A Public Choice Perspective on the Cycle in Monetary Policy

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> Perhaps the most important issue regarding inflation is why policy authorities have behaved, over the last 40 years, in a manner that permitted a many-fold increase in the price level in most industrial nations. A full answer to that question will require a much better theory of the political process than is currently available.
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> —Bennett T. McCallum (1990, p. 1007)

Introduction

The purpose of this paper is to develop a theory of the cycle in monetary policy and, thereby, to suggest a direction for those who would seek an answer to Bennett McCallum's question. In this cycle, monetary policy oscillates between inflationary and disinflationary phases. The amplitude and periodicity of the cycle are determined by the cost to interest groups of organizing to sustain sound monetary policy. The theory is developed from the perspective of a public choice view of monetary policy.

A Public Choice Perspective

Monetary Policy

In the past decade and a half, there have been notable attempts to link monetary policy with political phenomena. The most popular of these was the theory of the political business cycle—both the original (Nordhaus 1975 and MacRae 1977) and the modern (Alesina and Sachs 1988) versions—that related monetary policy actions to the proximity of elections. In contrast, public choice theories of monetary policy purport to explain the behavior of the money supply across a

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wider variety of political conditions. These theories do not depend on the proximity or even the existence of free elections.

There are two types of public choice theory of monetary policy: One focuses on the Federal Reserve's bureaucratic self-interest (Toma 1982); the other focuses on the redistributive impact of monetary policy. In the latter category there are, again, two types of research: One type centers on the revenue generated for government by inflation; the other focuses on the use of moentary policy to redistribute income between sectors. While they seldom use the label "public choice," there are a number of proponents of the latter approach, for example, Streissler (1976), Wagner (1986), Havrilesky (1987), and Hetzel (1990). These researchers share the general view that monetary policy actions are driven by rent-seeking interest groups and politicians who respond to organized sectoral pressures.[1]

This type of public choice theory of monetary policy is motivated by two fundamental observations. First, rather than converging on a time-consistent path, money growth is highly erratic, largely because it responds to pressures from the executive (Havrilesky 1988) and legislative branches (Grier 1989) and from private interest groups (Havrilesky 1990). Second, promises to redistribute income not only dominate formal election campaigns, they are the bread and butter of politicians in practically all economies at virtually all times.

This approach to monetary policy is consistent with modern rational expectations reasoning. No matter how forward-looking voters are, they will be imperfectly informed about future environments. Therefore, voters can anticipate neither the timing nor the magnitude of related monetary surprises; neither can they easily filter credible signals for surprises from the often subtle, but continual, barrage of political and private pressures on monetary policymakers.

Finally, this theory of monetary policy is compatible with a wide array of political arrangements. Redistributive promises, from the

[1]One particular variation on this general theme is that monetary policy is used to counteract the adverse consequences of the sectoral burdens imposed by politicians' redistributive agendas. The money supply's response to the sectoral flak generated by changes in interest rates, exchange rates, and output is a by-product of politically optimal redistributive programs. The particulars of each promised redistribution—the groups favored, the variables and sectors subsequently affected, and the related monetary surprises–depend on the distribution of voting rights within the distribution of income, as well as on existing financial regulatory and tax structures. For example, a rapid expansion in voting rights relative to the distribution of earned income can usually be expected to ignite such a formidable redistribution that its sectoral impacts will precipitate a monetary surprise. Since these (income and voting rights) distributions and structures change over time, the promised redistributions, the sectors and variables subsequently burdened by the redistributions, and the related monetary surprises will also change over time (Havrilesky 1987 and 1988).

bread and circuses of ancient times to Reagan's supply-side tax cuts, seem to have consistently provoked monetary surprises, from the ancient sovereign's debasing the coinage to the Reagan administration's outburst of monetary growth in 1985–86. The prospects for further historical testing of this type of public choice theory of monetary policy are inviting.

Monetary Reform

The public choice view is that unstable money growth patterns and, in the present paper, the cycle in monetary policy emerge because permanent restraint on government attempts to redistribute income is a public good. Fundamental reform of fiscal and monetary institutions is ordinarily not feasible. Fiscal reforms, such as those trying new spending or tax cut programs to offsetting tax increases or program cutbacks, are ordinarily unacceptable to politicians because they would result in overt distributive conflict. Monetary reforms that would uncouple money supply growth from interest group pressures (for example, by returning to the gold standard) are similarly unpalatable, because by denying politicians the monetary camouflage, they, too, would bring distributive conflict out into the open. Open distributive confrontation in legislatures or in the streets would typically prove quite costly.[2] Given the immediate benefits to rent-seeking interest groups and politicans and given the diffuse and often remote shared costs of continuing activist fiscal and monetary

[2]There are, of course, social scientists who would contend that distributive conflict can be reduced by the appropriate economic policies. For example, many embrace the ideal that carefully conceived policies to engineer a growing economic pie can reduce, if not eliminate, conflict over its distribution. Others, of a more philosophical bent, promote visionary principles of social justice, claiming that a just income distribution could forestall conflict.

Counterposed to humanist views is the ancient wisdom that conflict is an unavoidable consequence of private greed. The great communal religious traditions hold that individual attachment to wealth, like the attachment to anything outside oneself such as fame and power, is ultimately anterior to conflict. Spiritual teachings say that the attachment to private wealth cannot be a source of happiness, the wealth conveys a special status to its possessor, and that such specialness leads to conflict. If the conflicted wealthy need to find scapegoats for their unhappiness, what more convenient scapegoats are there than those who mimic their own materialistic values? Thus, society's "haves" are wont to fear its "have nots" and to charge them with greed and corruption. In this manner, fear and hate of others may become a direct reflection of self-hate. Spiritual teachings say that whatever individuals project for their brother they believe for themselves. In short, spiritual teachings hold that as long as one seeks outside oneself, there can be only conflict within oneself and with one's brothers and sisters. It follows that social stability, of which monetary stability is a part, cannot be found without a change in consciousness. To put it succinctly, the ethos of consumerism, unfettered by social compassion, has its limitations, as it can only increase the domain of unresolved distributive conflict (Havrilesky 1989a).

arrangements, it is difficult to envision the emergence of cohesive political coalitions that would promote reform. Devotees of fiscal and monetary reform have every reason to subside into a state of resigned pessimism.

The Cycle in Monetary Policy

Short-Run Benefits of Increasing Inflation

Since reforms that would more or less permanently restrain the monetary policy consequences of political rent-seeking have not been forthcoming, inflation rates tend to be highly erratic. The rates typically oscillate between long periods during which they rather steadily rise and shorter periods during which they are low and stable. During the former intervals there are formidable short-run benefits from rising inflation, associated with its potential for surprising market participants. Unfortunately, surprise increases in the rate of inflation of a given magnitude will swiftly lose their ability to affect output, employment, real interest rates, and real exchange rates. After a given level of inflation persists over time, market participants adapt and make appropriate adjustments in nominal wages, output prices, and asset prices. This erosion of benefits induces policymakers to further increase the money growth rate, but, once again, market participants catch on to the resulting higher inflation rate and benefits wane.

From the singular perspective of these short-lived benefits, surprise increases in money growth would continue unbounded. However, as market participants grow accustomed to increasing inflation, surprises have to become larger and larger in order to obtain the same short-lived flow of benefits.[3] Inasmuch as desired effects can be achieved only if the policymaker allows larger and larger doses of inflation, the process resembles a physical addiction.[4]

[3]The persistence of short-lived benefits from inflationary surprises is consistent with forward-looking agent behavior if there is imperfect information regarding the timing and magnitude of policymaker responses to the flood of private and public pressures on monetary policy. In economies where the financial regulatory and tax structures, as well as the composition of output and income, are changing over time, forward-looking agents can anticipate neither the location, the magnitude and timing of sectoral pressures on monetary policy, nor the timing and magnitude of the related policymaker responses.

[4]Addictive processes typically feature benefit flows and stock costs (in the form of a rate of deterioration [depreciation] of a stock). There are two approaches to addiction in the legal literature, the strong substance caused view (SSCV) and the characterological view (CV). In the former, withdrawal costs rise with use because the substance itself is addictive; in the latter, this rise does not necessarily occur because withdrawal costs are endemic in the user's character (Schwartz 1989). The parallel to the SSCV in

Long-Run Costs

The resemblance to a physical addiction does not end with the increasing inflation phase of the cycle. As with a physical addiction, there are adverse effects on health; in this case, "health" is measured by the stock of aggregate wealth. As the rate of inflation rises, economic growth is impeded and the stock of wealth depreciates more rapidly. The descriptive literature on inflation provides a host of reasons for the positive relationship between the rate of inflation and the rate of deterioration of aggregate wealth. As inflation rises, more resources are allocated to hedging and speculation; more resources are allocated by creditors to hasten and by debtors to retard debt collection; capital inputs in the form of real money balances are held at lower levels; and, finally, because nominal price changes are not synchronized, relative price distortions and uncertainty increase. In addition, if interest expenses are deductible for income tax purposes, real saving declines and debt/equity ratios rise, thereby increasing default risk and reducing capital formation. All this reduces economic growth.[5] While output growth is declining, rising inflation is boosting interest rates and increasing the velocity of money. As the growth of output declines and the velocity of money rises, any given increase in money growth will be more and more inflationary.[6]

When and how will increases in the rate of inflation end? Since the control of inflation is a government responsibility, its reduction requires that private citizens organize and/or enlist the support of existing interest groups. The height to which inflation must rise before interest groups coalesce to reduce and stabilize it depends critically on organization costs. Credible anti-inflationary policies will commence only when the marginal costs of inflation exceed the marginal costs of organizing.

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monetary addiction occurs in prerational expectations Keynesian models where the greater the inflation, the greater the subsequent recessionary cost of withdrawal (see footnote 5). The CV is consistent with the view presented here, namely the withdrawal costs depend on the system's organizational "character." (See Becker and Murphy 1988.)

[5]Besides the reduction in economic growth, there are other costs. For example, in prerational expectations Keynesian models, as inflation increases, the costs associated with a likely recession rise. Finally, if experiments with price controls are attempted during this phase of the cycle, as they often are, all of the preceding problems causing deterioration of the stock of the economy's wealth are exacerbated. This laundry list of inflationary "bads" ignores any long-run benefits from inflation, such as possible increases in government revenues arising from an inflation tax on monetary balances.

[6]This sequence can lead to hyperinflation as described, for example, in Cagan (1956) and Sargent and Wallace (1973).

In economies where interest groups traditionally struggle with one another and with government over the distribution of income, such as certain Latin American countries, there is strong interest-group disaggregation. Also, in these economies there is seldom a permanent anti-inflationary institution in the form of an autonomous central bank. For each of these reasons the costs of organizing to bring about anti-inflationary restraint will be formidable. To the extent that groups find it difficult to rally behind the monetary authority, the credibility of official anti-inflationary pronouncements will be low (Fellner 1979). In economies where sectoral strife is the norm, inflation is typically not attacked until political change occurs and a strong leader or external authority intervenes to restrain warring groups. In these economies, inflation usually must rise to very high levels before a policy of monetary restraint can be effected.

In economies, such as Japan and Switzerland, where overt sectoral strife is not customary and/or where political and moral leadership can quickly mitigate it, organizational costs are relatively low. These economies usually display minimal polarization among interest groups. They typically exhibit significant restraints on political rent-seeking and a deeply imbedded traditional opposition to overt distributive conflict. These economies also tend to have relatively autonomous central banks, which typically are the rallying point for anti-inflationary sentiment. In these economies, inflation is seldom permitted to rise to double-digit levels before effective demands are made for monetary policy restraint.

Monetary Restraint

Inflation increases over time until it reaches a critical level where ever-rising, collectively shared costs and zero long-run benefits force interest groups to coalesce and to demand the implementation of monetary restraint. As indicated earlier, the amplitude of the cycle, exactly how far the inflation must rise before a stabilization crisis occurs and before sound monetary policy is implemented, depends on organization costs. Traditional cleavages among interest groups and lower degrees of central bank autonomy raise the costs of organizing an effective anti-inflation coalition. Nevertheless, as inflation rises, interest groups are forced to become more cooperative in order to avoid mutual disaster. Modern game theorists support the notion that the greater the loss to be avoided through cooperation, the more cooperation is observed; that is, the supply curve of cooperation is upward sloping (Dawes and Thaler 1988).

After interest groups organize, the end to inflation is usually abrupt. Often there will be dramatic signals that precipitate the shift, such

as rapid reserve outflows or currency depreciation combined with pressure from external authorities. Once consensus has been established to forego further benefits from increases in inflation, the optimal policy is to restore economic health as quickly as credible targets can be agreed upon. The monetary authority typically takes quick advantage of supportive anti-inflationary coalitions and the resulting credibility of market participants to effect a low-cost return to monetary stability. Therefore, at this stage of the cycle, gradualism is usually not observed.[7]

The ensuing interval of monetary restraint is often fraught with (discussion of) programs to increase capital formation and to reduce the more extravagant forms of collective consumption. Unfortunately, this phase in the monetary policy cycle is not permanent. Export-oriented and import-competing industries increase their lobbying for protection (Bernholz 1987). As memories of the inflationary phase fade, these and other interest groups increasingly lament foregone rent-seeking opportunities, and sound money cohesiveness will weaken.[8] Demands for monetary relief from intermittent swings in interest rates, exchange rates, output, and unemployment will grow. Constraints on the political manipulation of monetary policy and the limits of central bank autonomy will be tested. Given a sufficiently strong shock to key variables, the sound money barrier will be broken. With a return to monetary activism, the addictive process is resumed and inflation once again rises.

The Limits to Inflation

Thus, the amplitude and periodicity of the cycle in monetary policy depend critically on organization costs. The level of organization costs varies inversely with the degree of central bank autonomy and the strength of traditional restraints that limit political rent-seeking,

[7]Leland Yeager (1981), in his classic study on the termination of inflations, shows that the ends of great inflations almost invariably are sudden, supported by temporary coalitions of interest groups who find a strong executive or outside authority to lead the effort and to emanate credible resolve. John Taylor (1983) shows that even in an overlapping-generations world with nominal contracting, the reduction in inflation can be costless if policy is credible.

[8]The growth of government and the related proliferation of interest groups have often led analysts to suggest a (strengthening of) corporatist imposition of order on distributive struggles by government authority. Corporatist schemes do not always succeed. In economies where authority is not too diffuse and ruling elites traditionally use government power to reduce threats from below through cooptation, corporatist ventures such as incomes policies seem to work. In economies where interest groups are not well organized, are not hierarchically structured, are competitive with one another, and are fraught with internal partisan subdivisions, corporatist schemes are less successful (Goldthorpe 1984).

enjoin against group distributive conflict, and encourage cooperation out of mutual concern for monetary disorder.

Modern game theorists contend that traditions of cooperation and mutual assistance convert uncooperative games (such as influencing monetary policy in order to extract rents) into the equivalent of team play. At the micro level, reciprocity, cooperation, and mutual assistance increase with the expectation of repeated future interaction. The closer the sense of community among individuals, the greater the frequency and intensity of interaction. This suggests that economies that systematically invest resources in building a sense of community may reap the benefits of monetary stability. Such investments can increase the level of social compassion, reduce the domain of unresolved distributive conflict, and, ultimately, constrain inflation.[9] Inflation might virtually cease to be a problem in an economy where the distribution of income was consensually considered fair and just.

The limits to inflation are determined by traditions that restrain rent-seeking and conflict and that encourage central bank autonomy. In economies where these traditions are minimal, only a hyperinflation can bring about monetary restraint, and the resulting interval of sound monetary policy will be short lived. In contrast, in economies where these traditions are formidable, even double-digit inflation will be intolerable and sound money intervals will be more durable.[10] These traditions thrive where there is a strong sense of community. Thus, the limits to inflation are ultimately determined by the allocation of resources toward building a sense of community and expanding social compassion.

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[9]As a stronger sense of community develops, values shift away from materialism and demeaning others toward acceptance and love—the free market laced with altriuism. To the extent that this shift happens, there is less distributive conflict and there are fewer opportunities for political gain through redistributive fiscal and monetary policy.

[10]The bimodal distribution of economies into high-inflation or low-inflation groups may be a useful starting point for testing the theory. All things being equal, low-inflation economies should exhibit less distributive conflict and more altruism. Of course, there may be threshold effects, whereby in economies with low levels of altruism, marginal increases in altruism may initially constrain punishment strategies more than they reinforce cooperation. For these economies, increases in altruism will not reduce inflation until this threshold is passed (Bernheim and Stark 1988).

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