promise to provide stability of a broad price index.

In any event, it is highly unlikely that major movements toward elimination of the Federal Reserve as the dominant monetary authority of the United States will become viable in the foreseeable future. Consequently, it would seem that obtaining a clear mandate for the Federal Reserve to make price stability its overriding objective should be regarded as a leading agenda item. From that perspective, it might be judged that the best practical strategy for the United States at present is to strive to protect the Federal Reserve from the type of politically based reorganization that is currently being considered by Congress,¹² and to campaign for recognition that a central bank/monetary authority should be given a clear lexicographic man-

¹² Current suggestions are designed to take policy influence away from regional reserve bank presidents, who have been less inflation-prone than Federal Reserve Board members, and to give Congress more influence over the selection of reserve bank presidents (i.e., to increase politicization of monetary policy).

date for price level stability. I confess, however, that I have little hope that the present U.S. Congress can be persuaded to take such a step.

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