COMPETITIVE MONEY, INSIDE AND OUT

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The aim of this essay, unlike so many works on monetary policy, is not to argue that the government monetary authorities ought to behave in a proper manner rather than the improper manner they have so often behaved in. Instead, it argues that the public ought not be forcibly subject to the vagaries of government monetary control. The way in which Federal Reserve officials choose to act is by no means a matter of indifference. It is, on the contrary, a matter of grave concern for anyone concerned about the values of his assets and the health of the economy. Monetary policy matters very much. But precisely because the public is so vulnerable to the errors of monetary policy, it is vital that some means of real protection be available. Attempts to elicit better behavior from the Fed do not go far enough in the way of vindicating the public's interest. Members of a free society should not have to suffer government control over their money at all.

The most fundamental question of monetary policy is whether government has any legitimate role to play in producing, or regulating the private production of, monetary assets. The question is especially crucial for those who, in the tradition of classical or real liberalism, are wary of the encroachment of coercive state power in areas competently handled by voluntary market interaction. As Milton Friedman has put it, "one question that a liberal must answer is whether monetary and banking arrangements cannot be left to the market, subject only to the general rules applying to all other economic activity."[1] Enthusiasm for monetary policy x or monetary pol-

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[1]Milton Friedman, *A Program for Monetary Stability* (New York: Fordham University Press, 1960), p. 4. While characterizing himself as "by no means convinced that the answer is indubitably in the negative," Friedman answers in the negative.

icy y presupposes the belief that government involvement is better than free markets in money and banking. Yet the reasoning behind this belief has been little explained by monetary policy enthusiasts, too few of whom have been troubled by the question.

Deregulation of Inside Money

Note the conjunctive phrase used by Friedman, "monetary and banking arrangements." There are two types of money used in our economy, as in other advanced monetary economies the world has known. They are (1) basic cash, in the United States today produced only by the Treasury (coins) and the Federal Reserve System (dollar bills), and (2) bank liabilities such as deposits transferable by check, usually privately produced, whose value derives from their being redeemable for basic cash. The distinction between these two types of money is usefully expressed by calling them "outside" money and "inside" money respectively. The question of market or government provision of money therefore resolves into two sub-questions, each dealing with one of the two types of money. It is possible to support deregulation of inside money without necessarily questioning the government position as sole producer of outside money. It is also possible to favor a system of privately produced outside money, for example a specie standard, without questioning bank regulation.

Deregulation of banking is properly a microeconomic issue, not an issue of monetary policy. The economic argument for abolishing any of the numerous ill-considered restrictions on banking is that free and open competition would better serve consumer wants. Full deregulation would eliminate the obvious waste created by erecting barriers around which competitors must maneuver. Numerous examples come to mind. Elimination of the interest ceiling on all deposits—now underway—will clearly benefit depositors. Clearing away the entry barriers that prevent non-bank financial firms and even non-financial firms from engaging in "banking" practices would widen the array of financial services and suppliers available to individuals and businesses. Legalization of interstate branch banking would permit the convenience of getting cash or paying by check away from home. The agenda for decontrol is a long one even after interest ceilings are lifted.

To summarize it briefly, the agenda for banking deregulation includes as its major items (1) repeal of lingering restrictions on loan and deposit interest rates and other pricing variables such as minimum balances, (2) elimination of restrictions on the asset portfolios of banks and especially thrift institutions (the difference between

banks and thrifts in this regard is entirely artificial and should be eliminated by freeing the asset-holding choices of both), (3) lifting of archaic geographic restrictions, (4) removal of regulatory barriers to entry into all aspects of the banking and financial industries, (5) an end to the peculiar taxes on deposits known as "reserve requirements," (6) privatization of deposit insurance, and (7) phasing out of the Federal Reserve System's roles as holder of bank reserves, including a closing of the discount window at which the Fed loans reserves to commercial banks and privatization of check-clearing services.[2]

One would expect some resistance to decontrol of banking to come from bankers themselves. Like the members of any industry, they enjoy restrictions that dampen the need to compete. Given the instability of private cartels, regulatory controls combined with closed entry are the only way to secure extra-competitive profits. And, in fact, there has been some pressure from banking industry groups to moderate the extent and slow the pace of deregulation. In December 1982, the Depository Institutions Deregulation Committee narrowly approved the checking accounts paying competitive interest rates that began in January. For no apparent reason other than to retain in cartel-enforcing fashion some producer surplus for the banking industry, the committee imposed a $2500 minimum balance on the accounts and barred corporations from holding the accounts.

Resistance to decontrol has recently arisen, however, from a more ominous source—the Federal Reserve System—on the grounds that deregulation of inside money poses a threat to the effectiveness of monetary policy. In November 1982, for example, the Deregulation Committee issued regulations governing the "money market" deposit accounts that banks and savings institutions began offering in December. The Committee laudably introduced no reserve requirements. Rather than leave free the minimum balance for an account and the number of transfers per month that may be made from an account, however, the Committee arbitrarily imposed a minimum balance of $2500 and a maximum of six transfers per month to third parties, only three of them by check. Press reports noted that Paul Volcker, Chairman of the Federal Reserve, had favored the transfer limitation and had argued for an even higher minimum balance of $5000, the highest Congress would allow. Volcker's argument: Greater

[2]Compare Catherine England, "The Case for Banking Deregulation," Heritage Foundation *Backgrounder*, March 26, 1982, p. 2, which mentions only the first three items. Privatization of deposit insurance is advocated by Catherine England and John Palffy, "Replacing the FDIC: Private Insurance for Bank Deposits." Heritage Foundation *Backgrounder*, December 2, 1982.

freedom from restrictions would allow the accounts to become more attractive to consumers than ordinary savings and checking accounts. This, he believed, would render more difficult the Fed's policy of controlling statistical measures of the money supply.[3]

Thus we see illiberal and inefficient regulations on banking activity defended as a means toward accomplishing the goal of targeted monetary growth. This is sadly ironic. The monetarist program of targeting monetary aggregates has long been advocated by Friedman not as an end in itself, but as "the only feasible device currently available for converting monetary policy into a pillar of a free society rather than a threat to its foundations."[4] If it is true that targeting broader monetary aggregates such as M1 and M2 requires restrictions on the freedom of banks and financial institutions to serve consumers efficiently, the game is not worth the candle, given the stated values of the game's best-known advocate. It would be more consistent for a free-market monetarist to favor targeting of the stock of government currency liabilities alone. I specify the stock of currency held by banks and the public rather than the aggregate presently called the monetary base (the sum of currency plus bank reserves held as currency-redeemable deposits at the Fed) only because full deregulation of inside money would fully privatize check-clearing and the holding of reserves.

Friedman, in fact, long ago acknowledged that "merit" exists in the proposal, which he attributed to Gary Becker, "to keep currency issue as a government monopoly, but to permit 'free' deposit banking, without any requirement about reserves, or supervision over assets or liabilities, and with a strict *caveat emptor* policy."[5] And he evidently still acknowledges it: According to a recent newspaper account of his remarks, he would replace the Federal Reserve System either with a fixed money supply growth rule *or* a freezing of the stock of currency with no regulatory restrictions on private bank deposit creation.[6] Why then have Friedman, other free-market monetarists, and

[3]*New York Times*, November 16, 1982, p. D14; *Wall Street Journal*, November 16, 1982, p. 2.

[4]Milton Friedman, "Should There Be an Independent Monetary Authority?" in Leland B. Yeager, ed., *In Search of a Monetary Constitution* (Cambridge: Harvard University Press, 1962), p. 243. An identical statement appears in Friedman, *Capitalism and Freedom* (Chicago: University of Chicago Press, 1962), p. 55.

[5]Friedman, *A Program for Monetary Stability*, p. 108 n. 10. Though Friedman gave no citation, Becker's proposal is expounded in Gary S. Becker, "A Proposal for Free Banking," unpublished manuscript (1957).

[6]*Philadelphia Inquirer*, November 24, 1982, p. 2-E. Friedman's remarks came in a debate to be broadcast over public television in 1983. The latter option has also been suggested by R. H. Timberlake, Jr., "Monetization Practices and the Political Structure of the Federal Reserve System," Cato Institute *Policy Analysis*, August 12, 1981, pp. 10–12.

a fortiori other monetary economists yet been reluctant to endorse free deposit banking? What are the arguments, explicit or implicit, against free competition in the production of inside money?

In large part the skepticism or hostility of even free-market-oriented economists toward free markets in banking appears to be the result of their accepting at face value the myths that prevail with regard to the historical record of unregulated banking in the last century. The following statement by Friedman is perhaps representative of a widely shared reading of history:

> The very performance of its central function requires money to be generally acceptable and to pass from hand to hand. As a result, individuals may be led to enter into contracts with persons [i.e. to accept the notes of bankers] far removed in space and acquaintance, and a long period may elapse between the issue of a promise and the demand for its fulfillment. In fraud as in other activities, opportunities for profit are not likely to go unexploited. A fiduciary currency ostensibly convertible into the monetary commodity is therefore likely to be overissued from time to time and convertibility is likely to become impossible. Historically, this is what happened under so-called "free banking" in the United States and under similar circumstances in other countries.[7]

In fact, according to the recent work of the economic historians who have seriously investigated the question, losses to noteholders under most state "free banking" systems in the United States were a much more minor problem than once supposed. The evidence "presents a serious challenge to the prevailing view that free banking led to financial chaos."[8] Nor did other nations' free banking systems show an inherent tendency toward over-issue.

The convertibility problems that did exist in a few states were not due to some inherent instability in unregulated banking. On the contrary, those problems may be traced to the state regulations that framed the systems. While the so-called "free banking" systems did provide for entry into banking without the need to obtain a special charter from the legislature, their leading feature was the require-

[7]Friedman, *A Program for Monetary Stability*, p. 6. I hope it is clear that I have no special animus against Friedman. Quite the contrary: I have singled out his statements for criticism only because our values are similar and, to his credit, his chains of reasoning on this topic are particularly clear and explicit. I also make these criticisms in *Free Banking in Britain* (New York: Cambridge University Press, forthcoming), chap. 5, with special emphasis on the evidence from free banking experience in Scotland.

[8]Arthur J. Rolnick and Warren E. Weber, "The Free Banking Era: New Evidence on Laissez-Faire Banking," Federal Reserve Bank of Minneapolis Research Department Staff Report 80, May 1982. See also Hugh Rockoff, "The Free Banking Era: A Reexamination." *Journal of Money, Credit and Banking* 6 (May 1974): 141–167.

ment that issuers deposit approved bonds with state officials as collateral against their notes. Because this requirement forced banks to devote a major share of their assets to state bonds, the banks were failure-prone during periods of declining state bond prices. This was the principal source of their notoriously frequent inability to redeem their notes at par.[9] Unregulated banks would naturally diversify their asset portfolios. In addition, perhaps because the banks provided a market for state debt, state legislature sometimes intervened by passing suspension acts to block the enforcement of redemption obligations against over-extended banks. This encouraged overissue by reducing the legal penalty for it. There also remained in place restrictions against inter-regional branch banking, a development that would have promoted stability and the wide circulation of trustworthy notes. For these reasons "free-banking" as applied to these systems is a misnomer; "bond-deposit systems" would be more accurate.

For evidence on the stability or instability of a virtually unregulated banking system it is instructive to turn to Scotland, which had a genuinely free and remarkably stable banking system for more than a century prior to amalgamation with the English system in 1844.[10] There, due to vigorous competition among widely branched banks, the notes of bankers "far removed in space and acquaintance" could not gain currency. A very short period elapsed between the issue of any note and its return to the issuer for fulfillment of its promise to pay. Competition had led all issuers to accept one another's notes at par and to join in a single note-exchange (clearinghouse) system. Notes issued by Bank A in a loan would, after being spent by the borrower, soon come into the possession of individuals who deposited them with Banks B through Z; these banks would return the notes to Bank A through the note-exchange system and demand redemption of them. No individual bank could overissue without rapidly being disciplined by adverse clearing balances. The case of the Ayr Bank, discussed at length by Adam Smith,[11] bears witness to the efficacy of the note-exchange mechanism.

[9]Arthur J. Rolnick and Warren E. Weber, "Free Banking, Wildcat Banking, and Shinplasters," Federal Reserve Bank of Minneapolis *Quarterly Review* 6 (Fall 1982): 10–19.

[10]See Lawrence H. White, *Free Banking in Britain*, chap. 2; Rondo Cameron, *Banking in the Early States of Industrialization* (New York: Oxford University Press, 1967), chap. 3; S. G. Checkland, *Scottish Banking: A History, 1695–1973* (Glasgow: Collins, 1975).

[11]Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, R. H. Campbell, A. S. Skinner, and W. B. Todd, eds. (Indianapolis: Liberty Classics, 1981), pp. 313–317.

In the United States the situation of distant bankers overissuing notes with poor homing power, suggested by the quote from Friedman, was experienced in a few states. These issuers were the "wildcat" banks, so called because the bank offices were supposedly located out in the untamed forests among the wildcats. It is clear that today's advanced communications networks eliminate a necessary condition for wildcat banking.[12] Even in the last century, however, wildcat banking was by no means inevitable. It did not occur in Scotland. It was made possible in the United States only by the reluctance of state governments to prosecute fraud where it did occur. It was abetted by the prohibition of interstate branch banking. Bank notes could find their way beyond the areas where they could be redeemed only because redemption areas were circumscribed. Bank notes traded at a discount in cities outside the area of redeemability. Individuals were willing to bear the loss in value from carrying notes from the area of redeemability, where the notes traded at par, to an outside city, where the notes traded at a discount, only because the superior alternative—a bank note redeemable in both locations and therefore valued at par in both locations—was ruled out by the ban on interstate banking.

The pyramiding of reserves, which has been thought to make banking inherently unstable and in particular to have produced the panics of late 19th-century America, was the product of the artificial unit banking system.[13] That a large group of banks came to trust their reserves to a single bank or to a smaller group of banks was, as it was in England, the result of artificially excluding banks from regional and national financial centers. In Scotland each bank held its own reserves; there was no pyramiding. No less an authority than Walter Bagehot pointed out that each bank holding its own reserves was the natural system that would emerge in the absence of intervention. Bagehot was unequivocal in saying that one central bank holding reserves for the entire system was a poor idea. It had grown up in England as the perverse consequence of unwise banking legislation.[14]

If the objections to full deregulation of inside money creation are largely based on a misreading of history, as I believe they are, the case in favor of it based on its enhancement of liberty and efficiency

[12]As Friedman, *A Program for Monetary Stability*, p. 108 n. 10, recognized.

[13]See Vera C. Smith, *The Rationale of Central Banking* (London: P.S. King & Son, 1936), pp. 138–140.

[14]Walter Bagehot, *Lombard Street* (London: Henry S. King & Co., 1873), pp. 66–69, 100.

is a strong one. There seems to me no inherent reason why monetarists, gold standard advocates, and denationalization of money advocates cannot all join in supporting deregulation of banking.

For monetarists, as already indicated, this would mean shifting to a monetary rule based on the growth of the monetary base or stock of currency rather than a broader monetary aggregate.[15] If some monetarists in the past have favored targeting a broader aggregate, it is because historically they have found its measured velocity to have been slightly more stable than the velocity of the monetary base. In an era of major innovations in the payments system and the variety of near-money instruments—the past few years have already seen two redefinitions of the broader aggregates—the monetary base is a safer bet.

Gold standard advocates should also find deregulation of inside money congenial with their free-market outlook. Some have, it is true, defended 100 percent reserve requirements on banknotes and demand deposits on the grounds that fractional reserve banking is somehow inherently fraudulent.[16] But it is difficult to see why fraud is inherent in the issue of—as opposed to the failure to redeem—ready claims to gold against which less than a 100 percent reserve is held at any moment, provided that the claimholders not be misled about the arrangement. If it is inherently fraudulent for a bank, is it also inherently fradulent for an insurance company to issue more claims than it could redeem were all to come due at a single moment? It seems more just to say that a claimholder suffers an actionable breach of contract only when the claim issuer actually fails to honor the claim, not when the issuer's ability to honor all its claims (in the event of their arriving simultaneously and unexpectedly) falls below 100 percent. It is at least not clear why such a non-bailment contract between bank and customer is inadmissible. The legal prohibition of fractional-reserve banking would mean an abridgement of freedom of contract and a blockage of opportunities for mutually beneficial exchange. Under a gold coin standard with deregulation of inside money, those individuals who insist on 100 percent bank liquidity could have their wants satisfied by 100 percent reserve institutions. Individuals who prefer the higher interest that a fractional-reserve

[15]Eugene Fama, "Fiduciary Currency and Commodity Standards," unpublished manuscript (January 1982) has adopted this position.

[16]Murray N. Rothbard, "The Case for a 100 Per Cent Gold Dollar," in Leland B. Yeager, ed., *In Search of a Monetary Constitution* (Cambridge: Harvard University Press, 1962), pp. 113–120. Rothbard argues that a demand deposit should be treated in law as a warehouse receipt or bailment. But why should the law prohibit contracts that by mutual agreement do not treat demand deposits as bailments?

bank can pay (because it holds some interest-earning assets) would likewise be free to hold contractual claims to gold issued by those institutions. Historical experience with free banking in Scotland indicates that fractional-reserve banks under conditions of free contract can operate with sufficient security to outcompete 100 percent reserve banks totally, though this fact of course does not answer the normative jurisprudential question of whether such freedom of contract should be allowed.

Denationalization of Outside Money

Even more fundamental—and hence more controversial—than deregulation of inside money is the question of denationalization of outside money. We are indebted to F. A. Hayek for raising this question to prominence by publication of his booklet *Denationalisation of Money* in 1976, with a second edition in 1978.[17] The advocate of competitive market provision of outside money is somewhat at a disadvantage in stating his case. In contrast with the advocate of a specific government monetary policy, he cannot with certainty spell out in exhaustive detail the institutional change his program would bring. That is because an essential part of free market provision is the freedom of institutions to develop and adapt themselves to consumer wants in unforeseeable ways. Market competition is a discovery procedure, as Hayek has remarked.[18] Its results are different than anyone could predict or deliberately bring about, and therein lies its virtue: Its unpredictability is owing to its aptitude for discovering that goods and ways of providing goods not previously known, or at least not previously known to be profitable, are in fact profitable. This is true of competition in the provision of outside money as in the provision of any good. Only through the competitive process can we discover what sorts of outside money, and what ways of supplying it, are best suited to consumer preferences.

Any scenario of a future free-market monetary system, then, should be considered conjectural in its details. The suppositions the scenarist makes concerning the dominant forms of outside money are necessarily no more than suppositions, whose purpose is simply to

[17]F. A. Hayek, *Denationalisation of Money*, 2nd ed. (London: Institute of Economic Affairs, 1978). For an able survey of the literature on this topic see Pamela J. Brown, "Constitution or Competition? Alternative Views on Monetary Reform," *Literature of Liberty* 5 (Autumn 1982): 7–52.

[18]F. A. Hayek, "Competition as a Discovery Procedure," in *New Studies in Philosophy, Politics, Economics and the History of Ideas* (Chicago: University of Chicago Press, 1978), pp. 179–190.

illustrate the idea of privately produced money. (Some forms of outside money are more plausible than others, of course.) This is worth keeping in mind because the advocacy of monetary freedom should not be identified with the advocacy of particular forms of money. There is a danger, for example, that Hayek's conjectures concerning the sort of outside money that might come to dominate under open competition (namely, privately issued inconvertible currencies whose purchasing powers are kept stable in terms of market baskets of wholesale commodities by means of quantity control) will give his work an air of what we may call social-science fiction. Hayek's attempt to forecast "the future unit of value" can only be regarded as an entrepreneurial speculation, not as a prediction derivable from economic theory.[19]

Such speculation should not be allowed to distract attention from Hayek's most valuable message:

> [T]here is no reason whatever why people should not be free to make contracts, including ordinary purchases and sales, in any kind of money they choose, or why they should be obliged to sell against any particular kind of money. There could be no more effective check against the abuse of money by government than if people were free to refuse any money they distrusted and to prefer money in which they had confidence.[20]

Economists have recently explored the properties of three systems under which government would not produce outside money. (1) Hayek and Benjamin Klein have conceived of a multiplicity of privately produced non-commodity outside monies.[21] (2) Fischer Black, Eugene F. Fama, Robert L. Greenfield, and Leland B. Yeager have conceived of a payments system, based on checkable mutual funds, that is devoid of outside money.[22] (3) Elsewhere I have discussed a

[19]See F. A. Hayek, "The Future Unit of Value," paper presented to Visa International Annual Conference, September 14, 1981.

[20]F. A. Hayek, "Choice in Currency: A Way to Stop Inflation," in *New Studies*, p. 225. In this essay, written earlier than *Denationalisation of Money*, Hayek was willing (p. 227) to entertain the possibility that gold would prove the most popular currency.

[21]Benjamin Klein, "The Competitive Supply of Money," *Journal of Money, Credit and Banking* 6 (November 1974): 423–453.

[22]Fischer Black, "Banking and Interest Rates in a World Without Money: The Effects of Uncontrolled Banking," *Journal of Bank Research* (Autumn 1970): 9–20; Eugene F. Fama, "Banking in a Theory of Finance," *Journal of Monetary Economics* 6 (January 1980): 39–67; Robert L. Greenfield and Leland B. Yeager, "A Laissez Faire Approach to Monetary Stability," *Journal of Money, Credit and Banking* (forthcoming). For criticism of the concept of a competitive payments system devoid of outside money, see Lawrence H. White, "Competitive Payments Systems and the Unit of Account," unpublished manuscript (1983).

free banking system based on convertibility into a commodity money, such as coined precious metal, which could be privately produced.[23]

History has seen privately produced commodity money, in particular privately minted gold and silver coins,[24] but so far as I know has not seen competition among privately produced non-commodity outside monies, nor sophisticated payments systems devoid of outside money. For this reason free banking on a specie standard is the most plausible monetary system free of government involvement. (Again, this is not to suggest that markets should not be open to other forms of private money or barter.) It clearly is the system that would have emerged in the absence of the state interventions of past centuries. We today have a system of government-issued fiat currencies only because governments successively monopolized the coinage, monopolized the issue of banknote currency through the creation of central banks, and permanently suspended convertibility for central bank liabilities. No private firm under open competition could have taken the first two of these steps in the absence of "natural monopoly" conditions. Suspension is a breach of contract that only a government or government-sheltered agency can commit with impunity. Economists who defend the government's monopoly provision of outside money presumably defend each of these steps, or think it not advisable to reverse them having once taken them.

The standard approach used by economists to justify government production of a good, or regulation of its private production, is to argue that the good in question is a "public good," or a good that generates Pareto-relevant positive externalities. Because the potential producer of a public good cannot sell the external benefits he would generate, the good may be underproduced or not produced at all if left to the profit-driven free market. It is possible to challenge this approach on the scientific ground that its theoretical concepts are lacking, or on the ethical ground that the production of an external benefit does not create a right to seize compensation from those benefited.[25] In the case at hand neither challenge is necessary because it is obvious that money—being simply an asset generally accepted

[23]Lawrence H. White, "Free Banking as an Alternative Monetary System," in M. Bruce Johnson and Gerald P. O'Driscoll, eds., *Inflation or Deflation?* (Cambridge, Mass.: Ballinger Publishing Co., forthcoming). Admittedly the emphasis there was on deregulation of inside money.

[24]On the American experience see Donald H. Kagin, *Private Gold Coins and Patterns of the United States* (New York: Arco Publishing, 1981).

[25]For the first challenge see Tyler Cowen, "The Problem of Public Goods: A Preliminary Investigation," unpublished manuscript (1982); for the second see Robert Nozick, *Anarchy, State, and Utopia* (New York: Basic Books, 1974), p. 95.

in payment—is not a public good. The market did not fail to produce money. Money satisfies neither the non-rivalness-in-consumption criterion nor the non-excludability criterion associated with public goods: The money one individual owns is excluded from ownership by anyone else, and the liquidity services provided by that money cannot simultaneously be enjoyed by anyone else.[26] It is true that government monetary policy can affect the servicability of money when government controls the production of money, but that does not justify government production of money or show money to be a public good. The public-goods argument for government production of money boils down to the claim that government can produce a money with desired characteristics that private firms cannot produce. There is no evidence that this is the case, although there is plenty of evidence that a government monopoly can stay in business producing a money worse than any private producer could.

It may be argued that uniformity of money is a public good because it reduces informational burdens on transactors, and that government may provide that good by suppressing the variety of monies that prevails under open competition.[27] The argument proves too much, however: It holds equally against proliferation of a variety of products or brands in any industry. It amounts to arguing that too much choice makes life difficult for consumers and ought to be suppressed by government choosing for them. This sort of intervention in fact eliminates the only process available—market competition—for discovering which products and how many brands best serve consumer preferences. Even if the market process will eventually converge on a single type of money, e.g. converge out of a state of barter on a single precious metal as the outside money commodity, the time spent converging is not a wasteful aspect of competition that may

[26]See Roland Vaubel, "Welfare Economics and the Government's Monopoly in the Production of Base Money: A Critique," unpublished manuscript (July 1982), esp. pp. 3–24. After a thorough investigation Vaubel concludes (p. 25) that "externality theory fails to provide a convincing justification for the government's monopoly in the production of (base) money."

[27]Carl Menger surprisingly makes this argument in chap. 5 of his article "Geld," reprinted in F. A. Hayek, ed., *The Collected Works of Carl Menger* (London: London School of Economics and Political Science, 1936); unpublished abridged English translation by Albert H. Zlabinger. The argument is also made by Karl Brunner and Allan H. Meltzer, "The Uses of Money: Money in a Theory of an Exchange Economy," *American Economic Review* 41 (December 1971): 801–802. It is cited and criticized by Vaubel, p. 7 n. 2. In particular Brunner and Meltzer assert that the suppression of multiple bank note issuers in Britain by the Act of 1844 "raised economic welfare by reducing costs of acquiring information." Having studied the Act and the circumstances surrounding it, I find this statement incredible.

efficiently be supplanted by government edict. Government would not be in a position to know what the market process would have selected as most suitable. If the market will instead support a number of brands, as under competitive conditions it has in the production of coins and inside money, entry barriers serve no welfare-enhancing purpose.

The question of the optimal number of money producers may be approached in another way. Proponents of government production of money have argued that "the production of a fiduciary currency is, as it were, a technical monopoly," or a "natural monopoly," so that competition is not feasible.[28] If the phrase "fiduciary currency" is intended to cover fractionally backed inside currencies such as specie-redeemable bank notes or dollar-redeemable traveller's checks, then the natural monopoly argument is empirically false. No tendency toward the dominance of a single producer due to unlimited economies of scale was seen in the Scottish free banking system; nor is such a tendency evident among traveller's check producers today.

There is more room for believing that the production of fiat outside money, if this is all that "fiduciary currency" means, is akin to a natural monopoly. This is because there is an inherent tendency for traders in an economy to converge on a single good (or a very small number of goods) as outside money. Carl Menger long ago explained why: Each individual in pursuit of the easiest way of completing his desired trades finds it advantageous to accept and hold an inventory of the good or goods that other individuals will most readily accept.[29] Where the traders converge on a commodity money, as they naturally will out of a barter setting, no natural monopoly problems arise. Neither the mining nor minting of precious metals gives indication of being a natural monopoly.

Where government has suppressed commodity money in favor of fiat money the question of natural monopoly does arise. Whether the production of fiat money is in fact a natural monopoly, i.e. whether traders in region would in fact use a single fiat money were they free to use any potentially available, is not *a priori* obvious. Even if the answer were positive there would be no rationale for legal barriers to entry. Nor would it follow inevitably that fiat money production should be nationalized; a private monopoly disciplined by potential competition and competition at the borders might be better. Most

[28]Milton Friedman, *A Program for Monetary Stability*, p. 75; Roland Vaubel, "Free Currency Competition," *Weltwirtschaftliches Archiv* 112 (1977), pp. 437, 458.

[29]Carl Menger, *Principles of Economics* (New York: New York University Press, 1981), chap. 8.

importantly, to argue from potential natural monopoly in fiat money production that government should provide fiat money is entirely to beg the question: Why fiat money at all rather than commodity outside money? I do not know of a single historical case of fiat money supplanting commodity money through competition rather than compulsion. Where then is the evidence that consumers prefer fiat outside money to commodity outside money?

It might be argued that inconvertibility of money confers social benefits because it reduces costs of producing money, yet these cost savings cannot be realized through market processes because fiat money cannot emerge in piecemeal fashion. An established monetary standard spontaneously persists as a social convention because no trader by himself finds it advantagous to abandon it. All money-users must be compelled to switch over simultaneously if inconvertible paper is to gain currency. If the public are to choose intentionally between standards they must do so in a setting of constitutional choice. It cannot be claimed that one standard is Pareto-superior to another unless the other has no partisans in this choice setting. The fact that a switchover must be compulsory robs us of any assurance that the change is for the better as consumers view it. The argument that compulsion is justified because it is necessary to reach a new social convention might be made not only in money but also in language (e.g., a compulsory switchover to Esperanto) or weights and measures (e.g., compulsory metrification). Yet a social engineer's confidence that his blueprint will prove superior to a system evolved spontaneously out of the interaction of many minds must rest in large measure on constructivist hubris. Seldom if ever does a complex social institution operate according to a blueprint.

The belief is common among economists that the replacement of commodity money by paper money constitutes a social savings because paper is cheaper than precious metal. Yet this overlooks the possibility that consumers prefer commodity money to fiat money strongly enough to consider the resource costs worth bearing. Monetary theorists may assume that what consumers care about is simply the quantity of real money balances, or that plus the first and second moments of a probability density function over rates of change in the purchasing power of money. For many analytical purposes these assumptions are useful. But to use such assumptions in comparing alternative outside monies is illegitimate. Economists are not in a position to divine consumers' true preferences in a hypothetical constitution-like choice and thereby to design optimal social institutions for them. In particular it cannot be taken for granted that

money users are unwilling to forgo some alternative uses of a precious metal in order to use some of it as outside money.[30]

Consumers would conceivably consent to the replacement of a commodity currency by a fiat currency only if they themselves enjoyed the resource savings. A government earnestly desiring to make a Pareto improvement might then offer fiat currency in proportion to a citizen's holdings of specie, but allow him to retain the specie. Historically the introduction of fiat money has not come about in this way. It has instead come about by permanent suspension of redeemability of central bank liabilities, enriching only the government. The hypothesis that fiat money is potentially Pareto-superior even if true (which is doubtful) would therefore not explain historical transitions to fiat money. Those who agree with Milton Friedman, that government expenditures will rise to more than dissipate any level of income government can extract, would rather doubt that government passes on the savings from fiat money to the citizenry through lower overt taxation. Transition to fiat money gives government opportunities for further self-enrichment at the clear expense of the populace through inflationary finance. It can now commandeer resources from the private sector simply by printing the greenbacks to pay for them. Fear of this possibility would rationally create a preference for hard outside money were a choice between standards offered at a constitutional level.[31] America's Founding Fathers placed a prohibition of fiat currency into the Constitution, for whatever that fact is worth. It cannot be said that the fear of reckless monetary expansion under irredeemable currency is historically groundless.[32]

A final argument made for nationalization of outside money is that it is necessary to the existence of a lender of last resort, that is, a central banking institution standing ready to lend reserves to solvent but illiquid commercial banks. It cannot be argued that illiquid banks would have no recourse in the absence of a central bank: There would exist a system of interbank lending of existing reserves, such as the Federal funds market that operates today. If a temporarily

[30]Or forgo some alternative uses of the resources necessary to supply the precious metals. For this argument in another form see Lawrence H. White, "Free Banking as an Alternative Monetary System."

[31]As recognized by J. Huston McCulloch, *Money and Inflation: A Monetarist Approach*, 2nd ed. (New York: Academic Press, 1982), pp. 75–76. McCulloch makes an interesting case for silver as a better monetary metal than gold.

[32]As noted by Phillip Cagan, "A Review of the Report of the Gold Commission and Some Thoughts on Convertible Monetary System," unpublished manuscript (October 1982), p. 4. On the U.S. Constitution's intended prohibition of fiat money see Kenneth W. Dam, "The Legal Tender Cases," *Supreme Court Review* (1981), pp. 381–382.

illiquid bank is solvent and worth saving, a profit can be made lending to it, and lenders will be forthcoming. If the bank is insolvent and not worth saving, the real resources tied up in it are best freed to find more productive uses elsewhere through the bank's dissolution. Certainly there are wealth losses associated with the failure of a bank, as with the failure of any business firm, but these are not Pareto-relevant externalities. The failure of one bank should not lower public estimate of the soundness of other banks where banks are free to invest in establishing distinct identities in the public's mind. No runs on the banking system occurred in Scotland under free banking.

It is not even true that a lender of last resort (i.e., an institution able to increase the system's total existing reserves) can exist for a regional banking system only if some central body can create outside money at will. Under an international specie standard, for instance, it is possible for banks of one nation to borrow reserves from banks or other specie-holders of another nation. Only when a banking system is coextensive with the currency area of its outside money can the volume of total outside money reserves be augmented for the banking system as a whole solely through the agency of a lender of last resort able to create outside money at will. The power to create outside money at will is consistent only with fiat money. It is doubtful that an unconstrained power to print cash can be created without being subject to abuse. The lender of last resort function is clearly inconsistent with a strict quantity rule governing the creation of outside money. Monetarists who advocate both a lender-of-last-resort role for the Federal Reserve System and a rule-bound path for bank reserves or outside money (a.k.a. the monetary base) must have in mind a less-than-strict quantity rule.

Milton Friedman, to his credit, has called for a permanent closing of the Fed's discount window.[33] This change would eliminate the Fed's capacity to function as a lender of last resort in the classic sense. It is true that under Friedman's proposal of an M1 or M2 quantity rule the Fed could deliberately vary the stock of outside money in an attempt to offset temporary changes in the real demand to hold outside money. But this seems no different in principle from deliberately varying the stock of M1 or M2 (via the monetary base) in an attempt to offset temporary changes in the real demand to hold one of those aggregates, a policy Friedman would properly criticize.

[33]Milton Friedman, *A Program for Monetary Stability*, pp. 44, 100. On the other hand Friedman, "Commodity-Reserve Currency," *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953), p. 218, endorses the holding of an ultimate reserve for a fractional reserve banking system.

The injection of new outside money by a central bank acting as lender of last resort, like the injection of outside money in any way other than through a perfectly anticipated proportional addition to every person's holdings of outside money, redistributes wealth involuntarily. Rather than having to induce holders of existing outside money to lend it voluntarily by offering an attractive interest rate, the illiquid bank receives new cash loaned at a below-market rate that tacitly dilutes the purchasing power of existing holdings. That an increased public demand to hold cash may make cash scarcer for banks is a pecuniary externality, not a Pareto-relevant externality that could be invoked to justify subsidization of banks. At bottom, the lender of last resort function is a device for shifting from bank shareholders to the money-holding public the burden of bearing a risk associated with their banking business.

Because the lender of last resort relieves the bank shareholders of some of the risk of illiquidity from bad loans, profit-maximizing banks can be expected to take on loans riskier than they otherwise would have. Western banks would not have made such large loans to governments of less-developed countries—loans that have been much in the news since their riskiness became manifest—had they not believed that an international lender of last resort, namely the International Monetary Fund, would absorb the risk. The question now is whether that belief will be vindicated, the American taxpayer or dollar-holder being forced to pick up the tab for loan losses that should properly fall on bank shareholders.

The Agenda for Denationalization of Outside Money

There is no justification in benefits to the public for government production of outside money. In fact, political control over the quantity of outside money is responsible for the monetary ills of inflation and recession we suffer.[34] What then is to be done? The very least to be done is to open the production of outside money to potential competition from commodity monies, private inconvertible currencies as envisioned by Hayek, and foreign currencies. The legal and regulatory barriers to private production of alternative outside monies are greater than is typically recognized by economists considering the possibility. The following list of barriers present in the United States is probably not exhaustive: (1) private minting of coins has been illegal since 1864; (2) purchases of commodity monies are subject to sales taxes; (3) holdings of non-dollar currencies are subject

[34]See Lawrence H. White, "Inflation and the Federal Reserve: The Consequences of Political Money Supply," Cato Institute *Policy Analysis*, April 15, 1981.

to capital gains taxation; (4) though gold clauses are legal for indexing dollar obligations, it is doubtful that courts would compel specific performance of an obligation to pay something other than dollars; and perhaps most importantly (5) the unwarranted power of state and federal regulatory bodies to restrict entry into banking can (and has been) used to suppress the establishment of alternative monetary systems.[35]

Were these restrictions eliminated, transactors would at least be free to use outside monies other than the one produced by the domestic government. None of the arguments above that seek to justify government production of outside money, even if they were valid, would justify a compulsory monopoly for government. There is no rationale for preventing attempts to produce a "public good" privately, or attempts to compete with a "natural monopoly." Should potential or actual competition make the real demand for government-produced outside money more sensitive to its depreciation, the real seignorage yield for any given rate of monetary expansion would fall, reducing government's ability to tax money holders covertly through inflationary finance. Open competition, that is, could erode the monopoly profit government currently enjoys in the production of outside money.[36]

Would it then be enough to allow private producers of outside money to compete with the Federal Reserve? Unfortunately it most likely would not be. It is doubtful that a parallel monetary system could gain much of a foothold even in the absence of legal impediments, because of the natural tendency of money users in a region to converge on a common monetary unit. Each trader finds it most convenient to hold the money that he believes others most likely to accept in the near future, which normally is the money they have been accepting in the immediate past, even if that money is depreciating. Historical bouts with hyperinflation suggest that this momentum can carry an outside money at least through double-digit inflations. I hope that hyperinflation will not be necessary in the United States before competition in outside money can prevail.

[35]As evidence of this last barrier in practice, an experiment with privately issued indexed currency and deposits in New Hampshire in 1972–1974 was ended under legal pressure from the Securities and Exchange Commission. (Incidentally, the experiment was proving unprofitable.) See "Paying with Constants Instead of Dollars," *Business Week*, May 4, 1974, p. 29. On the other hand, the Secret Service has apparently found nothing illegal in the issue of gold-redeemable certificates by an individual in Maryland. See Irving Wallace et. al., "Significa/The Money Maker," *Parade*, February 21, 1982, p. 20.

[36]See David Glasner, "Seignorage, Inflation, and Competition in the Supply of Money," unpublished manuscript (February 1981).

If competition from alternative currencies would not be enough to neutralize the Federal Reserve's ability to do monetary damage, then the opening of competition must be supplemented by *some policy* for dealing with the supply of fiat dollars. A moderate policy would freeze the monetary base.[37] A more thorough policy would retire the stock of Federal Reserve notes and Treasury token coins via redemption for a potential commodity money. The commodity money could most plausibly be silver or gold. One advantage gold has over silver as a potential money in this connection is that the federal government already has a large stockpile of gold that ought to be disgorged in any event. The advantages of silver are its greater circulability in coinage (a 20-dollar gold piece would at today's prices be a very slight coin) and the greater geopolitical dispersion of silver mines. The point here is not to re-establish a link between government-issued money and a precious metal; it is to phase out government-issued money.[38] Given the market's tendency to evolve and sustain a payments system based on one and only one outside money, conversion to a precious-metal based monetary system seems our best hope for a competitive supply of outside money.

[37]This is proposed by R. H. Timberlake, Jr., "Monetization Practices and the Political Structure of the Federal Reserve System," Cato Institute *Policy Analysis*, August 12, 1981, p. 12. Timberlake adds that the gold in Fort Knox should be liberated to allow a private gold standard to emerge.

[38]For further elaboration see Lawrence H. White, "Gold, Dollars, and Private Currencies," Cato Institute *Policy Report* 3 (June 1981), pp. 6–11.

COMPETITIVE MONEY: A COMMENT

Peter Lewin

Barely a decade ago the suggestion of a fully competitive money industry probably seemed to most monetary theorists to be far-fetched and irresponsible. It probably is still regarded as a little eccentric. Nevertheless, it *is* now being discussed, by supporters and doubters alike, as a serious means to the achievement of monetary stability. And the indications are that, as disillusionment with the now-traditional monetarist prescriptions grows, it will be given increasing attention in the future. In the process the work of those few economists who have carefully and ably analyzed the theoretical and empirical properties of competitive monetary systems will come to receive the credit they deserve. And none more so than the work of Lawrence H. White, whose thorough and persuasive examination of free banking in Britain[1] is becoming something of a classic even before its publication. In his paper, "Competitive Money, Inside and Out," White has again produced an account of the virtues of competition in money in an engaging and original way.

Since I do not subscribe to the view that a commentator's remarks should invariably be critical, and since I find little with which to disagree, I will be content mainly to highlight and extend where I feel appropriate.

At various points in his paper, White reasserts the virtues of competition in the provision of money (as in the provision of other goods) as an important element of a free society. The point here is that irrespective of whatever economic costs and benefits can be identified with it, the existence of competition is compelling for ethical reasons alone. This would appear to establish a heavy burden on

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[1]Lawrence H. White, *Free Banking in Britain* (New York: Cambridge University Press, forthcoming).

those who would constrain the freedom to compete to justify such constraints. The mechanical resort to externalities, and public goods is becoming increasingly and justifiably suspect on fundamental methodological grounds. This is perhaps a natural result of the ease with which anyone favoring a particular policy can point to the externalities that justify it on grounds of social efficiency. Apart from the fact that it may be seriously doubted whether notions of social efficiency should be regarded as meaningful,[2] I would argue strongly that *rights* are logically prior to *efficiency*. The relevant question should be: Do people have the right to make contracts and exchanges in any money they wish? If they do, then the legal restrictions preventing freedom of choice should on principle be abolished.

Apparently the world is not so simple, for as White points out, it is often ironically the very same theorists who champion the cause of a free society that call for the establishment and extension of these restrictions in the case of money. In this way regulations apparently designed to serve freedom end up destroying it. And in this regard, I believe the ethical question needs more emphasis and should be clearly established prior to an examination of the empirical workings of alternative monetary systems. For in discussions of this sort, where the burden of proof is placed often turns out to be crucial. Proponents of free money should not have to prove the absence of significant externalities in order to be taken seriously. We have become so used to a government monopoly in money that generally the presumption appears to be against competition. Whereas in most social issues the weight of opinion in the economics profession would favor a private market solution when the evidence on alternative schemes is ambiguous, in the case of money the public solution is invariably given the benefit of the doubt.

However, concerning the renewed attention being given lately to competitive monies, it is inflation rather than freedom of choice that has been the motivating factor. Of course the two are crucially connected, but it has been dissatisfaction with the long-term performance of current monetary institutions in constraining inflation that has provoked the search for a more radical solution and thus led to the laissez-faire proposition.[3] White's paper is a little unusual in that he places more attention on the issue of freedom of choice. This is clear in his introduction of the distinction between inside and outside

[2]See Peter Lewin, "Pollution Externalities: Social Cost and Strict Liability," *Cato Journal* 2 (Spring 1982): 205–230.

[3]For example, F.A. Hayek, *Denationalisation of Money*, 2nd ed. (London: Institute of Economic Affairs, 1978).

money. This well-known distinction was originally made in a quite different context.[4] The issue was the existence or nonexistence of wealth effects. Inside money is issued by the private sector and is thus both a liability and an asset to the private sector. So a dollar increase in inside money, insofar as it adds nothing to the net worth of the private sector, has no wealth or real-balance effect. The person receiving the dollar feels wealthier but the person issuing it feels poorer. By the law of large numbers many such effects should cancel out leaving no net wealth effect. Outside money, on the other hand, is a liability of the public sector[5] and an asset of the private sector so that its increase will produce the real balance effect.

There are at least two objections to the distinction between inside and outside money used for this purpose. First, one may seriously doubt the wisdom of ignoring the distribution effects that unpredictable changes in the quantity of inside money produce. One may suspect that they are not really random in nature and have something important to do with the political economy of inflation. In this respect the tacit alliance between the commercial banking sector and the Federal Reserve System is important. Second, the distinction, in terms of the real-balance effect, rests on the implicit assumption that an increase in the money liabilities of the public sector have no repercussions in the private sector. If, for example, money creation is associated with an increase in the public debt, this may lead to the expectation of future taxation to finance the debt, thus creating a negative wealth effect. A third objection, mentioned only in passing, is that the important consumer surplus aspects of inside money are ignored. In many ways, introducing the division of money into inside and outside money was in my view unfortunate, since it may have helped divert attention away from the political-institutional aspects of inflation.

But the distinction that White is making is a different one. It is a more useful distinction in my opinion because it focuses directly on institutional implications. For this purpose the important point is that inside money is convertible (into outside money) while outside money is not. This has the implication that competition in inside money, while to be recommended in the interests of freedom of choice, will not solve the problem of inflation if outside money growth is not controlled. Deregulation of inside money must be seen

[4]See Don Patinkin, *Money, Interest and Prices*, 2nd ed. (New York: Harper and Row, 1965), pp. 295–310.

[5]For purposes of this discussion I include the Federal Reserve System in the public sector.

from this perspective as only a small first step. And, as White points out, even then it does not go far enough in providing to consumers the money services they desire.

It is to constraints on the production of outside money that one must look for a solution to inflation. The competitive solution effectively removes monetary control from a central authority. It is obviously not the only solution. Nor, as White notes, is it necessarily exclusive of other solutions. But it has the virtue of not assuming that the monetary authorities are able and can be trusted to act in the public interest on a long-term basis. It relies not on any additions to the constitution or otherwise legislated rule. It relies only on the market and obviates completely the need to plan or predict the future developments in the monetary industry at a national level.

It has been insufficiently emphasized that inflation is almost always a tax-subsidy scheme. And since the tax yield tends to diminish as people come to expect and adjust to the inflation, the subsidy side can only be maintained in real terms *if the inflation accelerates.* Thus, as long as the government or its agent controls the supply of outside money, and uses it predictably to finance the activities of well-placed interest groups, one may justifiably feel uneasy about the viability of any scheme that preserves the monopoly of outside money.

Finally, concerning the transition to competition, White mentions three types of competitive monetary systems. I wonder whether we need to be as agnostic as he appears to suggest. This goes to the meaning and relevance of convertibility. Historically, money evolved spontaneously from commodities used first for other purposes. It is extremely doubtful that a system "devoid of outside money" could evolve; for the "inside monies" therein would in a real sense have no guarantee of value. Guaranteeing the value of a money in terms of a basket of commodities or any other standard appears to me to be equivalent to establishing convertibility into the standard of value. For what else can the guarantee mean except that the money can be converted at a fixed rate into the standard? Thus, Hayek's competitive currencies and the free banking alternatives do not in essence appear that different. One would be inclined to predict the emergence of rapid clearing through a joint clearinghouse in either case. White's five-point agenda is sure to achieve a competitive system. And while we may judge its prospects somewhat remote at this point, its time may come sooner than we think.