# **Policy Analysis**

# Cato Institute Policy Analysis No. 8: Inflation and the Federal Reserve: The Consequences of Political Money Supply

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## **Executive Summary**

Lately the supply of money has become, even more than usual, an object of considerable concern and indignation in Washington. The supplier of money, the Federal Reserve System, has come under heavy fire from all sides.

Treasury Secretary Donald T. Regan opened the barrage last summer by criticizing Fed money creation as too meager. In January he complained that money supply growth had been excessive in past weeks, and too volatile overall in past months. In December, Sen. Howard Baker expressed personally to Federal Reserve Board Chairman Paul Volcker the opinion of some congressional leaders that overly restrictive Fed policy was worsening the recession. At a January press conference President Reagan complained that excessive monetary growth, as experienced in the previous month, "sends, I think, the wrong signal to the money markets," undermining business confidence that inflation will slow down, though he has since spoken more positively of Volcker's policies. Rep. Jack Kemp, the leading congressional supply-sider, has gone so far as to demand that Volcker step down, on the grounds that the Fed has been overly devoted to slowing inflation through tight money.

There indeed has been much to criticize in Federal Reserve behavior. It is clear from the numbers that the Fed's policy has been both expansionary and erratic. The basic M-1 measure of the money stock (cash plus checking accounts) rose at an incredible 26% annual rate between December 1981 and January 1982, even when we average the M-1 figures for the four weeks preceding December 23 and January 20 to include the decline in M-1 in the week preceding January 20. This monetary explosion began back in late October 1981.

For last year as a whole, M-1 (then called M-1B) grew by the less extreme but still price-boosting rate of 4.6%. This included a burst of 23.8% annualized growth between early February and late April, in addition to the recent increase, with some weeks of actual shrinkage intervening. Going back a bit further, the Fed expanded M-1 interruptedly for seven months from late April to late November 1980 at an annual rate of 15%. [1]

Few of us need to be reminded what has happened to the value of our cash holdings in recent years. The numbers are dismaying. In the three months prior to September 1981, consumer prices for all items except food and energy rose at a 15.2% annual rate. During the 12-month period ending last October, the purchasing power of the dollar -- as measured by the 10.2% rise in general consumer prices -- shrank by a tenth. In the year prior to that period, consumer prices rose 12.2%. Since 1967 the dollar's value has shrunk to less than 36 cents. [2]

Why have overall prices behaved in this way? The basic immediate cause is evident: The value of the dollar has been diluted by progressive additions made to the number of dollars (the stock of money) in circulation. The M-1 money

stock was expanded at an average annual rate of 6.1% between 1970 and 1975; prices rose at a 6.5% rate. Money averaged 7.1% annual growth between 1975 and 1980; prices grew at a 7.2% rate [3]

Blame for our nation's erratic inflation, then, belongs squarely on the shoulders of our nation's monetary authority. The Fed's actions are responsible for the rate of growth of the total stock of dollars, and hence are responsible for the rate of dilution of the purchasing power of each existing dollar -- the rate of price inflation. Changes in the willingness of the public to hold onto various forms of dollars, or changes in banking practices, may temporarily divert the rate of inflation from its appointed path, but over the longer haul (say, six months to a year) the predominance of the Fed is virtually complete. Other explanations of persistently rising prices simply do not wash.

Why has the Fed behaved in this way? There is not wide agreement among economists as to the best answer to this question. The answer differs depending on whether the analyst wants to explain the Fed's actions taken last week, or a pattern of actions taken week-to-week over the past few years, or, more fundamentally, the overall behavior of the institution in the decades since its inception. We address ourselves here to this last concern. If we wish to understand the root cause of our erratic inflation, we must ask why the Fed is fundamentally prone to pursue a policy of uneven monetary expansion. There is a serious danger in focusing myopically on the monetary growth rates of last week, last month, or even last year: We may lose sight of the more important and enduring trends in money and prices. Also, we may overemphasize such cosmetic changes as the October 1979 guidelines emphasizing monetary targets over interest rate targets.

It is the institution of the Federal Reserve System that is responsible for our monetary disorder. Monetary trends cannot be explained merely by the personalities of the Fed chairman, the Board of Governors, or the Open Market Investment Committee. Personnel changes in the last decade have had no perceptible impact on Fed policy, whatever the changes in rhetoric. Monetary trends cannot be corrected, despite Rep. Kemp's apparent wish to believe the contrary, merely by substituting new faces for old. Nor are we likely to accomplish much by bestowing yet more free advice on those now in charge. In order to understand what has happened to our money, and especially to find a remedy, we must look to the incentives and constraints effectively acting upon the suppliers of money.

# The Difficulty With Monetarism

Milton Friedman, influential leader of the Monetarist school of economists, has suggested that the Fed's recent record of especially erratic monetary expansion stems primarily from erroneous technique. A year ago he outlined several modifications in operating techniques designed to help the Fed "improve its control of the money supply and to become a major source of stability in economic policy instead of the unguided missile it has so often been." [4] There would be little point in offering such suggestions to a monetary authority one recognized frankly as having ingrained reasons for pursuing an erratically inflationary policy. Friedman left the distinct impression that nothing more stands in the way of improved Fed performance than some combination of addle-patedness and bureaucratic inertia: "The Fed has known what monetary growth it should aim for. But it has been reluctant to adopt procedures that would enable it to achieve those goals."

More recently, Friedman again urged that the Fed "has ample power to produce a more stable pattern of monetary growth" if it will only make "the changes in procedures and regulations required." The problem now is "not that the Fed does not know how to produce stabler monetary growth," but that those directing Federal Reserve policy fail to recognize the importance of doing so.

Were this interpretation correct, it would be necessary only to enlighten and cajole the Fed, or perhaps to replace its present Governors and staffers with stouthearted Monetarists, in order to usher in an era of stable, non-inflationary monetary policy. There are reasons to suspect, however, that the explanation for Federal Reserve policy lies deeper. Friedman touches on it when he cites political pressures on the Fed to inject more money, either to stimulate the economy at election time (recall the bulge in money growth in the months before November 1980), or to moderate the impact on interest rates of federal borrowing to cover budget deficits. Yet these pressures, real as they may be, are only part of the story.

What must be recognized as fundamental is how the federal government itself benefits from inflation. The federal

government gains from monetary expansion and accompanying rising prices in at least three ways. (1) Inflation underanticipated by bond-holders erodes the real value of the government's interest-bearing debt. Wealth is transferred from holders of government debt directly to the government, the largest debtor in the economy. (2) Inflation swells federal tax receipts due to "bracket creep." Income taxes are progressive with respect to nominal income, and deductions are nominally defined. Also, inflationary appreciation of business inventories is taxed as profit. The real burden of taxes increases, yet Congress is able to declare a moderating "tax cut." (3) Most importantly, expansion of the money stock itself levies a "tax"

on holders of money. By issuing fresh batches of money, the federal government can obtain real resources in exchange. An inflationary finance policy is an effective means for the federal government to enlarge its command of the real resources of its citizens, a means all the more effective because its burdens are disguised in the form of rising prices.

To make this clear, consider the following example. The government wants to command an additional 10% of a period's GNP, for instance, but it does not want to levy a visible increase in taxes. For the sake of simplicity, we assume that it does not consider borrowing the necessary funds. Instead it simply prints up enough extra dollars to buy the goods and services it wants from the private sector. Suppose it buys them first, at the old prices. What then happens to prices? Private agents (not counting recipients of the government's largesse) have the same number of dollars as always. Yet the stock of goods and services those dollars can buy is reduced by, we hypothesize, 10%. Obviously the purchasing power of each dollar must fall. The same number of privately-held dollars is now chasing fewer goods available for private consumption. Prices must rise. In the following period the usual number of goods will again be available (if the government does not repeat its trick), but the number of dollars bidding for them will have increased by the size of government's printing-press run. Other things being equal, prices will always be higher by the proportion newly injected money bears to old money. An overall rise in prices results when government practices printing-press finance.

#### The Process of Inflation

In the modern American economy the process of inflationary finance is not as obvious as in our example. Instead of a single federal agency both creating and spending new cash, the process is split between the Fed and the Treasury. The Fed creates new money and passes it on to the Treasury by purchasing Treasury notes and bonds (IOUs from the federal government, the total stock of which represents the outstanding government debt and net growth of which represents yearly budgetary deficits). The Treasury is then free to spend the money on the goods and services that the government wishes to commandeer. The Fed's "loan" of money to the Treasury comes out of thin air, as it were. Neither party worries about repayment, since the debt can always be "rolled over" by fresh Fed-Treasury "loans." That in practice the Fed does not buy many IOUs directly from the Treasury, but through middlemen (private bond dealers) in the open market, is a minor detail. It does mean that Fed purchases and Treasury sales need not coincide closely in timing or in volume. The two nonetheless do coincide closely enough, as shown in a recent piece by Robert J. Shapiro, to leave no doubt that the Fed's open-market operations are usually tailored to support the Treasury's funding needs on a month-to-month basis. [6]

It is worthwhile to trace the consequences of a monetary expansion, in order to understand both the redistributive process involved and the seriousness of the burdens it imposes. Inflation is worrisome precisely because it can never be neutral. As any businessman knows, it is never smooth, or uniform, or perfectly and unanimously anticipated. As Austrian economist Ludwig von Mises has argued, changes in the quantity of money can never affect the prices of all goods and services at the same time and to the same extent. Inflation introduces both systematic distortions and elements of chaos into the price system of an economy, generating serious misallocation of resources.

The path of a monetary disturbance depends crucially upon the point of entry of the new money into the economic system. The quantity of money changes only through additions to-the money holdings of particular individuals and institutions, never through simultaneous multiplication of all holdings by a common factor.

There are two distinct stages of distribution of a local injection of cash: First, a uniformly distributed addition to cash balances; and second, a redistribution of cash (and hence wealth) to the specific beneficiaries of government monetary policy. These beneficiaries are the recipients of government spending financed by money creation, when Fed injections

are matched by Treasury withdrawals, or the borrowersof the extra loanable funds created when Fed injections are not so matched. Monetary expansion would be neutral only if the first stage were perfectly and unanimously anticipated and the second stage were nonexistent. To the extent that an individual mis-anticipates the rate of dilution of the purchasing power of his money, inflation will cause him to make expensive errors. Such mis-anticipations are unavoidable when the Fed pursues erratic policy and introduces considerable noise into the signals transmitted by the price system.

The redistribution of wealth comprising the second stage results in a systematic skewing of the structure of relative prices. The specific impact is again impossible to anticipate: Were it possible for everyone to "see through" prices to anticipate the impact, there would have been no need for them to orient themselves by means of a price system in the first place. The skewing effect persists until after the redistribution ceases.

The Austrian view of monetary disturbances, developed by von Mises, F. A. Hayek, and their followers, focuses on the consequences of an imperfectly anticipated monetary expansion in the form of credit expansion unmatched by expanded government borrowing. With such an expansion, lending becomes easier, and interest rates fall. With the new credit, entrepreneurial borrowers are able to bid real resources away from others in the economy. They see possible profits in doing so, in the absence of perfect knowledge that the greater availability of investment funds is impermanent. Bad investments ensue, and the structure of production is distorted as new projects are undertaken, the profitability of which depends on artificially plentiful credit. This distortion must eventually be reversed, as inflationary expectations and the scarcity of real resources assert themselves, ending the real redistribution and driving interest rates back up to their natural levels.

Other authors have pointed out the consequences of an unanticipated monetary expansion that enters the economy as fresh consumer demand for goods and services, as when Fed injections are matched by Treasury borrowing (the federal government is, in this context, a huge consumer). Prices do not immediately rise to the full extent warranted by the money expansion, as each competitive entrepreneur is unable to identify the surge in demand for his product as other than a relative shift, or a random blip, in demand. With inventories shrinking, he places restocking orders and expands production. Combined restocking orders deplete inventories at successively higher stages of production. At the highest stage, prices of raw materials rise. Price changes then rebound down through the stages of production. Producers at lower stages are, in effect, informed by rising input prices that there has been a widespread increase in nominal demand, allowing them to raise their output prices further. This process has the appearance of "cost-push" inflation, but it is only the initiating increase in demand that has raised prices. The structure of relative prices in the economy is disrupted due to the raggedness with which upward transmission of inventory depletions and output expansions, and downward transmission of price hikes, proceeds. Firms and industries adjust at different speeds and with different frequencies and sizes of price hikes.

With either sort of monetary injection, any temporary output "gain" for the economy results from the injection's distorting price signals in such a way as to mislead private economic agents about the costs of their actions required to achieve that gain. It results from a squandering of scarce resources and can persist only as long as they continue to be misled. Recessionary reversal of the employment and output effects eventually reveals the hollowness of the supposed gains.

### The Temptation of Easy Money

That the illusory boom comes first, and the painful readjustment period of the recession comes later, helps explain why a shortsighted monetary authority is tempted by easy money policy. The temporary dip in output and employment associated with the monetary restraint necessary to cool inflation unfortunately comes before any permanent gain. A temporary bulge in unemployment appears well before price stability and productive reintegration can be established. Past expansionary impulses continue to snake their way through the economy, pushing up prices. Restraint reveals the distortions and dislocations due to the previous inflation, and popular analysis mistakenly attributes these troubles to the restraint rather than to the previous inflation. Since the Fed (as Mr. Dooley once said of another political body, the Supreme Court) follows the election returns, shortsightedness is just what we should expect of our monetary authority.

Lack of past restraint has built inflationary expectations that today make the rate of price explosion even harder to

decelerate. As traditional tight money policies have worked with less and less speed at stemming inflation, the Fed has abandoned restraint before inflation could be ended, thus reinforcing expectations that prices will continue their climb. Our monetary authority must show much more resolve if it genuinely wants to break the stagflationary cycle and bring an end to rising prices.

That the Fed has reasons not to decelerate inflation should be evident from our discussion of the ways in which the federal government gains from inflation. Put simply, the transmission of inflation entails a redistribution of wealth to the recipients of the newly-injected money, namely the federal government and its beneficiaries. Those outside the favored sector, who find prices rising or accelerating faster than their incomes, are the losers.

The social repercussions of this arbitrary redistributive process are enormous. As is widely recognized, creditors or debtors lose wealth, one to the other, as the rate of inflation is greater or less than anticipated. An unforeseen rate of inflation must yield results unexpected and undesired by at least one party to any long-term financial contract. This weakens the social institution of credit as a means of facilitating trade.

All participants in the economy suffer from the economic confusion and disorganization caused by inflationary falsification of price signals. Capital is misallocated due to distortion of prices and interest rates and insufficiently maintained due to illusory effects on accounting magnitudes. And enhanced uncertainty makes commitment of capital to new enterprises less attractive. The delicate coordinative institution of the price system is rendered to some degree spastic and unreliable.

With less reliable and less effective signals, inflation causes a detrimental transformation of social and legal institutions as well as a disruption of economic institutions. The very foundation of the free society, the institution of the private contract, is damaged by its inability any longer to provide a reliable means either for multi-period exchange at agreed-upon relative prices or for securing real incomes.

The alternative to a society of contractual relations is one of political relations. Growing numbers of individuals turn to government to provide the security of real income that has become so much more difficult to achieve in the inflation-hobbled market. Resentment at the unpredictable and arbitrary enrichment of a few and impoverishment of many will turn still more, unaware of the irony of their action, to the government for redress. Social cohesion is upset by a search for scapegoats. Because the law is impotent to prevent inflationary windfalls and losses where contracts are struck in dollar terms, the rule of law loses ground to the rule of men. <sup>[7]</sup> The imposition of wage and price controls, if it were to return under a Republican presidency, would be but a cruel acceleration of this trend.

Those in charge at the Fed may well regret the disruptive effects of inflation. To point out that these are the unintended consequences of the erratically expansionary monetary policy they pursue is not to imply that the governors of the Fed are fools. Nor is it to accuse them of being knaves to suggest that the explanation for expansionist policy lies fundamentally in its redistributive effects.

Instead, the Federal Reserve Board's pursuit of inflationary policy is the predictable result of the incentive structure surrounding them as an arm of the federal government. We cannot hope to end inflation -- and with it the business cycle -- until we reform our monetary institutions so that the stock of money is no longer subject to manipulation by politicians. As long as the federal government enjoys central control of the money supply, we will find money being turned to political ends. Who manages the money managers?

The bald fact about the Fed is that, like any state-sponsored central bank, it is by nature and origin a parasitic institution. Central banks typically originated as wartime inflationary finance schemes, the Bank of England being the premier example. They exist today primarily to service governments' appetites for spending. As Hayek notes, [8] government control of money has been "regularly used to exploit and defraud" the public. Hayek is surely correct in arguing that ending government authority over money is crucial to the wider goal of shrinking government.

President Reagan is himself fond of noting that the only effective way to reduce government spending, like a teenager's spending, is to "cut off its allowance," i.e., to reduce government revenue. The federal government's spendable revenue is not just its tax receipts. It is also its permanent "borrowings" of money created by the Federal Reserve System.

Cutting off a teenager's allowance would be pointless if he had a printing press in his bedroom that allowed him to counterfeit whatever money he wanted to spend. Reductions in explicit taxes will similarly be worthless if matched by increases in inflationary finance. A major step would be taken toward reducing government spending if the ability of the Fed to monetize deficits were eliminated.

# **Three Monetary Alternatives**

There are essentially three routes open with respect to monetary policy: (1) a monetary authority with unlimited discretion, as we now have; (2) a rule-bound monetary authority, as favored by Friedman and his followers; and (3) no monetary authority at all, with currency governed by competition among private issuers, as Hayek has advocated. (I recently discussed elsewhere the case for, the role of gold in, and possible strategies toward, private currency competition. [9] The first alternative -- the status quo -- has brought us to our present state of monetary malaise.

The second alternative -- chaining the Fed -- is an attempt to impose artificially designed rules on the supply of money without alleviating the Fed's hammerlock on the currency industry. The attempt would be an empty gesture were it to allow the Fed anywhere near as much discretion as it now has to revise its monetary growth targets and to take its time getting back on track. It would be an act of intellectual hubris were it to allow much less. Bureaucratic regimentation of the currency industry does not change, no matter how the bureaucrats are constrained

We may agree fully with Friedman that the past few years are "a striking example of the harm that monetary instability can produce," that the current regime of discretionary policy is a disaster, and that almost any new operating procedure or binding rule imposed upon the Fed would be an improvement were it to make its behavior less unpredictable and less inflationary. Yet binding rules do have their dangers, which we should not ignore. A rule based on pegging the growth rate of a single specific monetary aggregate like M-1, which Monetarists advocate, faces the problem that any statistical measure of money is liable to become passe as financial innovations continue to create sophisticated new forms of nearly-money assets. Recall that M-1 itself disappeared last year, having split into M-1A and M-1B, though it has subsequently reunited.

Recent evidence from Monetarists at the Federal Reserve Bank of St. Louis suggests that M-1 is not yet passe. But in the face of proposed banking and financial deregulation, we can hardly consider M-1 so impregnable as to be suitable for inclusion in an amendment to the U.S. Constitution, as some Monetarists suggest. Making a monetary growth rule less binding than that -- perhaps letting the Fed or the Congress change it when suitable -- would not enhance predictability. Unfortunately, a workable, rigid, and specific monetary rule may be incompatible with financial deregulation.

While a monetary authority like the Fed exists, exercising complete dominion over changes in the monetary base upon which the banking system perches like an inverted pyramid, we face the dilemma that its behavior must be dangerously flexible or dangerously inflexible. So long as the suppliers of base money are political appointees (President Reagan has recently appointed Preston Martin, an old crony from California, as vice-chairman of the Federal Reserve Board of Governors), respond to political incentives (G. William Miller moved from the Fed chairmanship to secretary of the Treasury under President Carter), and face political constraints (Congress can rewrite the Fed's mandate at any time, and has several times since it created the Federal Reserve System 60 years ago), we should expect to find the Fed struggling to escape any self-denying binds placed on it.

The third alternative -- a nonpolitical or free-market monetary system -- offers an escape from this dilemma. Money would no longer be available for manipulation by the authorities as a covert device for exploitative and fraudulent taxation by inflation. No longer would instability of money supply be a persistent source of macroeconomic disturbance, since there would exist no central body capable of sending monetary shocks through the system.

The most readily conceived alternative, one with a dramatically positive history, is a "free banking" system in which both checks and paper currency are issued by competing private banks on the basis of convertibility into full-bodied silver or gold coin. This system provides money of stable or even increasing purchasing power, and at the same time allows full deregulation of banking and financial markets. Under such a system politicians, bureaucrats, and the public need fret over the supply of money no more than they fret over the supply of pocket calculators. In blissful

ignorance all outsiders may let the interaction of buyers and sellers in currency and credit markets do the job of coordinating supply with demand. [11]

Besides dismantling of the Fed, a freely competitive monetary system awaits repeal of several legislative barriers. Any "forced tender" laws or court rulings, which prevent enforcement of debt contracts specifying other than the government's favored money, would have to go. It is unclear whether any such laws or rulings presently have force. More importantly, there would have to be an end to the powers of state and federal regulators, now held by the Fed and the Securities and Exchange Commission, to restrict entry into the business of issuing currency. Private entrepreneurs must be free to offer gold-convertible, indexed, or whatever other sort of pay-to-bearer-on-demand or interest-bearing instruments they may wish to market. The Deak-Perera Bank presently offers gold warehouse receipts, for example, but these are nontransferable. Sears Roebuck has been repeatedly frustrated by the SEC in its attempts to offer small-denomination bonds to the public that would compete with bank savings certificates. Finally, any tax laws that restrict use of currency units other than the dollar in transactions or accounting would have to be appropriately modified. One barrier to contracting in gold, the "Gold Clause" Joint Congressional Resolution of 1933, was fortunately repealed by the Helms amendment in 1977. [12] A noted monetary and banking theorist has expressed the hope that "when a few more theories have been tried" by the monetary authorities, and a few more recessions suffered as the result, "then we may discover that all our attempts to regulate the currency have been productive of mischief, and we shall be willing to let the currency regulate itself." Those words were written by British banker James William Gilbart 140 years ago. [13] Since then we have suffered numerous recessions at the hands of the monetary authorities. Today we may let the Fed try yet another theory, another technique for control of the money supply, as suggested by Friedman. Or we may finally live up to Gilbart's expectation by allowing the emergence of a competitive money order. We may finally be willing to let the currency regulate itself.

#### Notes

- [1] New York Times, 30 January 1982, p. 29; Milton Friedman, "The Federal Reserve and Monetary Instability," Wall Street Journal, February 1982, p. 20.
- [2] Source: Federal Reserve Bulletin (December 1981), pp. A13, A51.
- [3] Source: Lawrence K. Roos, "Lessons We Can Learn," Federal Reserve Bank of St. Louis Review 63 (October 1981): 4.
- [4] Milton Friedman, "A Memorandum to the Fed," Wall Street Journal, 30 January 1981.
- [5] Friedman, "The Federal Reserve and Monetary Instability. n
- [6] Robert J. Shapiro, "Politics and the Federal Reserve," The Public Interest 66 (Winter 1982): 119-139.
- [7] See Axel Leijonhufvud, "Costs and Consequences of Inflation, n in Information and Coordination (New York: Oxford University Press, 1981) for elaboration of these consequences.
- [8] F. A. Hayek, Denationalization of Money, 2nd ed. (London: Institute of Economic Affairs, 1978).
- [9] Lawrence H. White, "Gold, Dollars, and Private Currencies, n Policy Report 3 (June 1981): 6-11.
- [10] See Lawrence H. White, Free Banking in Britain: Theory, Experience, and Debate, 1800-1845 (unpublished UCLA doctoral dissertation, forthcoming 1982), chap. 2; Rondo Cameron, Banking in the Early Stages of Industrialization (New York: Oxford University Press, 1967), p. 72; Vera C. Smith, The Rationale of Central Banking (London: P. S. King, 1936), chap. 2; Roland Vaubel, "Currency Competition in Monetary History" in Pascal Salin, ed., European Monetary Union and Currency Competition (Brussels: Institutum Europaeum, forthcoming); Hugh Rockoff, "The Free Banking Era: A Reexamination," Journal of Money, Credit and Banking 6 (1974): 141-167.
- [11] For greater detail as to how a free banking system would work, see 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). On how inconvertible private currency might work, see Hayek, Denationalization of Money.

[12] On this, and on the uncertainty surrounding the enforce- ability of indexed contracts, see J. Huston McCulloch, "The Ban on Indexed Bonds, 1933-77," American Economic Review 70 (December 1980): 1018-21.

[13] In "The Currency: Banking," Westminster Review 35 (1841), p. 67 (American ed.).