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THE FORMULATION OF MONETARY POLICY

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## Abstract

The purpose of this paper is to elucidate the way in which current institutional arrangements shape the character of monetary policy. It is emphasized that the Fed, in order to preserve its independence, formulates monetary policy in a way that prevents the formation of coalitions within the government that could threaten its independence. As a consequence, the Fed, in general, attempts to balance multiple, changing objectives. This attempt leads to the demand for "flexibility," an absence of precommitment. Much of the paper is devoted to a discussion of the way in which the Fed's desire to avoid precommitment influences its use of analytical procedures for formulating policy and its use of money supply targets.

## 1. Introduction

Economists often seem to view the monetary policy of the Federal Reserve System as formulated independently from the rest of government. Influencing policy is believed to be a matter of getting the attention of the chairman of the Fed and convincing him of the cogency of a particular policy. It is argued here that monetary policy reflects the nature of the institutional arrangements that circumscribe it. Influencing policy is more aptly viewed as requiring an alteration of institutional arrangements, than as requiring the persuasion of individual policy makers of the validity of particular ideas. The principal participants in the formulation of monetary policy are introduced briefly in Section 2. In Section 3, the theme of the paper is summarized, that is, the primary importance of institutional arrangements in determining the character of monetary policy.

## 2. The Principal Participants

Constitutionally, the Fed owes its existence to Congress. An independent Fed conforms to Congressional needs in that Congress lacks the incentive to supervise monetary policy closely (Woolley 1984 Chap. 7), but is unwilling to surrender monetary policy to the Executive Branch. Congress, of course, still cares about the effect of monetary policy on the economy. The Executive Branch also cares about the effect of monetary policy upon the economy. Unlike Congress, it cannot directly threaten the independence of the Fed. It can exert influence, however, through the power to appoint governors. More important, indirect influence derives from the fact that a good relationship with the Executive Branch can make the latter a useful ally for the Fed in protecting against encroachments on its prerogatives by Congress. [For an extensive list of ways the Executive

Branch and Congress can use in order to try to influence monetary policy, see Kane (1982).]

The public comprises disparate groups with conflicting objectives. The relative political influence of these groups, that is, the extent to which they attempt to influence the political process through voting or contributions to politicians, depends upon the contemporaneous state of the economy. For example, the higher the unemployment rate, the greater is the pressure on politicians to pursue policies to expand employment. Accordingly, Congress and the Executive Branch care about the contemporaneous state of the economy.

The Fed is independent in the sense that no other part of government dictates monetary policy to it. The Fed prizes this independence. The responsibility to formulate monetary policy makes the Fed into an institution of considerable importance. The resulting access to the public media and to other policy makers offers a Fed chairman who is publicly and privately persuasive the opportunity to influence a wide range of governmental economic policies.

### 3. Institutional Arrangements and the Character of Monetary Policy

The dominant characteristic of existing institutional arrangements is the Fed's independence. The sine qua non for the Fed is preservation of this independence. Preservation of its independence, from the perspective of the Fed, involves two aspects. One aspect entails maintaining public support by encouraging the belief that Fed independence is essential for the control of inflation. The aspect emphasized in this paper is that monetary policy must be formulated in a way that precludes a coalition from forming, among groups in Congress and the Executive Branch, that is capable of threatening Fed independence. It is argued that this latter aspect

shapes the formulation of monetary policy in three ways. First, monetary policy is determined primarily by the contemporaneous state of the economy. Second, the behavior of the funds rate must accord in a common sense way with the contemporaneous state of the economy.

Third, preventing the formation of a coalition that can threaten its independence among groups in Congress and the Executive Branch with differing objectives appears, in general, to the Fed to require the balancing of multiple targets, with the relative importance of individual targets varying over time. This latter requirement creates the demand by the Fed for "flexibility," an absence of precommitment. The unwillingness of the Fed to precommit its actions generates implications for the formulation of monetary policy of three kinds: 1) the relationship of the long run and short run in policy; 2) the use of analytical operating procedures; and 3) the use of money supply targeting. The bulk of this paper is devoted to discussion of points two and three above.

#### 4. The Contemporaneous State of the Economy and the Funds Rate

Congress and the Executive Branch are concerned with the contemporaneous state of the economy. A monetary policy guided by the contemporaneous state of the economy is, therefore, required in order for the Fed to maintain its independence. The contention that the dominating influence on monetary policy is the Federal Reserve's perception of the contemporaneously most pressing economic problem has been advanced by students of the Federal Reserve, e.g., Lombra (1980 p. 50) and Pierce (1980 p. 261).

The concern of Congress and the Executive Branch for the behavior of the economy translates, to a limited extent, into a heedfulness of the

behavior of the money supply because of public association of high rates of growth of money with high rates of inflation. Primarily, however, this concern translates into a heedfulness of the behavior of interest rates. While the money supply is an intellectual abstraction, interest rates are a readily observable part of the price system that constrains the availability of resources and affects the distribution of income.

Rep. Paul. A lot of our discussion so far has been on interest rates, and there is justified reason for this, because when we go and talk to the people, everything they see and hear about is in terms of interest--  
Chairman Volcker. That is right. (U.S. Congress 1982 p. 66)

The Federal Reserve implements monetary policy by varying its policy instrument in a way that accords with its perception of the contemporaneously most pressing economic problem. The policy instrument that is considered relevant for implementing policy, the funds rate or the money supply, changes in an ad hoc way because of the dual concern of the public for each of these instruments. The greater importance attached to interest rates rather than to the money supply by the public implies that generally it is the behavior of the funds rate that must appear to accord with the contemporaneous behavior of the economy (Poole 1980 pp. 276-7). The attitude of the Fed toward interest rate, as opposed to money supply targeting, is discussed in Section 6. For the post-October 1979 period, the ideas of this section are illustrated in Hetzel (1984).

The political system acts to ensure a monetary policy that is politically acceptable through the selection procedure for the chairman of the Federal Reserve. Attributes that promote an individual's candidacy for chairman include a distinguished career of public service, recognition in financial markets, recognition by key politicians (especially the chairmen of the House and Senate Banking Committees), and acceptability to

presidential political advisors. In discussing candidates, newspaper articles stress phrases like "leadership skills," "experience," and "stature." The economics of serious candidates will be described by words like "pragmatic" or "eclectic." This recruitment procedure produces chairmen likely to adopt monetary policies that will elicit broad political support, specifically, policies guided pragmatically by the contemporaneously most pressing problem of the economy, rather than by an abstract economic paradigm.

The hypothesis that monetary policy is shaped by the need to avoid formation of coalitions that could threaten the Fed's independence implies that monetary policy should be thought of as being formulated within the political system rather than as being formulated apart from this process by philosopher economists. This implication in turn implies the testable implication that monetary policy will not be formulated in any way that removes it from the political decision making process. The characteristics of the way in which monetary policy is formulated that are described below can be viewed as empirical evidence supporting this testable implication. More generally, the hypothesis of this paper that the character of monetary policy derives from the institutional arrangements within which it is formulated requires for testing observation of monetary policy across different monetary regimes. The summary of monetary policy for the current regime offered here is intended as a step in the latter program of research.

##### 5. The Time Horizon of Policy and Nonanalytical Decision Making

FOMC discussion, as it evolved in the early 1970s, was in two parts, with each part organized around a staff presentation. The first of these presentations, the Greenbook presentation, entailed a detailed forecast of

the behavior of the economy over a four to six quarter horizon (Lombra and Moran 1980). In the subsequent discussion, FOMC members would offer their views on the current and near-term state of the economy and would ask "stump the staff" questions about the consistency and validity of the staff's projections. Detailed discussion of the state of the economy dominated at FOMC meetings, with minimal discussion of basic issues of monetary theory and policy (Mayer 1982a). No explicit numerical specification of ultimate objectives was attempted.

The second presentation, the Bluebook presentation, entailed explication of three sets of paired values of the federal funds rate and growth of the money supply, with the values in each pair predicted to be mutually consistent. These three sets assumed a slightly lower, unchanged, and slightly higher value of the funds rate than the currently prevailing value, and they showed the associated money growth predicted over consistent six, later twelve, and two month paths. Specification of the pairs of funds rate and money supply projections started with a staff forecast of the growth of nominal GNP. This latter variable was taken as exogenous over the relevant horizon of policy. The relationship between the funds rate and money supply projections was derived on the basis of a Keynesian liquidity preference effect. Nominal money growth that was high, commensurate with, or low in relation to the given value of GNP growth was assumed, respectively, to depress, leave unchanged, or raise the level of market rates.

The FOMC in its discussion would select a pair of values for the funds rate and growth of the money supply, although not necessarily one of the pairs listed in the Bluebook. The associated figure for money growth was viewed as a benchmark, not a target (Hetzl 1981). Over the ensuing



intermeeting period, the Desk would compare projections of money growth (revised weekly on the basis of incoming data) with this benchmark as the criterion for determining whether to change the target for the funds rate.

The relationship between the first and second parts of FOMC meetings was informal. For example, when FOMC members were concerned about the real sector, the detailed discussion of the economy in the first part typically focused on reasons for not tightening in the money market. Such concern is often recorded in the Record of Policy Actions (a summary of FOMC deliberations) by statements like the following:

It was also suggested that a firming of money market conditions. . . would be premature, given the weakness of recent economic statistics, the still unsettled coal strike, and uncertainty about the strength of the prospective rebound in economic activity. (Board 1978 p. 150)

If the real sector was the primary concern, the FOMC would choose an "easy" benchmark for money growth based upon the alternative specified by the staff in which money growth was high relative to the projected growth of GNP. In this way, incoming data on the money supply would be likely to cause the Desk to lower the funds rate slightly. If inflation was the primary concern, the FOMC would choose a "restrictive" benchmark for money growth, one likely to cause the Desk to raise the funds rate slightly. (This discussion of operating procedures in the 1970s is continued in Section 6).

Although the operating procedures of the Fed changed in 1979 (Hetzel 1982 and 1984), the formulation of monetary policy has retained a basic continuity. First, monetary policy evolves as a succession of short-run decisions, as reflected in the assumption of exogeneity of GNP growth over the relevant policy period. It is assumed that an optimal long-run policy will result from a concatenation of policy decisions, each of which is

optimal in a short-run context, without any systematic procedure whereby long-run objectives constrain the decision-making process. The unwillingness to constrain the behavior of policy variables on the basis of long-run objectives is one manifestation of avoidance of precommitment.

Second, monetary policy is formulated outside of an analytical framework. For example, Lombra and Moran (1980 p. 43) comment, ". . .without the guidance or discipline offered by an analytic model and formal targets for nonfinancial variables, the formulation of monetary policy often seemed a seat-of-the pants operation." (See also Warburton 1952, Friedman and Schwartz 1963, Brunner and Meltzer 1964, Guttentag 1966, Kane 1980, Pierce 1980, Mayer 1982a and 1982b, and Lombra forthcoming.) The FOMC does not specify explicit numerical values for ultimate objectives and then employ a model of the economy in order to derive, from these ultimate objectives, settings for either its intermediate or operating targets. Monetary policy is effected outside of any framework relating policy variables to ultimate objectives. Instead, policy variables are moved in a way that conveys a shading of emphasis among competing qualitative objectives, such as "low" unemployment and "low" inflation.

There are a variety of reasons why the Fed formulates monetary policy outside of an analytical framework. Analytical decision making requires explicit formulation of ultimate objectives. The Fed believes that explicit formulation of objectives would encourage an attack on its independence. In particular, Congressional review of explicit objectives might allow Congress to dictate them. This view is illustrated in testimony by the Fed on the numerous bills introduced in Congress in 1983 that would require the Fed to make explicit its ultimate objectives. (An example is the bill introduced by Rep. Fauntroy, The Balanced Full Growth Act of 1983, that

would require the Federal Reserve to transmit to Congress twice annually an objective for GNP growth.)

Finally, some proposals could be motivated--whether explicitly or not--by a desire for the Congress (or an administration) to exert direct control over setting and implementing monetary policy. That is not usually a professed objective; but the effect of some proposals would be to facilitate or even encourage such an outcome (p. 618). . . The independent status of the Federal Reserve that makes a longer-term view possible might well be compromised with GNP targeting, since the Federal Reserve could be under great pressure to conform its targets to some immediately attractive number and then to act to achieve those targets. (Volcker 1983c p. 620)

Indeed, in the end, the pressures might be intense to set the short-run "objectives" directly in the political process. . . . (Volcker 1983a p. 607)

More generally, analytical decision-making procedures are unacceptable to the Fed because they would precommit it to a way of making decisions incompatible with the formulation of monetary policy in a way that prevents the formation of political coalitions capable of threatening its independence. At times, analytical procedures would call for changes in policy instruments that to the public would appear unjustifiable in light of the contemporaneously most pressing economic problem, for example, significant increases in the funds rate when unemployment, rather than inflation, is the major concern. Also, analytical procedures for decision making would cause the Fed's preference for moderate, gradual changes in its operating variables, especially the funds rate, to appear adventitious. (The existence of this preference is not contradicted by occasional large changes because it may be the moderate, gradual changes that force occasional large changes.) Such behavior of operating variables is valued because it creates the impression that the Fed is not making a clear choice between conflicting goals, but rather is only shading the emphasis of policy. In this way, monetary policy actions are packaged in order to avoid serving as a lightning rod for the criticism of potential opposition.

Other problems turn on the fact that policy formulated within an analytical framework requires numerical specification of ultimate objectives. Such explicitness is ill adapted to the requirement that priorities among ultimate objectives be varied over time in an ongoing manner (Kane 1980). By serving as a focal point for pressure from vocal, well organized groups, explicit objectives would constrain the ability of the Fed to alter the priorities assigned to ultimate objectives. When an objective is revised in a way that a particular group considers undesirable, the explicitness of past targets would facilitate accusations by this group of a lack of resolve and consistency on the part of the Fed.

The absence of explicit ultimate objectives aids in fostering a consensus among competing groups that actual monetary policy is desirable. The more explicit the monetary authority is about its ultimate objectives, the harder the task of convincing competing groups that their conflicting objectives are being pursued. Vagueness fosters consensus by permitting a defense of policy as a joint pursuit of all desirable objectives, at least within some undefined long run. Explicitness highlights painful trade-offs. Explicitness about the relationship between ultimate objectives and operating targets also would increase the ability of groups to challenge the Fed over whether the actual choice of operating targets would in fact achieve the stated ultimate objectives.

Perspective on the formulation of monetary policy outside of an analytical framework can also be gained from the work of political scientists like Lindblom (1959). A variety of entities can potentially combine in order to threaten Fed independence. These entities include the House and Senate Banking Committees, each of which possesses majority and minority camps, and the Executive Branch, which may be divided into

disparate camps comprising the Treasury, the Council of Economic Advisers, and the Office of Management and Budget. These camps will have their own constituencies. The conflicting objectives of these various constituencies render impossible formulation of a common set of objectives, the pursuit of which would preserve Fed independence. Analytical decision-making procedures, consequently, are impractical. Negotiations within the political system over ultimate objectives are not possible. Discussions over ultimate objectives are replaced by more tractable discussions over moderate changes in operating variables, although in unusual situations of "crisis," large changes in operating variables become feasible.

#### 6. Money Supply Targeting

Money supply targeting is only infrequently an acceptable means of implementing monetary policy. It generally conflicts with the need for the behavior of the funds rate to "look right" given the contemporaneous behavior of the economy. Also, within the Fed, money supply targeting is associated with precommitment, that is, a commitment to vary the funds rate on the basis of the behavior of the money supply, relative to a target set in the past. An absence of precommitment, however, is viewed as a prerequisite for balancing multiple, changing targets. These points are illustrated below in the context of a review of the three general ways in which the Fed has implemented monetary policy in the recent past.

The first general way of implementing monetary policy is termed the judgmental mode. It involves straight judgmental variation of the funds rate (or money market conditions) with no criteria specified in advance for determining this variation. This mode characterizes monetary policy from the post-Accord period through Sept. 1972. In response to criticism that it had allowed excessive growth of money in 1968, the FOMC early in 1970

began to make policy choices from alternative pairs of specifications of conditions in the money market and projections of money growth. The hope of the FOMC was that, if it were aware of the implications for growth of the money supply of its choice of the interest rate target, then interest rate targets that produced undesirable money growth would be avoided. This procedure, of course, did not obviate the need to make hard choices between interest rate changes and monetary control. In practice, the increased awareness of the implications for growth of money of the rate target did not enhance monetary control.

From the perspective of the Fed, the problem with the judgmental mode is that it conveys the message to the public that the Fed can control interest rates. Pressures then develop for the Fed to control interest rates in order to achieve allocative, rather than macroeconomic, objectives. These pressures led to the indirect mode for implementing monetary policy. In this mode, used from Oct. 1972 until Oct. 1979 (Hetzel 1981), the behavior of the money supply triggers changes in the funds rate considered desirable by the Fed.

In the 1970s, the prerequisite for significant targeting of the money supply, that is, operationally-significant targets for the money supply, did not exist. Because of the phenomenon known as base drift, the money supply targets specified by the Fed lacked operational significance. Targeted growth rates (two quarter before 1975 and four quarter thereafter) were applied to a base that was changed quarterly. The result was to vitiate the significance of the targets by causing them to become a function of the quarterly misses of past targets.

The Desk was not given targets for the money supply, but rather was given "tolerance ranges." These tolerance ranges were not intended to

constrain actual money growth; instead, they served as benchmarks which, in conjunction with projections of near-term growth of the money supply, indicated to the Desk when to change the funds rate. Changes in the funds rate were constrained to be essentially monotonic over particular phases of the business cycle (Hetzel 1981). In this way, the money supply served as a triggering mechanism for producing desired changes in the funds rate. The operating procedures of the 1970s were extremely complex. They can, however, be understood as designed in order to build the politically advantageous rationale of monetary control into increases in the funds rate while in fact allowing the Fed to retain the funds rate as its policy variable.

In the third general way of implementing policy, the monetary aggregates mode, the behavior of the money supply is the criterion for setting the funds rate. This mode lacks the precommitment envisaged by proponents of money supply targeting. The money supply is retained as a criterion for setting the funds rate only as long as the behavior of the money supply captures the Fed's perception of the economy's most pressing problem. In contrast with the judgmental and indirect modes discussed above, however, the monetary aggregates mode does require specifying in advance a criterion for determining changes in the funds rate. The relative importance of precommitting policy with this latter mode makes its use acceptable only when the Fed possesses a single objective, lowering the rate of inflation.

The monetary aggregates mode was employed from Oct. 1979 to July 1982, apart from the period of the Special Credit Restraint Program in spring 1980 when credit, rather than money, was targeted. [The formulation and implementation of monetary policy from Oct. 1979 to Dec. 1983 is described in detail in Hetzel (1984).] The monetary aggregates mode allows full use

of the language of monetary control as a way of relaxing the political constraints on raising the funds rate. The use of this language allows the Fed to avoid setting an explicit target for the funds rate and to defend increases in the funds rate as necessary in order to control inflation.

In the summer of 1982, the Fed switched from the monetary aggregates mode of implementing policy to the judgmental mode. The prior preoccupation with the single objective of reducing inflation gave way to the more typical situation in which the Fed was balancing multiple objectives. In particular, policy came to be directed toward sustaining economic recovery and averting a collapse of the international financial system, while forestalling a revival of inflation. A policy environment of balancing multiple objectives rendered even the limited precommitment of the monetary aggregates mode unacceptable. This environment made inevitable a return to the implementation of policy through judgmental variation of the funds rate.

The money supply plays a role in two of the general ways of implementing monetary policy discussed above, the mode in which it triggers desirable changes in the funds rate and the mode in which it serves as a criterion for setting the funds rate. In order to understand this role, it is important to note that, with both kinds of operating procedures, the Fed "looks through" the money supply to economic activity in determining the funds rate. Specifically, the money supply is regarded as a useful criterion for triggering changes or for setting the funds rate when its behavior reflects the behavior of contemporaneous economic activity, but is discounted otherwise. When money is growing rapidly during a recession, for example, the growth of money will not appear to offer information on the behavior of economic activity, so it will be discounted. The lack of



correspondence between the behavior of money and GNP will be interpreted as reflecting a shift in the demand for money. In this way, the funds rate can be moved in a way that appeals to common sense in the light of contemporaneous economic activity. These ideas explain the following kind of quotation.

We recognize the considerable uncertainties surrounding the shorter-run relationship between growth rates of the monetary aggregates, on the one hand, and the behavior of output and prices on the other. The Federal Reserve will continue, therefore, to maintain a vigilant and flexible approach, putting the long-run performance of the economy above the pursuit of any fixed monetary growth rates. (Miller 1978 p. 189)

The idea of "looking through" the behavior of money to the economy explains the importance the Fed attaches to having multiple definitions of the money supply to choose from as targets. This multiplicity of definitions and targets and the ability to vary the emphasis placed on particular definitions and targets increase the probability that at any given time the Federal Reserve will have available a definition of money whose behavior captures its perception of the contemporaneous state of economic activity.

. . .for purposes of conducting monetary policy, it is never safe to rely on just one concept of money. . . . (Burns 1973 p. 794)

I believe we need to measure and target a variety of aggregates because, in a swiftly changing economic environment, any single target can be misleading. (Volcker 1982 p. 751)

. . .in the final analysis, reality is too complicated to pick out a single figure at this single point in time that can fully capture the essence of money and will not behave somewhat differently than the numbers relative to economic activity. (Volcker 1980 p. 8)

. . .judgment about which target or targets are more significant at particular times, provide an element of, to me, appropriate flexibility in the face of shifts in relationships of the aggregates to the economy. . . . (Volcker 1983b p. 614)

## 7. The Role of Money after 1975

In the 1970s, the Fed resisted a direct role for money in monetary policy. Discussions within the Fed typically concentrated on why the M1 demand function might plausibly be considered to be contemporaneously unstable. For example, when M1 was below its target range, discussions usually centered on reasons why financial innovation might cause the M1 demand function to shift leftward in an erratic fashion. Such discussions, by concentrating on the possibility of unpredictable shifts in money demand and by ignoring the difficulties of associating values of the funds rate with values of the expenditure of the public, built in the conclusion that the Federal Reserve should target the funds rate. The widespread aversion to money supply targeting probably derives from the tacit assumption that acceptance of money supply targeting implies acceptance of stability of the public's money demand function. This stability implies a simple criterion for assessing monetary policy - high rates of growth of money are inflationary. Such a simple criterion would curtail the freedom of the Fed to pursue policies balancing multiple, changing objectives and would, from the perspective of the Fed, reduce its ability to maintain its independence.

In 1975, Congress, as part of the post-Watergate effort to increase its influence, required the Fed to report to it on objectives for money growth. As the discussion in Woolley (1984 Chapter 7) makes clear, the primary concern of Congress was over the behavior of interest rates. Money supply targeting represented a compromise among other legislative initiatives, probably made necessary by the impossibility of reaching a consensus over what would constitute a desirable interest rate target. Woolley (1984 p. 147) concludes, "Mainly, HCR 133 required the appearance of the Federal Reserve Chairman at hearings at regular intervals. This was an opportunity

for fruitful exchange; nothing more (*italics in original*).” The Fed opposed publicly-reported money supply targets.

. . .if the Federal Reserve's policies were to be focused solely on the money supply. . .our financial system would be placed in jeopardy. . . .Let us not lose sight of the fact that the public's demand for currency, for demand deposits, for savings deposits, and for a host of other liquid assets are constantly changing. (Burns 1975 p. 153)

In order to understand the role played by money supply targets after 1975, it is useful to note that the requirement that the Fed balance multiple goals creates a demand by the Fed for multiple instruments of policy. Typically, the Fed attempts to implement policy with two kinds of variables: one variable directed at influencing directly the spending of the public, the funds rate, and the other variable(s) directed at influencing the public's perception of monetary policy, the discount rate, public announcements, money supply targets, and again the funds rate (Cukierman and Meltzer 1983).

After April 1975, the Federal Reserve used its money supply targets primarily as a means of influencing the inflationary expectations of the public. The target range for growth of M1 was lowered periodically between April 1975 and July 1977, despite the fact that over this same period the actual growth of M1 rose to its cyclical highpoint after the trough of early 1975. The target range for M1 was lowered in order to convey to the public the message that the Fed's ultimate objective of price level stability would constrain its policy in a long run context, even though this objective could not be constraining in a short-run context because of a concern for the behavior of the real sector.

The formulation of monetary policy has retained a basic continuity from the post-Accord period through the present. The level of interest rates in the money market is varied judgmentally, primarily in response to

the contemporaneous state of the economy. Starting in 1975, however, the language of interest rate targeting began to be abandoned in favor of the language of monetary control. Use of the former language is felt by the Fed to encourage the political system in the inappropriate belief that interest rates can be manipulated either to achieve allocative ends or to substitute for fiscal discipline.

Starting in 1975, the Fed began to use the language of intermediate targeting, with the funds rate as the instrumental target, the money supply as the intermediate target, and, say, GNP as the ultimate target. After Oct. 1979, in this description of policy, nonborrowed reserves replaced the funds rate as the instrumental target. Finally, after Oct. 1982, borrowed reserves became the instrumental target. This language allows the Fed to avoid any reference to interest rate targets. Unfortunately, it has also created considerable confusion over the nature of monetary policy because economists have often inferred the nature of policy from the language used by the Fed.

#### 8. Summary and Conclusion

Monetary policy is characterized by the judgmental variation of policy variables, especially the funds rate, in response to the behavior of the contemporaneous state of the economy. The judgmental character of monetary policy is viewed by the Fed as allowing it to pursue desirable goals while also endowing policy with the latitude necessary in order to preserve the independence of the Fed. The need to formulate monetary policies capable of preserving its independence is believed by the Fed typically to impose the requirement of balancing multiple goals among which priorities change. This requirement creates the demand for flexibility, an absence of precommitment. The desire not to specify in advance criteria

for determining the behavior of policy variables limits the willingness of the Fed to constrain policy by long-run goals, to employ analytical operating procedures, or to pursue money supply targeting.

Altering the character of monetary policy requires altering institutional arrangements, rather than convincing the policy maker of the truth of particular economic theories. The removal of Fed independence and the assignment of the responsibility for monetary policy to Congress or the Executive Branch, however, would not necessarily change the basic character of monetary policy. Monetary policy would probably still be characterized by the ad hoc juggling of multiple, changing targets. An alteration of the way in which monetary policy is formulated would require an explicit mandate from Congress for a change.

The current mandate from Congress to the Fed is too general to possess any significance. Section 2A of the Federal Reserve Act requires the Fed "to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." The "ranges of growth or diminution of the monetary and credit aggregates" are to be set "taking account of past and prospective developments in employment, unemployment, production, investment, real income, productivity, international trade and payments, and prices." In the absence of a clearly defined Congressional mandate, the effective mandate of the Fed is defined in an ongoing way by the contemporaneous state of the economy. It is the contemporaneous state of the economy that determines the relative priorities among the variables the Fed must juggle in order to preserve its independence.

Economists interested in influencing monetary policy often have assumed that the character of monetary policy derives from a choice by policy makers from among the ideas debated by macroeconomists. Influencing

policy becomes then an exercise in convincing policy makers of the cogency of particular theoretical paradigms. The political economy of monetary policy, however, possesses little in common with the ideas constituting macroeconomic debates. Economists interested in influencing monetary policy, it is contended here, need to pay increased attention to the design of institutional arrangements.

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