

A REVIEW OF THE RULES VERSUS DISCRETION DEBATE IN MONETARY POLICY

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INTRODUCTION

Some economists believe that economic growth can be enhanced and price stability achieved by implementing a monetary policy rule. Rules are argued to reduce policy mistakes, improve the transparency of policy, and end political influence on policymaking. Rules have been suggested for Latin American economies that for many years have struggled with high inflation and unemployment, and financial crises [Zarazaga, 1995]. Other economists believe monetary policy works fine without rules or see rules as unpractical. They cite attempts to implement rules in the past that have failed to create a reliable policy [Friedman and Kuttner, 1996]. This paper is about how monetary policy should be conducted. The essay begins by summarizing the case in favor of rules and describing the specific monetary policy rules derived from this theory. The next part of the paper systematically lays out the argument for rejecting policy by rules. The last section provides a critical analysis of the rules versus discretion literature and makes the case for a discretionary monetary policy. The intent of this work is to provide readers with a substantive overview of the rules versus discretion debate. An extensive bibliography is provided to direct readers to primary sources.

THE CASE FOR RULES

A strong consensus prevails among economists that discretionary monetary policy generates economic instability, is biased toward inflation, and is open to special interest politics. Friedman [1968] argues that policy efforts to peg low interest rates or high employment only produce higher interest rates and inflation later. Monetary authorities can control money growth, however, and it is changes in money that affect economic stability. Furthermore, rule advocates believe that monetary policy strategy and targets frequently shift, producing a time-inconsistent and unpredictable policy, resulting in a substantial decline in people's faith that the central bank is committed to low inflation. Complicating this problem are the rational expectations of economic agents who either must be fooled into expanding economic activity or who will react before any policy is implemented in a way that makes activist policy ineffective in changing employment and output [Sargent and Wallace, 1975]. Expectations formed from experience lead people to believe that activist monetary policy will

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contribute to economic instability and excessive inflation [Kydland and Prescott, 1977]. Therefore, a rule that commits the monetary authority to a nonactivist, nondiscretionary policy makes the economy more stable by creating a more credible, more certain policy aimed at price stability [Barro and Gordon, 1983a]. In contrast, discretion leads to an inflationary bias in monetary policy when policymakers err towards achieving unemployment levels below the natural rate. Theoretically, a credible noninflationary policy stance could costlessly reduce inflation and achieve lower unemployment compared to a discretionary policy [Barro and Gordon, 1983b]. And finally, a monetary rule prevents policy from being manipulated by government fiscal and political interests. Government's attempts to obtain resources through printing money creates inflation, which taxes the public and reduces the real value of property, all without legislation. A price stability mandate, achieved through a rule, protects private property and keeps state finance honest. Rules also prevent political pressures that distort markets or incentives, and limit the government's ability to placate special interests [Cox, 1990; Hetzel, 1997; Goodfriend, 1997; Cukierman, 1992].

Rule supporters criticize discretionary policy because it is conducted on a period-by-period basis without making any connections between the policy choices made over time [McCallum, 1989, ch. 12]. The advantage of decision making by rules is that it views policy not as a sequence of unrelated decisions but as a means to achieve optimal outcomes by following a consistent régime over a long time period. The monetary authority should take into account the cumulative consequences of its policies, which may be destabilizing for an economy, but a discretionary policy does not foster such prudence. The ability of a rule-led policy to hit low inflation targets is not thwarted by random shocks or cyclical fluctuations. McCallum believes that policy can be activist in that it takes into account current economic situations and remain rule driven as long as the central bank stays committed to a given rule or formula each period. McCallum offers evidence that monetary policy by rules is superior to discretionary policy. He argues that a commodity-money standard is one form of a rule and this standard was in effect before World War II. McCallum displays data showing that U.S. history prior to World War II was a period of zero average inflation, while inflation has been substantially positive since the war [ibid., 245-48].

MONETARY POLICY RULES

From the above argument, economists have derived simple rules to guide monetary policy to avoid inflation bias and political pressure. Perhaps the most famous rule is Milton Friedman's [1968; 1972; 1992] monetary policy rule. This rule would require policymakers to control money growth rates by controlling the growth in bank reserves. The immediate objective is to limit money growth to the rate of growth of production to maintain price stability. In the United States, this function is to be performed by a small group of people in the Treasury Department, thereby reducing the Federal Reserve's role to one of bank supervision and regulation. A modified money growth rule would allow policymakers to adjust money growth in accordance with past changes in money velocity [Mayer, 1987]. Either way, monetary theorists believe that the quantity theory is the only useful framework for explaining the long-

run behavior of prices [Hetzel, 1993]. Similarly, McCallum's rule [Croushore and Stark, 1995; McCallum, 1988] specifies that the central bank should vary money growth when nominal GDP growth exceeds or fails to meet a predetermined growth rate ceiling or floor. If GDP growth breaches the set ceiling, money growth should be reduced to avoid inflation or to reestablish price stability. Alternatively, former U.S. Federal Reserve Board member Wayne Angell is a proponent of the commodity price rule [Angell, 1994]. This rule would require the central bank to vary short-term interest rates directly with a commodity price index. If, for example, the index exceeds some predetermined ceiling or index value, the central bank would necessarily raise interest rates in an attempt to limit borrowing and demand in the economy. Angell believes that inflation in commodities leads general inflation.

Some economists and Fed officials have given credence to the concept known as the natural rate of unemployment. The natural rate is that rate of unemployment that maintains price stability; it's the noninflationary unemployment rate. The only way for activist public policy to exploit the Phillips curve tradeoff and drive unemployment below the natural rate, and maintain that unemployment rate, would be to create ever greater monetary stimuli that would generate accelerating inflation. A rule based on the natural rate would be to compare a quantitative estimate of the natural rate to the official estimate of unemployment to determine whether policy should ease or tighten. When actual unemployment falls below the natural rate, policy should tighten. The Taylor rule is a modification of the natural rate concept for policymaking. It weighs reported economic growth against potential growth and inflation. From an equation, the policymaker derives an estimate of the appropriate federal funds rate to set [Wilke, 1996; Taylor, 1993].

The Economic Growth and Price Stability Act of 1995, informally known as the Mack bill, if enacted, would make price stability the only goal of the U.S. Federal Reserve. Monetary policy discretion would be limited to one goal, not several, and the Fed would have to demonstrate to Congress the consistency of its policy stance to achieving price stability. This bill would in effect rescind the Employment Act of 1946 and the Full Employment Act of 1978. The theoretical justification for this is that price stability and a consistent monetary policy position promote long-run growth and stability [Clark, 1996]. Federal Reserve Bank economist Goodfriend [1997] criticizes the Fed's "Go-Stop" discretionary policy as destabilizing and believes that credibility on inflation is best achieved through a legislative mandate.

Some monetary theorists believe that the deposit creation process in commercial banking is a source of instability in the monetary system. One suggested rule applied to banking would mandate a one hundred percent reserve requirement [Simons, 1936; Friedman, 1953, 133-56]. Such a rule would effectively end the banking system's ability to create money by requiring that they hold all deposits in cash. Any bank lending would have to be financed by selling bonds to the general public. While banks would maintain discretion in lending, their decisions to lend would not affect the money supply. Central bank policy would then determine money growth by determining growth in the monetary base.

Another example of a rule is the currency board system, which establishes a rule requiring central banks to maintain a fixed ratio between a reserve currency and

their monetary base. The monetary authority issues money only against a designated reserve currency, such as the U.S. dollar, at a fixed exchange rate. If the reserve currency increases because of a capital inflow, the monetary authority increases the base by an equivalent amount. In other words, the currency board ensures that a country's currency is backed by the reserve currency. By maintaining sufficient reserves, central banks can prevent devaluation of the domestic currency by committing themselves to buy domestic currency with reserves at the fixed exchange rate. In the case of Argentina, some flexibility is built in to allow for lender of last resort efforts by the central bank; foreign reserves at minimum must be eighty percent of the base [Zarazaga, 1995].

The most recent innovation is to advocate inflation targeting, which is a single-goal policy that tries to eliminate the conflict between achieving growth and price stability [Bernanke and Mishkin, 1997; Mishkin and Posen, 1997]. Proponents of this idea want to establish a low but positive range for inflation that the central bank is committed to maintain. Such a target constrains policy discretion so that low inflation can be achieved yet permits some flexibility to respond to adverse supply shocks. Inflation targeting is viewed as a policy framework and not a rule. Moreover, targeting provides a transparent policy, allowing the government and the public to hold the central bank accountable if they miss the stated inflation goal. Targets also protect the monetary authority from political pressures to overexpand the economy because such expansion would force policymakers to abandon their commitment to an explicit target.

POLICY DISCRETION AND THE CRITIQUE OF RULES

Proponents of discretion reject definitive rules for precisely what they do, namely run monetary policy on autopilot and eliminate the role of judgement in policymaking. Some rules put the country's monetary stance into predetermined paths irrespective of circumstances while other rules, such as Taylor's and McCallum's, require that possible contingencies be predetermined at the time the rule is formulated. The social economy of the United States is subject to change and evolution. New issues and problems arise that cannot be anticipated. Previous policy can have unintended consequences that need attention. Changes in circumstances mean that decisionmakers need the flexibility to respond and make judgements. Hard and fast rules prohibit measured responses to prevailing conditions. The short run matters. A recent study on fiscal and monetary stabilizers indicates that balanced budgets would increase the severity of future recessions and require the Federal Reserve to respond more strongly to economic fluctuations [Weise, 1996]. The historical success of Federal Reserve interventions in promoting stability, such as in the banking problems of the 1970s and 1980s, the 1987 stock market crash, the corporate and consumer indebtedness of the early 1990s, and sporadic international economic difficulties [Wolfson, 1986; Federal Reserve Bank of Kansas City, 1997], are testimony to the need for policy discretion. When the Fed causes instability it is because they are too focused on inflation; they raise interest rates and reduce bank liquidity, which precipitates a financial crisis. Proposed monetary rules would institutionalize this kind of policy as normal, and therefore rules are destabilizing.

Further, rule opponents argue that automatic procedures are not necessarily neutral in their effects on the population and some rules are too simple to address complicated political-economic problems. These concerns are highlighted by the monetary policies of the 1990s. While the stock market has advanced at record rates, the Fed has followed a relatively high real interest rate policy. This stance therefore favors creditors and businesses who raise funds by issuing stock at the expense of debt-dependent consumers and firms. Rules that make price stability the top priority bias policy towards protection of the purchasing power of money over ensuring sufficient economic vitality, which protects jobs and profits. Further, the quantity theory of money is too simple a concept upon which to base monetary policy because of variable money velocity and reverse causation from money growth rates determined by private sector credit demand. Short-term interest rates, not money growth, are under central bank manipulation. In sum, rules in fact benefit certain groups, or favor some at the expense of others, or are too unsophisticated to address real-world problems.

Of course, with discretion comes the opportunity for mistakes and ineptness on the part of policymakers. But rules do not allow anyone to circumvent human error. The following quote from Keynes is instructive on the issue of rules:

The object of our analysis is, not to provide a machine, or method of blind manipulation, which will furnish an infallible answer, but to provide ourselves with an organized and orderly method of thinking out our particular problems...Any other way of applying our formal principles of thought will lead us into error [Keynes, 1964, 297].

Rule opponents believe the problem with policy by rules runs deeper because of five specific conceptual weaknesses employed by rule supporters:

1. **The Natural Rate Concept:** Rule advocates typically use the natural rate concept, yet experience demonstrates that there is no fixed equilibrium unemployment rate, and studies show that estimates of the natural rate vary significantly and that the relationship between unemployment and inflation changes depending on the factors affecting the economy [Chang, 1997]. Further, unemployment that prevails at the natural rate includes more than frictional and voluntary joblessness. Official unemployment rates are biased downward because they exclude discouraged workers and count part-time and contingent labor as fully employed. Further, acceptance of the natural rate as an employment target for policy excuses the monetary authority from pursuing full employment [Eisner, 1994].
2. **The Labor Market:** Some rule supporters have reinvented the Classical labor market into their analysis. Employment levels, however, are not determined in the labor market as Svensson [1997, 108-110] appears to believe. While the nominal wage is determined in the labor market, employment and the real wage are governed primarily by the level of aggregate demand [Keynes, 1964, ch. 3]. In theory, labor productivity improvements do not necessarily promote growth but instead can be seen as the effect of increased spending on

goods and services. Rule supporters take a supply-side view of economic growth as demonstrated by their focus on production functions and aggregate supply curves [Goodfriend, 1997, 15-17; McCallum, 1989].

3. **A Vertical Phillips Curve:** Some rule advocates also believe that there is no long-run and possibly no short-run inverse connection between unemployment and inflation. Yet there is some empirical support for the Phillips curve. Chang's [1997] scatter diagram displays no vertical Phillips curve, and recent econometric work by Tootell [1998] demonstrates significant statistical association between unemployment and capacity utilization with inflation. While relative price stability and high employment are possible, this condition is not achievable by the way monetary policy is currently conducted: High interest rates restrain demand and inflation but raise unemployment; similarly, rules are formulated to curtail inflation by reducing growth and job creation. Fuhrer's [1997, 33-34] work shows a negative correlation between central bank independence (and thus the pursuit of price stability) and real output growth. The articles by Bernanke and Mishkin [1997, 105] and Mishkin and Posen [1997, 87] admit to output declines or reduced growth coming from restrictive monetary policy.
4. **Rational Expectations:** This idea assumes too great an ability of people to compute and comprehend complex economic policy and events. Some research claims that where expectations can be measured, they are not rational [Lovell, 1986]. Experience with public policy demonstrates the fallacy in the policy ineffectiveness theorem. In addition, rational expectations believers have economic causality wrong: They claim that Fed induced money growth leads to inflation, which raises the actual inflation rate above what is expected, which prompts increased work and production. However, it is really greater spending and optimism that lead to a more vigorous economy, which then permits firms to raise prices [Davidson, 1996, ch. 7-9].
5. **Exogenous Money:** Unfortunately for rule supporters, the central bank cannot control money growth since money growth depends mostly on private sector credit demand and the vigor of business activity and bank lending. It is more accurate to view the economy "pulling in the money" (endogeneity) as opposed to the Fed "pushing money into the economy" (exogeneity). Moore [1988] and Davidson [1994, ch. 8] develop the concept of endogenous money within a Post-Keynesian macro perspective.

One final critical remark pertains to the issue of monetary policy independence and political pressures on the central bank. Interestingly, rule advocates believe that a policy rule mandate is consistent with constitutional and democratic principles, which protect liberty and property. Yet rule opponents believe that rules are actually undemocratic. They permit the Federal Reserve, a nonelected authority beholden to financial interests, to conduct monetary policy without accountability. Such central bank attributes as "independence from government" and "protection from political pressures" isolate and unencumber monetary policy. Consequently, there is insufficient means for the voting public or elected representatives to influence policy when

rules and monetary independence protect FOMC members from democratic scrutiny and debate. In fact, the FOMC may be unconstitutional because although five of its members are not appointed by the President, the FOMC serves as a public policymaking body [Galbraith, 1996]. Rules imply an end to policy debate or at least make debates meaningless; debate and openness are essential ingredients of democracy.

DISCUSSION

For the most part, Neoclassical economists advocate a monetary policy that pursues very low inflation and central bank independence from political influence, and therefore most supporters of rules come from orthodox economics. In contrast, heterodox economists advocate full employment policies and therefore tend to prefer a low interest rate, expansionary monetary policy. Rule advocates believe rules will eliminate policy mistakes by requiring the central bank to follow a prescribed policy mandate, and in doing so, prevent inflation and stabilize economic activity. Opponents of rules argue that rules are too inflexible, too simplified, class biased, unable to circumvent mistakes in policy, ineffective due to theoretical weaknesses that underpin the conception of rules, and that they are undemocratic. Opponents of rules desire a discretionary monetary policy where the Fed is always free to act and react according to given circumstances. Inflation targeting is offered as an alternative in order to provide both the transparency of a rule and the flexibility of discretion. Targeting is said to be a policy framework that provides a compromise between two distinct alternative policy régimes, namely fixed rules and complete discretion.

After an extensive review and consideration of the literature, heterodox theory and historical experience cast doubt on the efficacy of a rules-based monetary policy. Most importantly, there are theoretical weaknesses underpinning the Neoclassical approach, and an implied policy bias that favors the relatively affluent rentiers with a rules-based restrictive monetary policy.

As evidenced in the literature, a rules-based, strongly anti-inflationary monetary policy is predicated on such important theoretical concepts as the natural rate of unemployment, the classical labor market, a vertical Phillips curve, rational expectations, and exogenous money. Any policy that is implemented must be founded on, and justified by, valid theoretical principles. When these principles are found wanting on theoretical or empirical grounds, their derivative policy implications are not meaningful. Thus no practical monetary policy should be imposed on the economy whose underlying core principles are weak. A rules-based monetary policy therefore must be questioned, given the stated criticisms against the very principles from which rules are derived.

Furthermore, the literature correctly claims that a rules-based policy is implicitly class biased. Beyond the issues of central bank accountability and membership, central bank reserve operations favor rentier income. As explained by Wray [1998], fiscal policy affects the quantity of money and bank reserves. While government spending increases bank reserves, taxation and bond sales drain reserves. The Fed cooperates with the Treasury, through open market operations, to maintain signifi-

cantly positive interest rates. Fed actions are essentially defensive in order to maintain a scarcity of money that meets federal funds targets. What the central bank is actually doing is assuring that government-created fiat money does not invigorate the economy to the point of full employment where upward pressures on prices may occur as the result of deficit spending. This policy secures remunerative returns to finance capitalists at the expense of borrowers. Having persistently low interest rates and unemployment is possible in capitalism, but a rule-based monetary policy precludes this outcome by keeping interest rates up to prevent any possibility of inflation.

Policy by rules is compatible with the behavior of people predicted by rational expectations but not with the basic lesson of the Lucas critique [Lucas, 1976] concerning behavior. Presumably, a rules-based policy promotes economic stability because it forces the central bank to follow a consistent policy, which should produce consistent expectations and behaviors by workers and firms from period to period. Yet in an evolving and dynamic economy such as ours, people's psychology and behavior will change in response to changing political-economic circumstances regardless of how closely policymakers adhere to a rule. Just as the Lucas critique states that given economic models cannot be used to evaluate alternative policy régimes because changes in policy lead to behavioral changes in people; the application of rules cannot be expected to create persistently stable and predictable behavior when behavior can change for non-monetary reasons. Just as econometric models are not useful in policy evaluations, rule mandates are not useful in fixing people's behavior.

Rule supporters contend that the economy can be understood as a system of mathematical relationships. Rules are usually expressed in equation form and are part of larger math models. Policy rules are constructed for the purpose of giving policymakers the means to manipulate the economy in definable and predictable ways. However, a highly quantitative understanding of the economy implies that the system is mechanistic; its parts fit together in statistically fixed relations. But the economy is not a machine. Economic variables are not usually related in precise mathematical fashion and to portray them as such sets up the illusion that people can fine-tune the economics of millions of interdependent firms and people. Rules just perpetuate this false notion.

A fifth reason to question monetary policy rules has to do with the Neoclassical conception of what the central bank can actually do and how inflation is generated. Inflation is viewed as a monetary phenomenon. If the supply of money exceeds the demand for money, this excess liquidity is expended, which drives up prices, regardless of the level of unemployment. The culprits are the government and/or central bank, which allow excessive money growth. This story of the inflation generation process is too abstract. According to heterodox theory, central banks are not capable of controlling bank reserves and the money supply; reserves are not a discretionary variable, given the endogeneity of the supply of money, and the interest inelasticity of the demand for loans. The central bank cannot control the supply of money because reserves are not independent of the demand for money. The central bank must supply reserves more or less on demand to maintain a smoothly functioning financial system. Central bank efforts to inject reserves may not increase the money supply

barring sufficient loan demand, and efforts to drain reserves may fail as banks can obtain reserves from various sources [Wray, 1998, ch. 4-5]. Moreover, increases in the supply of money alone cannot raise prices. Prices in most parts of the economy are administered and are not determined in commodity markets nor in any direct way by the central bank. The inference here must be that the central bank cannot perform the function intended by rule advocates.

A final problem with a rules-based monetary policy is that it may misunderstand the actual nature of aggregate demand and inflation. The conventional aggregate demand-aggregate supply model shows a downward sloping aggregate demand curve in price-output space. Inflation caused by cost-push pressures or aggregate supply shocks reduce spending and raise unemployment; contrary movements in aggregate supply generate deflation-induced increases in spending and falling unemployment. Not only are these model predictions inconsistent with real-world experience, but the conventional model is challenged on theoretical grounds by Van Lear [1999] and Fazzari et al. [1998]. They argue that the aggregate demand curve is vertical in price-output space. Cost-push inflations do not reduce aggregate demand, and leave output and employment unchanged. Yet normal central bank action is to increase interest rates, which shifts the vertical aggregate demand curve leftward, reducing output. Van Lear agrees with Keynes [1964, ch. 21] that the aggregate supply curve gradually rises with increases in demand as the economy approaches full employment. Thus rising spending typically leads to a commensurate increase in output and modest inflation until the economy is close to full employment. The policy implication is that the central bank has no business fighting inflation since cost-push inflation has no detrimental impact on employment, and higher spending only modestly increases prices. Empirical work documents that modest inflation has no negative effect on growth [Brittan, 1995, 9]. Monetary policy rules are all geared to suppress inflation and can only accomplish this goal by depressing economic activity. Close following of a rules-driven policy régime will likely require sharp rate hikes in response to spikes in inflation, and thus the central bank will ultimately fight inflation with unemployment.

It appears that inflation targeting offers a balance between rules and discretion. But this policy prescription assumes that the central bank can control the monetary base and money supply, and that inflation is a monetary event. Yet the heterodox understanding of modern financial institutions and money argues that the central bank has great difficulty in controlling bank reserves, that the money supply is endogenous not exogenous, and that the inflation process is more complicated than just a money growth problem. If correct, this may mean that the central bank's reserve and interest rate maintenance function is superfluous. Why have two institutions, the Treasury and the Federal Reserve, operate to influence bank reserve positions? The Fed could be reformed into an institution entirely dedicated to supervision and regulation of financial institutions and henceforth the Treasury alone would conduct monetary policy in a discretionary fashion. In addition to ending the superfluity, the class bias now a part of monetary policy could diminish as the federal government is less beholden to private financial interests.

In closing, it is necessary to note that proponents of discretion do regard inflation as a problem, but secondary in importance to producing a vigorous economy and full employment. Contractionary policies are not advocated to address inflation. Options are proposed however, such as incomes policies [Davidson, 1996] and employment buffer stock policies [Wray, 1998] to contain inflation yet complement stimulative aggregate demand efforts.

NOTES

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