

FED WATCHING AND THE MONETARY REGIME

Alan Reynolds

The Market for Fed Watching

The Federal Reserve's Open Market Committee consists of a dozen unelected officials with enormous unguided authority to affect interest rates, exchange rates, and prices, and thus to affect real economic activity and the distribution of wealth and income. Decisions by the FOMC are made in an atmosphere of deep secrecy and obfuscation, according to no fixed principles whatsoever.

After the Humphrey-Hawkins Act of 1978, the Fed was merely requested to monitor and report on nonbinding short-term targets for a variety of measures of money and credit. The Fed itself was delegated the task of defining and redefining those measures of money, and of setting, revising, and rebasing its own targets, making the whole exercise rather futile.

In the total absence of any predictable monetary policy, great fortunes have been made and lost by correct or incorrect weekly guesses about the priorities, opinions, and moods of Federal Reserve governors. An entire industry was created, consisting of economists and journalists who attempt to psychoanalyze the motives behind future changes in Fed manipulations. Academics became another vested interest in monetary chaos, as the demand for excess schooling increased to make a simple subject appear sufficiently complex to justify lavish salaries and consulting fees.

Journalism too has prospered in direct proportion to the mystery of Federal Reserve decisions. Members of the elite Washington press corps are successful in gaining access to top Fed officials only if they treat the Fed with uncritical awe and slavishly refrain from the

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slightest hint that Fed policy could possibly err, or be responsible for anything unpleasant, such as farm crises or budget deficits. The bond column of any New York newspaper now consists of a contest between Fed watchers, with each pointing to a different indicator to explain what the Fed is doing, should be doing, or will be doing.

The Fed has repeatedly co-opted critics by simply adding their targets to a growing shopping list—a frequently changed assortment of measures of money, nonfinancial debt, exchange rates, indicators of real activity, etc. If the Fed paints enough targets on the side of the barn, they are always bound to hit one of them.

Minutes of the Federal Open Market Committee reveal an ever-changing brew of possible Fed targets:

- “Most of the members agreed that the continuing strength of the economic expansion and the spreading optimism . . . argued against any easing” (20 December 1983).
- “Most of the members, as they had at previous meetings, expressed concern that growing capacity constraints [and] declining unemployment . . . might be conducive to greater inflationary pressures” (22 May 1984).
- “A number of members expressed particular concern that under current conditions appreciably lesser restraint might well induce a sharp decline in market interest rates . . . and an unsustainably strong rebound in economic activity” (2 October 1984).

After particularly dramatic failures of Federal Reserve actions, the Fed is invariably rewarded with an equally dramatic increase in authority, as in 1933 and 1980. The institution thrives on failure, since failure is considered evidence of the need for broader and deeper regulatory control.

It is in the interest of both professional Fed watchers and the Fed itself to ridicule any and all measurable rules, or even guidelines, by which the Fed’s performance might be evaluated. Investors and business planners would not need experts to tell them how monetary indicators stood relative to any explicit standard.

Fed watchers and Fed officials will always argue for an “eclectic” approach, on the ground that any single rule is “too simple” to bind monetary authorities for even a month. It is easy enough to make a plausible case that any monetary rule is imperfect, on some criteria or other, but that by no means constitutes an argument for unconstrained discretion. The only argument for such discretion is that people have no right to know what the Fed is going to do in the future, or how, or why; that is, the value of the public’s money is too important to tell them in advance. That would be like arguing that a Federal Patent Board ought to vary the length of patent protection,

on a case-by-case basis, rather than having the government make prior commitments that secure property rights and expectations (Barro 1985).

Unlimited discretion adds unnecessary uncertainty to long-term plans and contracts. Long-term interest rates remain high to protect lenders against added risk of both inflation and deflation-related default. John Wood (1983, p. 17), for example, notes that "yield curves since the abandonment of the gold standard in 1971 have much in common with those of the greenback era of 1862–78." Under both greenback eras, 1862–78 and 1971–85, long-term interest rates have been routinely much higher than short rates, though bond yields rarely exceeded 6 percent under any sort of gold standard.

Price Rules

A meaningful monetary policy must begin by specifying attainable objectives and relevant tools or instruments for achieving those objectives. A useful distinction can be made between price rules and quantity rules. Under a quantity rule, the quantity of money is more or less fixed, so prices must vary with changes in the demand for whatever form of money is being regulated. People are, in effect, assigned a quota of, say, M1 and market forces then determine the value of that stock of liquid assets. Under a price rule, by contrast, the value of money is more or less fixed, so the quantity of money must vary with changes in demand for money.

"We clearly need some international standard," wrote F. A. Hayek (1984, p. 328), "and since we can obtain information about the international price system only from the wholesale prices of the more widely traded standardized raw materials, the closest approach to a general stability of the purchasing power of a monetary unit would probably be the stabilization of an index number of the prices of these raw materials." J. M. Keynes made a similar proposal in 1924 (quoted in Warren and Pearson 1935, p. 288).

Several recent statistical papers can be patched together to suggest how such a commodity price rule might work. Jeffrey Frankel and Gikas Hardouvelis (1983) noted that commodities "have flexible prices: they are homogeneous products traded in competitive markets where arbitrage does insure instantaneous price adjustment. Commodities are more like assets in this respect. Since their prices are free to adjust from day to day, and even from minute to minute, they offer a potential measure of the market's perception of current monetary policy. And, unlike interest rates, they are an unambiguous indication of the direction in which monetary expectations are revised." Frankel

and Hardouvelis further found that brief increases in the M1 money stock (while M1 was the Fed's primary target) were accompanied by simultaneous declines in commodity prices, which "can only mean the market expects the Fed to tighten . . . causing higher real interest rates and the other effects of tightened liquidity."

Robert Barsky and Lawrence Summers (1985) find a similar link between gold prices and real interest rates: "Variations in the real interest rate appear to be responsible for much of the year-to-year movement in the relative price of gold. . . . The impression that real rates have been high since 1981, and that these high rates have been associated with a low relative price of gold vis-à-vis the 1980 level is unmistakable." Behzad Diba and Herschel Grossman (1984) also found that changes in the gold value of dollars closely match changes in real interest rates. Higher real interest rates clearly lower the prices of gold and other commodities while lower real interest rates have the opposite effect.

The Fed can push the real interest rate temporarily above or below its equilibrium value, and commodity prices fall or rise when that happens.¹ Less flexible prices do not respond as rapidly, which accounts for the apparent lag in broad price indexes. Efficient auction markets do not lag. The CPI and GNP deflators are sluggish due to such factors as infrequent sampling, artificial list or catalog prices, inadequate quality adjustment, prices set by long-term contract or government regulation, government pay increases, and arbitrarily fixed weights. This does not mean that such indexes could get far out of line with commodity prices, but rather that the CPI and GNP indexes are very late to record either a speculative flight from a currency or a liquidity crisis. For example, service prices rose 4.8 percent in 1949 even though the wholesale price index fell by 10 percent.

Monetary policy affects real interest rates, real interest rates promptly affect commodity prices, and inflations are invariably associated with both low real interest rates and rising commodity prices (and conversely for deflationary recessions).² Since this sequence is well established, commodity prices could serve as a timely target for

¹The ability of a monopoly central bank to keep real interest rates above their "natural" level is consistent with James Hamilton's observation (1985, p. 1224) that "recessions are associated with *ex ante* real interest rates that are twice the postwar average."

²John Huizinga and Fredric Mishkin (1985, pp. 1, 35) compared the increase in real interest rates from October 1979 to October 1982 with a similar experience in 1920–21, concluding that "when the Federal Reserve alters its behavior . . . there are significant shifts in the stochastic process of real rates. . . . There is strong support for the view that the recent shift in real rate behavior is a monetary phenomenon."

monetary policy (Garner 1985, p. 21). The idea is to tighten monetary policy whenever some smoothed commodity price index exceeds a predetermined band, and to ease whenever commodity prices take a sustained tumble. This was the proposal of Knut Wicksell, Gustav Cassel, Henry Simons, George Warren and Frank Pearson, J. M. Keynes, and many others. More recently, it has been revived by Ronald McKinnon, Robert Hall, Robert Genetski, Pentti Kouri, Marc Miles, Richard Rahn and Ronald Utt, and Wayne Angell, among others. As Hall (1983, p. 321) explained: "We can keep the price level at 100 simply by raising interest rates gently whenever prices are above 100 and lowering them when prices are below 100." Little compulsory activism would be needed if such a proposal were adopted because it would be risky to push prices up in the expectation of Fed accommodation (Hutt 1979, p. 186). There only remains the practical and political questions of which prices to target and what level to begin the stabilization. Even erring on the high side would nonetheless reduce the risk of debasing long-term bonds (Stein 1980, pp. 65-66). A ceiling and floor on some key prices is more than any country has now.

It is not self-evident that the existing consumer price index is the ideal target, either in theory or in practice. Commodity standards, however, would anchor the CPI reasonably well over periods of a year or so, which is more than advocates of nominal GNP targets can claim. Brian Horrigan (1985), using Granger "causality" tests to see whether various measures of commodity prices (including gold) predicted the CPI better than measures of the money stock, concluded: "When commodity prices were introduced, the null hypothesis—that measures of money have *no* predictive power given past inflation and past commodity prices—could not be rejected for M1 or the base. . . . [The] power of money to predict inflation is virtually wiped out when various measures of commodity prices are taken into account."

It is easy to dismiss wide swings in commodity prices, and the related changes in the real burden of debts, as a mere change in "relative prices." But this particular pattern of relative prices has a very long history of leading every inflation and deflation. As Karl Marx ([1859] 1970, pp. 182-83) wrote: "The most common and conspicuous phenomenon accompanying commercial crises is a sudden fall in the level of commodity prices. . . . A general fall of commodity prices may be expressed as a rise in the value of money relative to all other commodities." The popular press invariably describes inflations as "shortages" and deflations as "gluts," but what they are

observing is a glut or shortage of cash relative to goods and tangible assets.

A Backdoor Case for the Gold Standard

Many economists argue that instability of interest rates or exchange rates is a matter of no concern. Yet unstable interest rates create windfall losses and gains that are probably less predictable than those arising from unstable consumer price indexes, and the risk of capital loss keeps long-term interest rates high (Evans 1984, pp. 204–22). Unstable exchange rates are likewise as undesirable as instability in any other prices, for exactly the same reason, and exchange rates obviously affect almost every other price.

For nations to want to share a common currency, like the European Economic Community, is often castigated as “price fixing” or an infringement on free markets (Zycher 1985). Yet a free market in government-monopolized money is a contradiction—demand for fiat money is “free” regardless of the exchange rate rules, but the supply is not. If there were a workable rule to keep, say, the CPI from moving very much, that would be no less “price fixing” than an exchange rate rule, which is usually adopted for exactly that purpose. To guarantee, say, the Hong Kong dollar in terms of U.S. dollars is not less consistent with free markets than to guarantee it in terms of nothing at all. If it were, we would have to condemn the fixed exchange rates that stopped every hyperinflation (Sargent 1982, pp. 41–97).

An exchange rate is indeed an ambiguous target for monetary policy: the dollar may fall because the Fed eases, or because the Bank of Japan tightens—with quite different effects. But that does not mean that exchange rate stability is not a legitimate part of the goal of monetary stability.

A system of fixed exchange rates or “target zones” without a common anchor, however, is no system at all. The whole group of participating countries is then free to inflate or deflate together, as a group, leaving all currencies floating rather than each currency floating. Such a system might help bring the weakest currencies in line with the strong, but this is by no means assured. As Richard Cooper (1984, p. 35) wrote: “*N* countries targeting *N-1* exchange rates leaves a degree of freedom. . . . Under the gold standard, this degree of freedom was used to tie currencies to a particular commodity, gold. Many academic proposals over the years would have retained that principle, but enlarged the list of commodities to some bundle or even to an index number of commodity prices.”

It is not self-evident that enlarging the bundle is desirable. According to Jurg Niehans (1978, pp. 130-31): "[T]he price policy that would make token money a perfect medium of account, if it exists, cannot be expressed in an index formula, and in view of the differences between individuals it is unlikely to exist in the first place. . . . Furthermore, the more complex the index number formula, the higher the accounting costs will be." The simplicity of a gold standard makes it easy to enforce, providing institutional credibility through convertibility (Lehrman 1985, Barro 1985, Reynolds 1983). And cyclical commodity prices should have more freedom to move cyclically, or in response to genuine supply shocks, than might be feasible with an index target unless the "bands" were reasonably wide. Still, the old idea of using an index of commodity prices to compel appropriate changes in monetary policy merits serious consideration as an incremental or second-best step.

Monetarist Regulations

Milton Friedman (1985a, 1985b) recently offered two graphs that supposedly show that nominal GNP is still closely related to M1 in the United States, and to M2 plus CDs in Japan. For the United States, the quarterly M1 and GNP series (with a 2-quarter lag) do move up and down together in 1981-84 well enough to make a graph, if the traditional assumption of a 3.2 percent rise of velocity is dropped. Over several two-quarter periods, however, M1 still overpredicts the growth rate of GNP by 5 percentage points or more—enough to mean the difference between boom and bust. For the two quarters ending in early 1986, for example, lagged M1 predicts that nominal GNP is currently rising at a 13.2 percent annual rate, or 16.4 percent with the older assumption of rising velocity. Since nominal GNP rose at a 6 percent rate in the fourth quarter, it would take a 26 percent increase in the first quarter of 1986 to salvage this forecasting device.

In any case, the correlation between M1 and inflation rates is nil, so M1 provides at best a mediocre indicator of real GNP, not prices. What M1 sometimes shows is that the Fed raised or lowered interest rates, causing people to hold smaller or larger M1 balances, and affecting interest-sensitive outlays and activities. Yet M1 remains a poor indicator of either inflation or real growth over time periods relevant for policy purposes. Indeed, the growth rate of M1 was faster in the six years after October 1979 than it was in the six previous years, though inflation was obviously much lower in the latter period. And Carl Palash and Lawrence Radecki (1985) find that M1 has not even given adequate warning of recessions.

Milton Friedman's chart for Japan (1985b) shows M2 growth before 1974 and M2 plus CDs after that. Growth rates of real GNP in Japan exceeded 10 percent per year in the pre-1974 period but have been less than 5 percent since; thus, much of the charted decline in nominal GNP is in the real component. Considering the importance that monetarists attach to stable growth of a narrow measure of money (M1), Japan's monetary policy would have to be judged a total failure. According to the St. Louis Fed's "International Economic Conditions" (August 1985), M1 growth in Japan did not drop below a 12-13 percent trend until mid-1979, and quarterly gyrations have been extremely dramatic—rising at a 22 percent rate in the second quarter of 1981, falling at an 8 percent rate in the last quarter of 1983, and rising at a 12 percent rate in the first quarter of 1985.

If a broad monetary aggregate is nonetheless endorsed as an appropriate target, which seems to be the point of using Japan as a lesson, this calls into question the monetarist anxieties about M1 in the United States in 1982-83 and particularly in 1985. The closest thing to Japan's alleged target is the U.S. "M3," which slowed from an 11.6 percent pace in the six months ending in February 1985 to 6.6 percent in the six months ending February 1986. While the Shadow Open Market Committee advocated risking a "small recession" on September 22 to slow M1, a Japan-style target was instead indicating that U.S. money was tighter than it had been in a decade or more.

It cannot be argued that it makes no difference which "M" is supposed to force the Fed to raise or lower interest rates, since narrow and broad measures of money often move in opposite directions (Trehan and Walsh 1985). That largely reflects the fact that lower interest rates make uninsured CDs less enticing than Super-NOW accounts, so M1 accelerates after the Fed lowers interest rates while broader, Japan-style aggregates slow down. Since it is impossible to distinguish "savings" from transactions money in such deposits, it is equally impossible to figure out what it means when people deposit relatively more funds in NOW accounts (M1) and less in money market funds (M2).

Another proposal would get around the public's shifts of deposits between M1 and M3 by simply freezing the monetary base (bank reserves and currency) (Fand 1985, p. 63). Under this proposal, the Fed would have been required to run a much *tighter* monetary policy from 1929 to 1932! As Robert Barro points out (1984, p. 453), banking crises typically provoke "increases in the real demand for base money"—the public wants to convert deposits into currency, and the banks want to hold extra reserves against the risk of a "run." Freezing the base under current institutions would be quite dangerous. Among

other problems, the *Federal Reserve Bulletin* of February 1986 points out that most of the largest component of the U.S. base—currency—may currently be hoarded by developing countries with rampant inflation. The global demand for U.S. currency cannot prudently be assumed to be constant, so a relatively fixed supply of base money confronting a variable demand can only be equilibrated by letting prices rise or fall. Any rule limiting the quantity of money or base could make the quantity predictable, but not the effects. A politically viable rule cannot require avoidable depressions.

Conclusion

The fact that monetarists keep changing the definition of money, the assumptions about velocity and multipliers, the lags, and so on—all of this is an implicit admission that no long-term rule can possibly be formulated in terms of a quantity of money. *Inflation is indeed a matter of “too much money,” but only market prices reveal what “money” and “too much” really means.* There is an urgent need for rules that define, stabilize, and guarantee the “dollar” in terms of something, so that debtors and creditors are not subject to unexpected windfall losses and gains. Promises to limit the quantity of certain liquid assets are not workable in a deregulated global financial system. Free banking is probably viable, but what do we do while waiting for the withering away of the Fed? Only rules about the prices of homogeneous commodities—a gold standard or price-index rule—can survive the wave of financial deregulation and provide institutional credibility for the future. We might wish to do more, through monetary policy, but by trying to do too much we end up with nothing but unnecessary uncertainty.

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FED SECRETЫ AND THE CHOICE OF A RULE

Marvin Goodfriend

In his paper, Alan Reynolds (1986) is primarily concerned with comparing a commodity reserve standard and a *money stock rule*, essentially making a case for a gold standard. In my comment, I choose not to focus on this debate, which has been raging in its modern incarnation at least since Milton Friedman (1951). Instead, I plan to elaborate on an issue that Reynolds touches on but does not develop: the economics of monetary policy secrecy. After exploring the secrecy issue in some detail, I will make some specific points regarding Reynolds's case for a gold standard.

Monetary Policy Secrecy

Like Reynolds, I too have been intrigued by the secrecy that surrounds monetary policy. I decided to study monetary policy secrecy in detail a couple of years ago when I discovered that the Federal Reserve had argued, in the course of a Freedom of Information Act suit, that secrecy is an important tool of monetary policy. I have grown up with rational expectations theory, which emphasizes private agents' optimal use of information. It seemed natural to apply rational expectations theory to investigate the economics of monetary policy secrecy. Much of what I say is based on a paper I recently completed on the subject (Goodfriend 1986).

Let me define what I mean by monetary policy secrecy. I restrict my attention to monetary policy processes generated by central bank optimization of an objective function where policy is not precommitted to a rule, but is merely the outcome of sequential optimization over time. Two sorts of secret policy are possible in this discretionary

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policy environment. First, the coefficients in a central bank's objective function might be secret. This might be because the coefficients are determined by political forces on the central bank, forces known only to bank officials. This sort of secrecy would be of relatively little importance if the public could infer central bank preferences by observing money growth realizations alone. The resulting equilibrium would be identical to one in which information on monetary authority preferences were public knowledge. Such a possibility can be demonstrated in the model developed in Alex Cukierman and Allan Meltzer (1986). However, for a multiple parameter objective function, as seems characteristic of central banks, such indirect identification of preferences is infeasible. So, in practice, multiple objectives would remain secret.

Second, even if central bank preferences were public knowledge, secret policy would still be feasible if one or more of the variables to which the central bank reacts were known to the central bank but not to the public. Let me give two examples. First, consider a central bank that pursues countercyclical stabilization policy, perhaps increasing money growth when unemployment rises. The government, in effect, has a monopoly on macroeconomic data collection. As part of the government, the central bank can receive updates on these variables as they are being constructed, but before they are released to the public. Consequently, money growth responses to preliminary but as yet unreleased unemployment data could be systematically secret although secrecy would be temporary, uncovered after each release of data. Second, very short-term open market transactions are undertaken by central banks to offset effects on banking system reserves such as float and currency movements. But central banks release data on open market transactions and factors affecting reserve positions with a lag *and* on a weekly or monthly average basis. Therefore, secret policy could not only be followed at this frequency, but because released data are temporarily aggregated, secret policy at this frequency could be permanent. In this sense, we might never be able to infer from publicly available data very short-term central bank open market strategy.

Having identified two potential sorts of secrecy, let me discuss two economic implications of secrecy, one from the central bank's point of view and another from the market's point of view. Consider how a central bank might profit from maintaining secrecy about its operations. Suppose both temporary and permanent factors drive the federal funds rate. If the market has information on these only through observations on the funds rate itself, then it would *unconditionally* forecast every funds rate innovation as an average of temporary and

permanent factors, that is, to be somewhat persistent. In this case, Treasury bill rates, which the market prices as an average of expected future funds rates, would respond identically to current funds rate innovations regardless of the true underlying disturbance. Suppose a central bank could trade *conditionally* on its private information that a temporary market factor such as a currency drain is affecting reserves and the current funds rate. In offsetting such a temporary factor, the monetary authority could buy T-bills at a lower price, or sell them at a higher price, than if it made its private information public.

From its point of view, the private market wishes to minimize losses due to trading with the central bank. Let me assume for this example that professional central bank watchers—"Fed watchers"—can interpret central bank signals to acquire information that yields better funds rate forecasts. Furthermore, assume that there is free entry into the central bank watching industry. Finally, suppose that funds rate movements convey better information the more traders are informed, that is, the more widely used are central bank watching services. In this case, the marginal value of central bank watching diminishes the larger the fraction of traders that uses central bank watching services.

Following Sanford Grossman and Joseph Stiglitz (1980), we can imagine a competitive equilibrium in which the fraction of the market that is informed—that is, engages in central bank watching or purchases central bank watching services—is just large enough so that the marginal user is indifferent to employing central bank watching services. The competitive equilibrium framework implies the following: (1) Market participants who use central bank watching services cannot earn abnormally high profits. This means that judgments about the cost or benefits of secret policy cannot be based on claims of above average returns accruing to central bank watchers or their clients. (2) Less central bank secrecy would reduce the cost of acquiring information about central bank policy, reduce the marginal value of central bank watching, and shrink the central bank watching industry. Less secrecy would confer social benefits in two senses. First, it would raise the informativeness of security prices, which could reduce forecast errors and raise everyone's expected utility. Second, it would free resources for other uses previously wasted from a social point of view on central bank watching.

Unfortunately, there is insufficient space here to discuss mechanisms by which secret policy might confer social benefits. I refer you to Goodfriend (1986) for a detailed analysis of such matters. What I have hoped to do in this discussion is to show how recently developed

tools of rational expectations and finance theory can add rigor to the discussion of monetary policy secrecy.

Gold Standard versus Money Stock Rule

As I mentioned I do not intend to present a point-by-point critique of Reynolds's case for a commodity or gold standard. Nor will I conduct a technical critique of the assertions in the text of Reynolds's paper, though I find some of them mystifying. Instead I will organize my comments around the main argument in the paper which seems to proceed as follows: (1) Discretionary policy as currently practiced by the Federal Reserve has failed because it has added unnecessary uncertainty to long-term plans and contracts, due to an unstable price level. (2) The Federal Reserve should be precommitted to a policy rule to reduce uncertainty. (3) The rule could be a price rule, for example, a gold standard or a quantity rule, that is, a money stock rule. But the gold standard is superior on *a priori* grounds because it immunizes the price level from instabilities in money demand and supply due, for example, to technological change and financial innovations in the money services industry.

I am sympathetic with the first two points. There is ample theoretical and empirical evidence that discretionary policy has produced inefficiently high and variable inflation.¹ However, unlike Reynolds, *a priori* I view the gold standard (or some commodity standard) and a money stock rule as roughly equivalent means of delivering price level stability. A gold standard anchors the price level by fixing the dollar price of gold; supply and demand for gold determine the relative price of gold in terms of goods and thereby indirectly determine the dollar price of goods, that is, the price level. A money stock rule anchors the price level by fixing the nominal money stock; the price level adjusts to bring the real supply of money into equilibrium with the real demand for money. Reynolds seems to believe that a gold standard unambiguously delivers more price level stability than a money stock rule. *A priori*, I see no way to make this judgment. We know that new gold discoveries, technological innovations in mining, shifts in industrial demand, and volatile precautionary demand have in the past and continue to induce substantial fluctuations in the relative price of gold. Price level fluctuations mirror relative price of gold movements under a gold standard, but have no effect on the price level under a money stock rule.

¹See, for example, Barro and Gordon (1983) for a theoretical point of view. Broaddus and Goodfriend (1984) and Council of Economic Advisers (1985, ch. 1) contain empirical evidence from recent experience.

However, the cost of using a money stock rule to immunize the price level from relative gold price movements is to allow money demand disturbances to directly affect the price level. As mentioned in point (3) above, Reynolds appears to prefer a gold standard because he believes that it completely immunizes the price level from money demand disturbances. Even if this were so, the price level stabilizing powers of a gold standard relative to a money stock rule would depend on whether price level noise introduced by movements in the relative price of gold were greater or less than those associated with money demand disturbances. However, the gold standard is not even likely to insulate the price level from money demand disturbances. To see why, note that under a gold standard, whether there is a central bank or not, society will have a definite stock demand for gold for monetary uses, that is, coin and banking system reserves. Disturbances to money demand and to the technology of money services provided by banks will induce shifts in stock gold demand for monetary uses which will, in turn, shift supply in the nonmonetary gold market. In general, movements of gold into or out of monetary uses would necessitate shifts in the relative price of gold to maintain equilibrium in the nonmonetary gold market. These will have price level effects as described above. Though the magnitude of these effects is unclear, they are logically undeniable. In short, it is an empirical question whether a gold standard is to be preferred over a money stock rule for price level stabilization, not simply a matter of *a priori* theory as Reynolds's argument seems to imply.

At the end of his paper, Reynolds argues that changes in both the definition of money and assumptions about velocity, that is, money demand, make clear that "no long-term rule can possibly be formulated in terms of a quantity of money." He is presumably making this generalization based on events of the past 10 years. The generalization is highly improper. The definitional changes resulted directly from deregulating the payment of interest on checkable deposits, deregulation forced by the market's efforts to evade interest rate ceilings that had become exceedingly costly due to high inflation-induced interest rates. Without the inflation or the regulations, the name changing and definitional changes would not have happened as precipitously if at all. Moreover, unprecedented velocity behavior since 1982 was associated with the unprecedented disinflation and permanent fall in interest rates, and may in part be due to the deregulation. Again, there is no reason to think that this would have occurred in a regime of stable monetary policy. The feasibility and desirability of the monetarist prescription for low and steady money growth should be judged only after a steady money growth rule has been

credibly followed for a number of years in a correspondingly low inflation and deregulated environment. As Broaddus and Goodfriend (1984) document, Federal Reserve policy was not characterized by serious monetary targeting, let alone the steady, low money growth rates and lack of regulation effects necessary to evaluate the monetarist policy prescription fairly. One should be no more surprised that elements of money supply and demand behaved unusually in this period than that the price of gold was extraordinarily volatile and rose to unprecedented heights. Stability in neither the key elements of the gold standard nor a money stock rule can be assessed fairly by evidence from the highly unstable discretionary monetary experience of recent years.

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IS THERE A POLITICAL MONETARY CYCLE?

David I. Meiselman

Economic Events and Elections

There is a large and growing literature about the relationships between economic conditions and elections. One part of this literature is devoted to the impact of economic conditions on election outcomes. Does unemployment or inflation or interest rates affect how people vote, and if so, how? If unemployment changes votes, is it the level of the unemployment rate, the change in unemployment, its duration, or composition, and so forth. I shall not deal with this area, except to note that it is widely believed that perceived economic well-being, or the lack of it, is an important determinant of elections.¹ Richard Nixon attributed his loss to John F. Kennedy in the 1960 election, not to his 5 o'clock shadow, nor his TV debate with Kennedy, nor to his personal or political failings as a candidate, but rather asserted that the October unemployment rate did him in.

Nixon's proclivity for blaming others for his own shortcomings and failures lessens the authority of his comment but there are many other bits of casual and systematic empiricism which offer support for the importance of economic events in deciding elections, particularly when economic events are unsatisfactory. Thus, the "outs" view economic events with alarm, highlighting real or imagined economic problems and attributing shortcomings to the "ins." In turn, the "ins" point with pride to economic events, highlighting economic accomplishment and cautioning against the dangers posed by the misguided policies of the "outs."

Cato Journal, Vol. 6, No. 2 (Fall 1986). Copyright © Cato Institute. All rights reserved. The author is Professor of Economics and Director of the Graduate Economics Program in Northern Virginia, Virginia Polytechnic Institute and State University. He wishes to thank Hilary Kauffman for preparing the charts and assisting in the analysis.

¹See Frey and Schneider (1978), Nordhaus (1975), and Tufte (1978).

In this context of political competition, there are strong incentives for politicians and those with control over actual events or their perceptions to try to shape actual and perceived economic and public policy events to affect election outcomes. Increased unemployment, higher real incomes, and lower inflation—especially in the months immediately preceding an election—are widely understood to benefit incumbents. To help achieve these results, there is much evidence of special favors to woo special interest groups and of increased pre-election payouts for transfer programs, such as Social Security, with deferred pay-ins of taxes. These are components of the electoral economic cycle widely labeled “the political business cycle.” The myopia of voters, including those with doctorates in economics, and dependable elements of greed and self-interest make the game possible.

Erosion of Constitutional Constraints

There has been a sizable increase in the range, level and detail of government activities viewed as appropriate or permissible for at least the last 50 years. There has been a parallel weakening of traditional constitutional limitations as well as the long-standing fiscal and monetary restraints of balanced budgets, fixed exchange rates, and a fixed price of gold. One result has been an enlarged scope for fiscal actions to effect election outcomes. The secular upward drift of budgets, taxes, and regulation means that government actions more directly touch the lives of larger numbers of voters. There is a corresponding enhanced opportunity for tax and expenditure changes to influence voters. This means that politicians can more readily promise “goodies” by offering the prospect of more government intervention, or, in some instances, less. When government is small and constrained, election outcomes obviously matter less to the median voter. One of the dangers of big government is the undermining of the election process itself as governments use their coercive powers, including taxing, spending, and regulatory powers, to buy votes. But what of the Federal Reserve and the conduct of monetary policy? Is there a “political monetary cycle?”²

Politicization of Monetary Policymaking

By statute the Federal Reserve is independent of the Executive Branch, including the White House and the Treasury. But surely this formal legalistic independence of the Fed and the Executive Branch

²See Meiselman (1984).

need not be interpreted as involving a lack of interest or concern over election outcomes by either the Fed or the Executive Branch. The independence of the Fed need not imply either an inability of the Fed to affect votes or a disinclination of the Fed to do so on their own, nor does it preclude the success of attempts by the Executive Branch to influence the Fed to alter monetary policies to influence voters.

Although I do not intend to survey the literature on the political role of the Fed or to resolve alternative hypotheses, two major hypotheses can be noted. The first hypothesis, as represented by the work of Robert Weintraub (1978), posits that the Fed, like the Supreme Court, reads the newspapers and cares about election results. Weintraub's view is that it is essentially easier to forecast the broad sweep of Fed actions by knowing who occupies the White House than it is to know who the chairman of the Federal Reserve happens to be, because the Fed generally ends up taking its monetary policy leads from the Executive Branch. An alternative view, characterized by the work of Edward Kane (1980), has emphasized the Fed's independence as well as the bureaucratic nature of the Fed hierarchy and staff.

There are still other hypotheses, including the welcome application of public choice analysis to the behavior of central bankers (Shughart and Tollison 1983), but my paper is not directed at these issues. Instead, a narrow aspect of these more general concerns will be analyzed by examining what happens to money growth in election seasons, both before and after presidential elections. This analysis mainly depends on examining a set of charts showing the growth of the current M1 measure of money in each presidential term since January 1945. There have been several recent studies that have used more complex econometric models to examine the relationship between presidential elections and Fed policy (Grier 1984, Pollard 1983). Nevertheless, it is useful to begin with a simpler more direct analysis of this relation before proceeding to more complex statistical procedures.

Elections and Money Growth

Monthly money data were analyzed using seasonally adjusted averages of daily figures at annual rates, as well as three-, six-, nine-, and twelve-month averages of monthly data. A set of charts provided in the Appendix to this paper shows the six- and nine-month averages of money growth at annual rates.³ The charts are marked to indicate

³See Meiselman (1984) for earlier results of examining six-month moving averages of M1 growth.

the location of both the presidential elections and midterm congressional elections. Although the charts show only the level of money growth, changes in the level of money growth—the second difference of the money stock—can be inferred from the charts.

The six- and nine-month moving averages were emphasized for two reasons. First, monthly figures are so erratic that it becomes difficult to see underlying patterns. The longer term moving averages smooth the monthly series. Second, there is much evidence and belief that changes in money growth tend to affect GNP with a lag of six to nine months. The six- and nine-month moving averages may help indicate which periods would tend to be influenced by earlier monetary change.

To influence some aspects of the economic environment, especially those related to changes in aggregate demand, money growth must pick up well before an election in order for the usual lags to come into play. The good news of faster money growth typically comes first, as more nominal money initially leads to more real output and employment. (There is a mirror image for declines in money growth.) Later, perhaps after a year or more, comes the bad news as rising prices replace the initial increase in output. After full adjustment, beyond two or more years, there is no permanent real improvement of output and employment. Only the price level is permanently higher.

If these differential lags hold, they also offer some potential for monetary policy to affect election outcomes by increasing money growth in the period before elections. This opportunity must be balanced against the risk of speeding up inflation. However, the difference in the two lagged effects of higher money growth, shorter for real effects, longer for inflation effects, presents the possibility of timing monetary growth to achieve the initial “good” effects before elections while the later “bad” inflationary effects hit the fan after the election votes are in, too late for voters to change their minds.

This process requires a high degree of myopia on the part of the voters. Alternatively, because only unsystematic surprises can systematically affect real variables, this process may also depend on a high level of ignorance and uncertainty—both about Fed policies and also about the effects of monetary change—in order for nominal money to affect real variables, even temporarily.

The 1948, 1952, and 1956 Elections

Consider first the elections in the early postwar period. As Figures A1–A3 show, in the months immediately before the 1948, 1952, and 1956 elections, M1 growth was relatively flat. In the year or so before

these elections, six- and nine-month money growth generally declined, particularly before the 1948 and 1952 elections. Prior to the 1956 election, money growth had declined sharply throughout 1955 and was relatively flat in 1956 at about 1 percent growth.

Thus, for these three presidential elections there seems no clear evidence of a political monetary cycle at work. In this period the Fed may have been focusing attention on pegging interest rates while simultaneously maintaining fixed exchange rates and a \$35 per ounce price of gold. If so, Fed activities were already so overdetermined and/or inconsistent that they could not easily add an election-cycle money-supply variable to their list of targets and goals, even if the Fed had wished to do so.

The 1960–80 Elections

There is evidence of complex presidential election-related cycles starting with the 1960 election (see Figures A4–A9). Indeed, there seems to be a repetitive cycle surrounding five of the next six elections in the period starting in 1960. As Figure A10 shows, the 1984 election started out conforming to the general pattern but did not carry through in the crucial months immediately before November 1984. Nor did the former pattern resume after the 1984 election. (The nine-month averages, also on the same charts, lag the six-month averages, so some of the lags using the nine-month averages are bound to differ somewhat.)

There are three distinct phases of money growth in five of the six periods surrounding the elections between 1960 and 1980. In Phase I, there was a marked deceleration of money starting about a year and a half before presidential elections. The Phase I deceleration typically lasts about two quarters. It is a prelude to the Phase II speeding up of M1 growth in the months preceding elections. The Phase II acceleration of money growth typically starts early in the year of the election itself. There is some variation in this turning point. Before the 1972 and 1976 elections the turning point occurred in the December preceding the elections and in 1980 it occurred several months later in April. For Phase I and Phase II, it does not seem to make any difference which political party controls the White House.

The pre-election speed-up of money growth ends in the neighborhood of the November election, and there is a tendency for the six-month money growth to hit a peak at that time. There is small variation in this overall regularity. In 1960 the peak was reached two months earlier, and in 1968 and 1972, one month later.

Prior to the 1976 election, there was a sharp deceleration of money starting the third quarter of 1975. This followed the same general pattern for Phase I decelerations. Phase II also started out the same way, with a sharp acceleration of money in the period ending the first quarter of 1976. Thereafter, six-month money growth was relatively flat, with some tendency to slow immediately prior to November 1976.⁴

The regularities over this span of six elections do not end with the elections themselves. There is a marked tendency for the Phase II pre-election speed-up of money to be followed by a Phase III post-election slowdown of money as the Fed changes direction again. However, there seems to be a difference in Phase III post-election money growth, depending on which political party has won the election. As in 1960 and in 1964, when a Democrat occupied the White House, the Phase III post-election slowdown of money is temporary. Soon, money growth speeds up, and within a year is higher than on election day. This was especially so after the Lyndon Johnson election of 1964. It was also a prelude to reigniting inflation in the later years of the Johnson administration.

By contrast, after Republicans won presidential elections, as in 1969, 1973, and 1981, the Fed stepped on the monetary brakes and kept them down, leading to recessions later in each of these three years. Indeed, although the pre-election patterns of money growth before the 1952 and 1956 Eisenhower elections did not follow the later regularities, there was also a marked post-election slowdown of money growth after these Republican victories, leading to recessions in 1954 and 1958, as well.

In the last stage, Phase III, of the apparent regularities over the 1960–80 period, there was an initial retardation of money growth and the only apparent difference in Fed behavior related to which political party was in power. When the Democrats occupied the White House, the Fed relented after the initial period of slowing money growth and soon resumed faster money growth. By contrast, when the Republicans were in the White House the initial tight money was maintained. One possible explanation for the post-election slowing of money growth is that it may be nothing more than an attempt to mop up some of the pre-election excess money, with differences between the Fed's later behavior of money reflecting responses to the fundamental differences between the two major political parties

⁴As noted elsewhere, Ford, the incumbent, lost the election (see Meiselman 1984). One ironic consequence was that Chairman of the Fed, Arthur Burns, was not reappointed by Jimmy Carter.

and the influence of the White House on the Fed's decisions affecting the money supply.

Two years ago, when I first started to examine election-related changes in money, I mentioned some of these patterns to William Niskanen, then a member of the President's Council of Economic Advisors. After I noted the tendency for a Republican presidential victory to be followed by tight money and recession, Niskanen pointed out to me that there had been a recession in the year of every off-year congressional election since 1930 when a Republican was in the White House. These include 1930 under Hoover, 1954 and 1956 under Eisenhower, 1970 under Nixon, 1974 under Ford and more recently, 1982 under Reagan. Republicans lost seats in every one of these six off-year congressional elections, as well. We shall see whether 1986 follows this pattern, or breaks it.

Both before and after the 1976 Carter election, the three-stage pattern of monetary growth in election seasons was different. For the six-month span of money growth, there was no tendency for money growth to speed up in the seven months before the November 1976 election. Then, after the election, instead of a slowing of money growth, it speeded up in early 1977 and remained high throughout all of 1977 and 1978. This fast money growth, combined with successful efforts to drive down the foreign exchange value of the dollar to "improve" the trade balance led to double-digit inflation and double-digit interest rates in the last two years of the Carter presidency.

Monetary growth immediately prior to midterm congressional elections exhibited no clear path before the 1946 elections. However, there was rising money growth before the 1950, 1954, and 1958 elections, declining growth prior to the 1962, 1966, and 1974 elections, and essentially flat growth before the 1970 and 1978 elections. Prior to the 1982 elections six-month money growth was so erratic that it is difficult to generalize a clear change in direction, whereas money growth measured over a nine-month span was relatively flat. All in all, there is no immediately apparent general pattern of money growth prior to—or for that matter, subsequent to—midterm congressional elections.

The 1984 Election

What happened to money over the 1984 election cycle? As Figure A11 shows, six-month money growth hit a peak of close to 15 percent in early 1983. Thereafter, it slowed almost steadily until the November election. Money growth speeded up for a short period in early 1984, which was consistent with the Phase II expansion mentioned earlier. However, the higher money growth proved temporary, as the

slowdown resumed and continued until October 1984. Then, instead of the Phase III slowdown of money growth there was a marked acceleration of money throughout most of 1985. Thus, the 1960-80 pattern (excepting 1976) did not hold, either before or after the 1984 election.

Can the Fed Consistently Create a Political Monetary Cycle?

These events, especially since 1960, raise several questions. First, as a theoretical matter, even if the Fed wished to do so, can the Fed *consistently* use its monetary powers to change the economic environment in election seasons? Second, were the patterns of monetary change prior to elections consistent with influencing economic conditions in a way that could reasonably affect election outcomes?

Turning to the first question, can a central bank consistently use its control over the stock of money to alter interest rates, aggregate demand, and the real variables that may influence voters? From an efficient markets perspective, it is clear that consistently repetitive and hence certain and predictable changes in money growth, including changes in money dependably tied to elections, have results similar to other certain and predictable changes in money. Neither interest rates nor real variables are affected by such known and hence discounted changes in the money stock. This means that if the Federal Reserve or other central banks consistently attempted to pursue policies aimed at affecting the financial and economic environment prior to elections, the efforts would fail once such monetary intervention was discovered. Intervention dependably linked to known constitutionally mandated elections would easily become widely known if central bankers consistently tried the same tricks before, or after, each election.

To work, such central bank intervention must come as a surprise. This means that, even if central bankers wished to intervene to influence elections, they cannot pursue the same strategy in every election, the way cherry blossoms and tulips dependably respond to the weather cycle in April of each year. Uncertainty and surprise must be retained for such policies to work at all, to say nothing of protecting the central bank from adverse actions by political parties and economic interests harmed by such intervention. This suggests that even if Fed officials wished to play the game, they cannot act consistently and predictably in each and every election season. Instead, they must make strategic choices when and how to play. Reflecting their own long-term interests and the interests of the Fed as an

institution, the 14-year tenure of governors and the even longer tenure of many of the staffs of the Board of Governors and district banks would seem to afford sizable potential for such strategic choices.

In any event, this reflects a *more* general phenomenon: that if a central bank acts in a predictable way, it has little or no effect on financial or real variables. Only the price level is permanently changed. This means that monetary uncertainty and the inability to forecast and predict Fed behavior is a necessary condition for the Fed to alter financial markets, output, and employment that influence voters or serve other ends, including economic stabilization. In turn, it also means that the usual search for empirical regularities related to actual (not unanticipated) changes in the stock of money, including the testing of hypotheses using measured and actual monetary magnitudes, may not be appropriate—precisely because the Fed cannot act dependably on average if it wishes to be effective in specific circumstances.

Thus, analyzing only actual monetary phenomena in different elections using standard statistical tests may not represent an operational or meaningful test of intended or actual Fed intervention directed to election results. Even if, from time to time, the Fed, in fact, tries to use its monetary powers for political ends, a *convincing test or proof* may require more detailed and explicit information about explicit intentions on a more micro level, including who said and did what to whom.

These considerations and qualifications make the task of isolating, identifying, and testing for the component of money growth potentially related to election seasons quite difficult. There is a paucity of fruitful results from the work of a generation of researchers trying to determine the Fed's objective function. Isolating its election component may be even more difficult. And, even if isolated from evidence of past elections, there would seem to be little basis for confidently predicting the same role in future elections. Indeed, the same understanding is equally applicable to predicting other components of the Fed's objective function, if there is one.

Before evaluating the specific evidence of monetary change in past political cycles, recall the by now conventional norms for describing the typical lagged effects of money. First, when money growth speeds up, GNP increases two to three quarters later. At first, the change in GNP is in real variables as output and employment increase. Later, as the initial gains in employment erode, prices begin to rise. The inflation impact is felt in about a year; the peak inflation effect of a once-for-all change in money is two years later. In the end, all real

gains erode, replaced by permanently higher prices. There is a mirror image of this process when money growth declines.

In the context of these lags, consider the actual patterns of monetary change during presidential election seasons. Note especially the lagged effects of actual changes in money during five of the six elections between 1960 and 1980 where there appears to have been a complex three-stage cycle. Recall that in Phase I of the cycle, typically starting about six quarters before the November presidential election, there was a slowdown of money growth. This monetary slowdown could serve two purposes. First, given the lagged effect of money on prices, early slowing of money growth could slow inflation immediately prior to the presidential election, which is generally viewed as favorable to the incumbent's political party. Second, the temporary slowing of money growth may also enhance the "good" effects of the more rapid growth during election years—because it appears to be the *change* in money growth rather than money growth itself that influences output and employment, and later controls the inflation rate. Thus, temporarily slowing money growth retards later inflation and increases the impact of the subsequent rapid money growth on real variables during election years. One problem with the Phase I monetary slowdown, however, is that it comes two quarters too late for maximum impact on later inflation. Still, the retardation is early enough for the later real output effects of faster money.

Turning to Phase II, the acceleration of money growth in the two to three quarters before the election would tend to improve real output before elections. The problem is that this turn comes too late for maximum output effect. It would seem to take a longer, more sustained period of high or rising money growth to improve economic circumstances before elections, especially given the delayed response of employment and unemployment to changes in real output. In addition, the delay in reporting and recognizing any actual improvement in economic and business circumstances suggests that the acceleration of money should come even earlier.

Although there is evidence of money growth peaking during Phase II at or close to elections, single-minded control of money directed toward influencing election results should have resulted in the speed-up starting earlier than it did. Thus, the monetary evidence from Phase II alone is mixed and at best may be inconclusive. Alternatively, the monetary evidence should be examined jointly with interest rate and other data for more complex hypotheses beyond the scope of this paper.

Conclusion

In my judgment there is some evidence of a political monetary cycle since the 1960 presidential election. This is consistent with the findings of several other studies, namely those of Grier (1984) and Pollard (1983). The major finding of my analysis, however, is not empirical but theoretical. It is that the usual empirical tests may not uncover clear evidence of a systematic, repetitive monetary cycle matching the constitutionally mandated elections even if there is a political monetary cycle. The reason is simple: to be effective in specific instances, monetary policies that are intended to influence elections cannot be systematically and dependably followed in every election episode. The Fed must choose when not to play in order to be able to use their control of money to influence financial and real variables at other times, including elections. The resulting uncertainty and absence of dependability necessary for the successful pursuit of political monetary cycle goals thereby impairs the periodic and/or systematic empirical regularities that the usual regression analysis and other operational tests depend on.

There are more general and important implications of this analysis. Because surprises, which by definition are unanticipated events, are required to alter markets and market results, uncertainty and the absence of dependability are a necessary condition if the central bank is to affect financial markets and real variables. To influence economic events and to achieve political power, the Fed must maintain uncertainty about its policies. Successful economic forecasting requires both good information about the market's anticipations of future monetary policies as well as the ability to forecast future Fed policies. The elusiveness of dependable information about anticipations plus the Fed's need to maintain or to create uncertainty about its actions explains why the Fed's erratic and unpredictable policies lead to such poor financial and economic forecasts on average by even the best of the forecasters. One related result of the "keep 'em guessing" policy is enhanced instability and economic waste; another is the widely observed variability of the lags in the effects of measured changes in the stock of money.

Appendix: M1 Growth and Elections

Each of the following charts shows the relationship between the six- and nine-month growth rates for M1 (seasonally adjusted at annual rates) and a specific presidential election, as well as a midterm election. The money growth rates cover the six- and nine-month periods ending in the month noted. The charts cover the entire postwar era.

FIGURE A1
SIX- AND NINE-MONTH GROWTH RATES, 1945-48
(SEASONALLY ADJUSTED AT ANNUAL RATES)

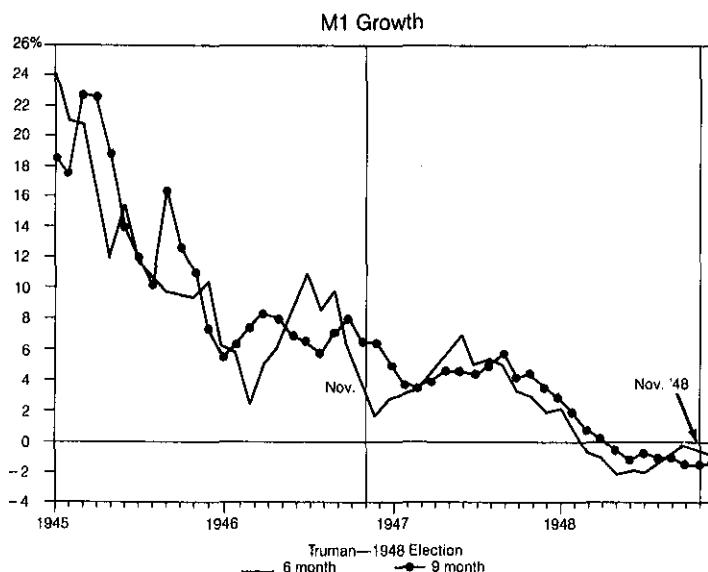
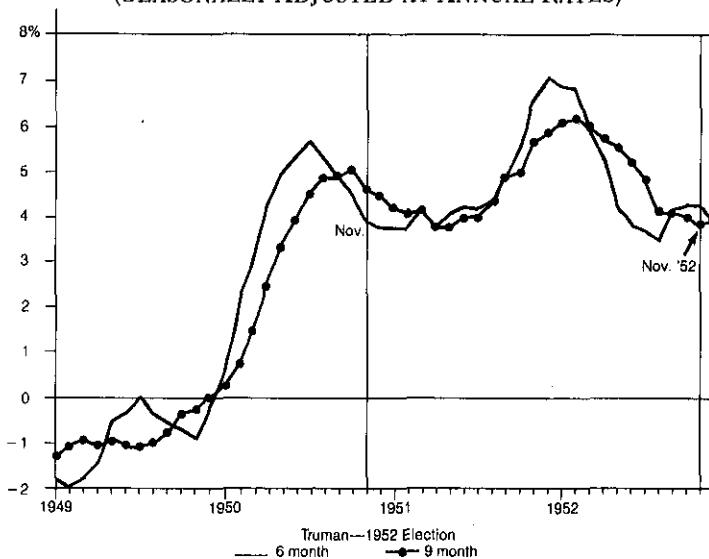


FIGURE A2
SIX- AND NINE-MONTH GROWTH RATES, 1949-52
(SEASONALLY ADJUSTED AT ANNUAL RATES)



POLITICAL MONETARY CYCLE

FIGURE A3
SIX- AND NINE-MONTH GROWTH RATES, 1953-56
(SEASONALLY ADJUSTED AT ANNUAL RATES)

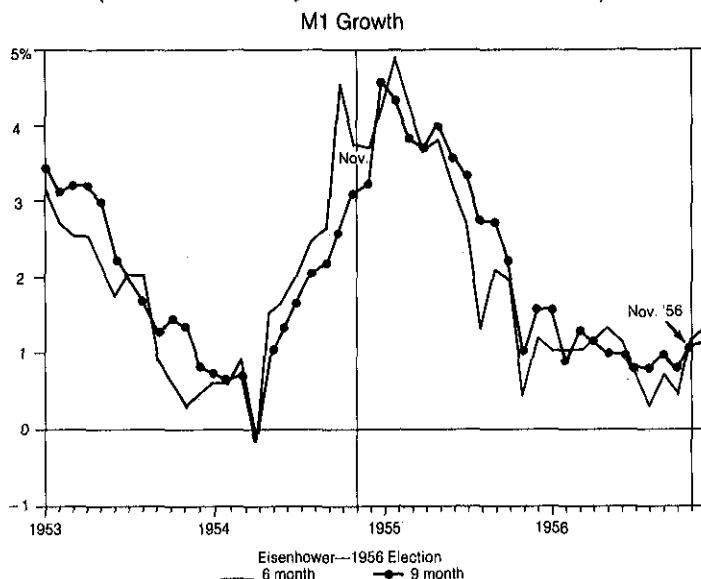


FIGURE A4
SIX- AND NINE-MONTH GROWTH RATES, 1957-60
(SEASONALLY ADJUSTED AT ANNUAL RATES)

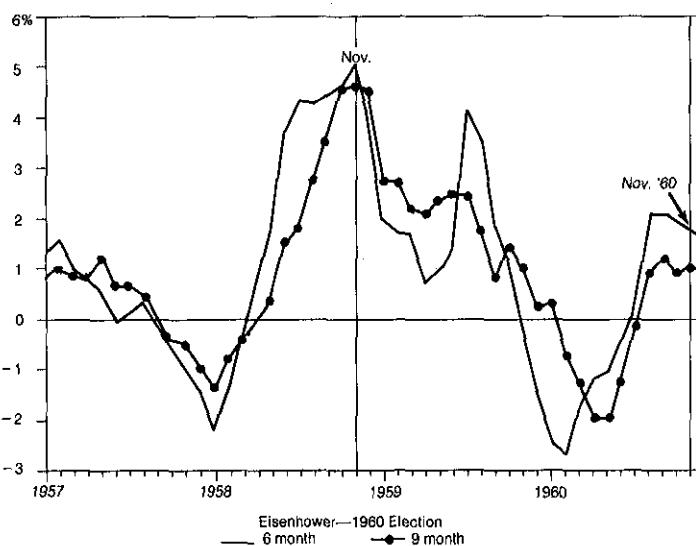


FIGURE A5
SIX- AND NINE-MONTH GROWTH RATES, 1961-64
(SEASONALLY ADJUSTED AT ANNUAL RATES)

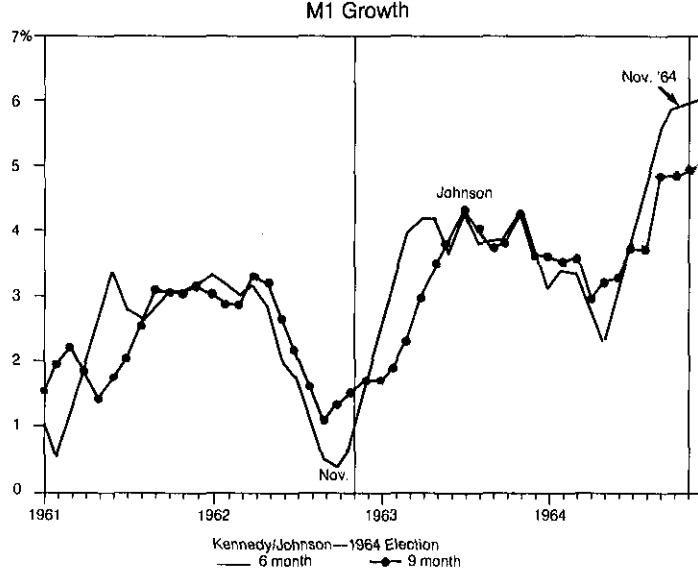
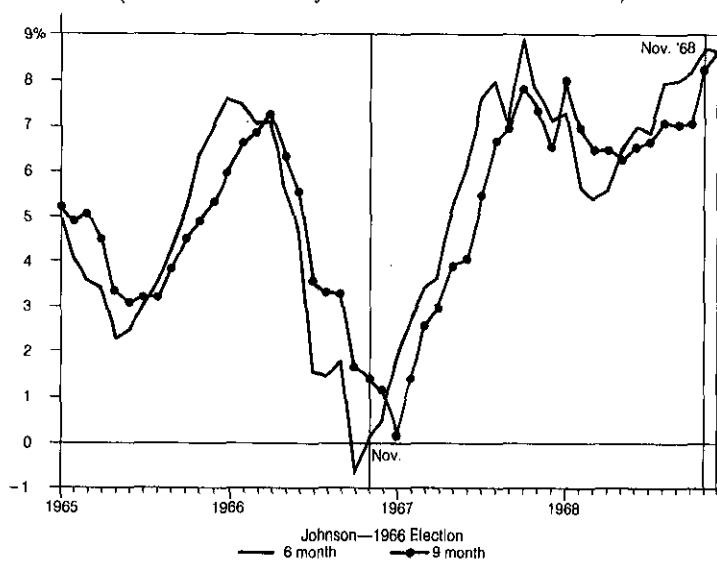


FIGURE A6
SIX- AND NINE-MONTH GROWTH RATES, 1965-68
(SEASONALLY ADJUSTED AT ANNUAL RATES)



POLITICAL MONETARY CYCLE

FIGURE A7
SIX- AND NINE-MONTH GROWTH RATES, 1969-72
(SEASONALLY ADJUSTED AT ANNUAL RATES)

M1 Growth

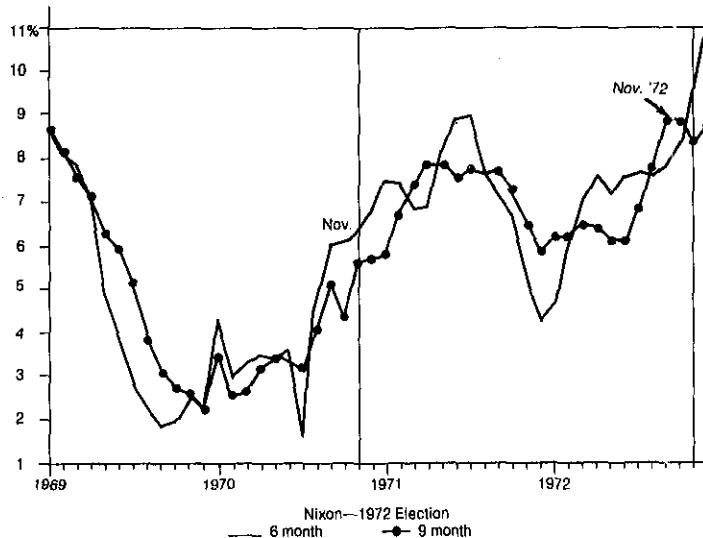


FIGURE A8
SIX- AND NINE-MONTH GROWTH RATES, 1973-76
(SEASONALLY ADJUSTED AT ANNUAL RATES)

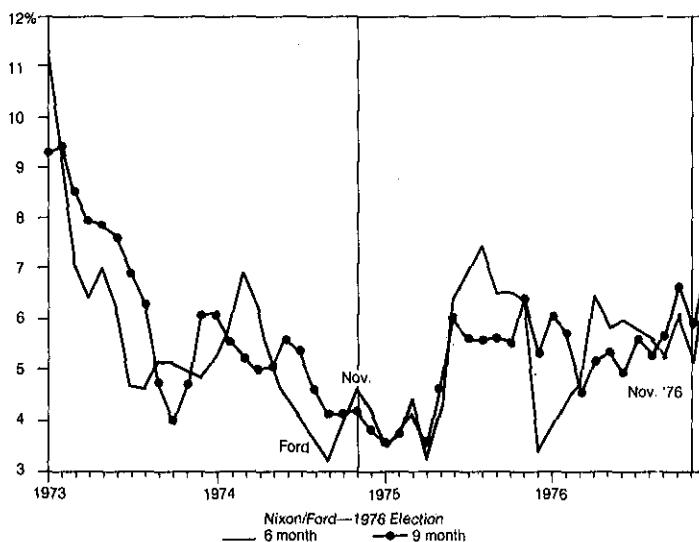


FIGURE A9
SIX- AND NINE-MONTH GROWTH RATES, 1977-80
(SEASONALLY ADJUSTED AT ANNUAL RATES)

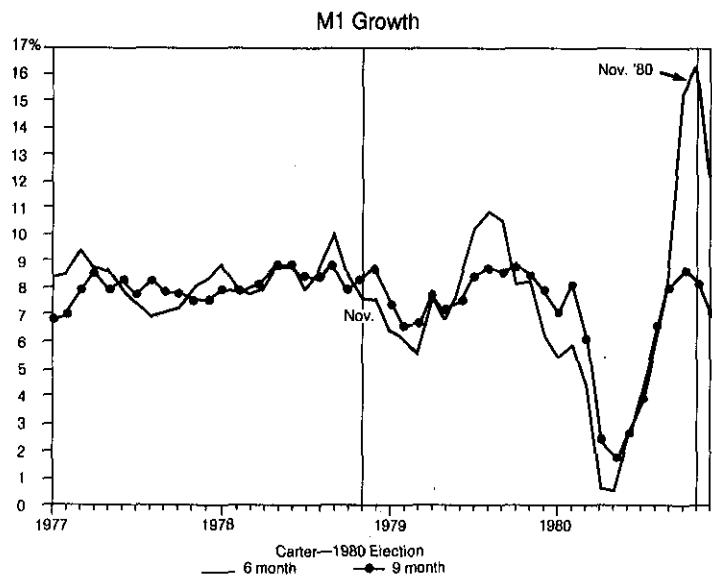
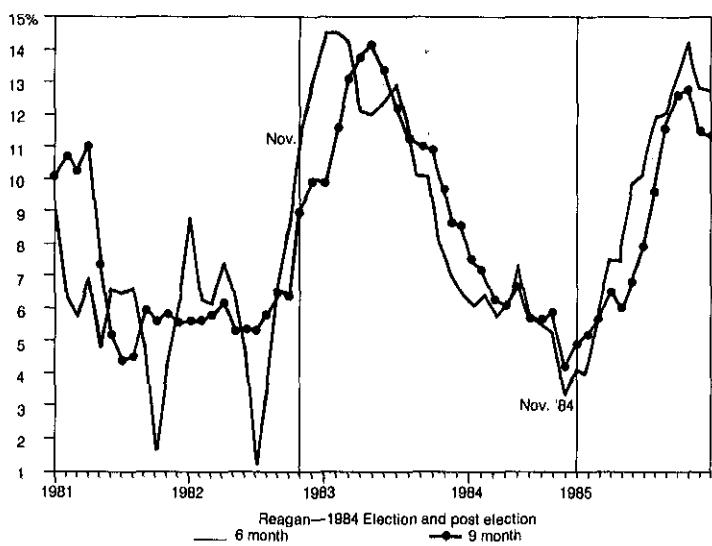


FIGURE A10
SIX- AND NINE-MONTH GROWTH RATES, 1981-85
(SEASONALLY ADJUSTED AT ANNUAL RATES)



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