

## Review Essay

### The Chicago Monetary Tradition: The Origin of the Modern Approach to Monetary Policy Rules

The Monetarists: The Making of the Chicago Monetary Tradition, 1927–1960. *By George S. Tavlas*. Chicago: University of Chicago Press, 2023. 656 pp. Hardcover, \$65.00. ISBN: 978-0-22682-318-8.

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Reviewed by Pierrick Clerc

In 1956, Milton Friedman published his famous restatement of the quantity theory of money, which is often regarded as having been the monetarists' first blow against the then-existing Keynesian orthodoxy. In this essay, Friedman claimed that his approach to the quantity theory was an outgrowth of an "oral tradition" at the University of Chicago in the 1930s and 1940s, a tradition that would have differed significantly from other versions of the quantity theory during those years. While Friedman's exegesis of an earlier Chicago monetary tradition went unchallenged for more than a decade, it came under fire in the late 1960s. In 1969, Don Patinkin (who had studied economics at Chicago in the 1940s) argued that the Chicago approach to the quantity theory of money in the 1930s and 1940s was nothing more than the one Irving Fisher had previously developed to explain secular and short-run movements in the price level (based on the so-called equation of exchange  $MV = PY$ , with M being the quantity of money, V the velocity of circulation of money, P the price level, and T a measure of output). This meant that there was nothing original, nor unique, in the quantity theory framework used by Chicago economists. The year after Patinkin's article, Harry Johnson (in his Richard T. Ely Lecture before the American Economic Association) went as far as to claim that Friedman had invented the Chicago monetary tradition to launch a counterrevolution in economic theory. Thereafter, the notion that the Chicago quantity theory tradition was an invention spread rapidly and remained deeply entrenched.

The main aim of George Tavlas's beautiful book is to provide evidence for the existence of a unique approach to the quantity theory of money developed by Aaron Director, Paul Douglas, Frank Knight, Lloyd

Mints, Henry Simons, and Jacob Viner—who referred to themselves collectively as “The Group”—at the University of Chicago in the 1930s and 1940s. In particular, the author convincingly shows that this approach, while relying on Fisher’s equation of exchange, involved a theory of business cycles and policy proposals very different from the ones that were promoted at other institutions during those years.

According to Tavlas, the belief that business cycle fluctuations were caused by sharp, autonomous variations in the velocity of circulation of money (V)—themselves stemming from shifts in business confidence—was the hallmark of Chicago’s business cycles theory in the 1930s. Depressions, for instance, would result from a sudden fall in business confidence, inducing individuals to hoard money (which corresponds to a fall in V). Variations in V initially affect prices (P) and then, via sticky nominal wages, also affect business profits and output (T). Those variations would have cumulative effects on prices and real activity: Once prices start to fall, they trigger anticipations of further price declines; this expectation undermines business confidence even more, inducing further declines in V (and, then, in P and T). Moreover, business cycle fluctuations would be amplified by the “perverse” behavior of a fractional-reserve banking system, which expands credit—and therefore the quantity of money (M)—in economic expansions, and contracts credit in economic downturns.

Tavlas stresses that what especially distinguished the Chicago tradition from other approaches to the quantity theory in the 1930s and 1940s was the policy proposals advocated by the Chicagoans. These proposals involved two aspects: counter-cyclical policies on the one hand and policies for long-term economic stability on the other.

Chicago economists argued that, to stem business cycle fluctuations, governments should undertake counter-cyclical variations in M. Such variations can be implemented by either open-market operations or through the government’s fiscal position (by triggering fiscal deficits to increase M, and fiscal surpluses to reduce M). During depressions, policies operating through the banking system would not be effective—notably because, during periods of low confidence, banks do not want to lend, and businesses do not want to borrow. In that case, the most effective way to put money into circulation is through money-financed fiscal deficits.

In terms of policies promoting long-term economic stability, Chicago economists advocated a 100% reserves scheme for demand deposits. This would prevent the self-reinforcing nature of the business cycle that characterizes a fractional-reserve banking system, and enable better control of M. Moreover, to reduce the amplitude of business cycle fluctuations, the Chicagoans believed that monetary policy should be

conducted on the basis of a rule embedded in legislation. Finally, to help ensure that domestic objectives could be achieved, the gold standard should be abandoned and replaced with a flexible exchange-rate system.

Although not explicitly stated, Taylas's book actually pursues another important aim. Throughout his book, the author seeks to show that the members of "The Group"—and, in particular, Simons and Mints—have fathered several key aspects of the modern approach to monetary policy rules.

Let us first recall that a rule can be defined as a prescribed guide for the conduct of policy. A rule is called "passive" when the prescribed course of actions is independent from circumstances. The constant-money-growth rule advocated by Friedman from 1956, in which the money supply is set by the central bank to grow at a constant rate, is a typical example of passive rule. A rule is called "activist" when the prescribed course of actions depends on circumstances. The most famous example of an activist rule for monetary policy is the rule suggested by John B. Taylor in 1993, in which the policy interest rate (the federal funds rate) is set to be a weighted average of an output gap (actual output minus potential output) and an inflation gap (actual inflation minus the target inflation rate). By contrast, discretion can be defined as a policy regime in which policy-makers frequently reconsider their policy decisions from scratch, without being bound by previous decisions.

The first lasting contribution made by the Chicagoans to the literature on rule-based policy-making is having clearly distinguished rules from discretion, and having argued that the most critical choice monetary authorities are confronted with is between these two policy regimes. To be sure, prominent economists (including Fisher) advocated some policy rules already in the 1920s. But they did not cast their advocacy in the context of a preference of rules over discretion. Similarly, contrary to the claim made by some historians of economics, the controversies between the currency school and the banking school that took place in England in the nineteenth century did not involve discretionary policies. Taylas demonstrates that both groups were actually in favor of a rule—the gold-standard rule. Where they differed was in the degree of activism that this rule should display in the case of excessive gold outflows. In such circumstances, the members of the currency school favored a "passive" version of the gold-standard rule: They believed that restrictions on the issuance of Bank of England notes (the so-called currency principle) would produce automatic adjustment so that no further policy action was required. The members of the banking school, instead, favored some activism in the gold-standard rule: They believed that the Bank of England should raise its discount

rate to counteract gold outflows. In sharp contrast with discretionary actions, however, this activism was perfectly predictable.

The distinction between rules and discretion is still at the heart of the modern literature on monetary policy rules. A telling example is provided by Michael Woodford's "Interest and Prices: Foundations of a Theory of Monetary Policy" (2003)—often described as the most important treatise in monetary economics since Patinkin's "Money, Interest, and Prices" (1956). In chapter 7 of his book, Woodford shows—in the context of the last vintage of optimizing macroeconomic models with sticky prices (the so-called dynamic stochastic general equilibrium models)—that there would exist substantial gains (in terms of social welfare) from commitment to a policy rule. This conclusion is drawn from comparing the volatility (triggered by exogenous shocks hitting the economy) of the output and inflation gaps (i) when the central bank is committed to following an optimal policy rule and (ii) when the central bank conducts discretionary policy. Woodford finds that the volatility of both the output and inflation gaps is much lower under the first scenario, making a strong case for commitment to a monetary policy rule.

The second contribution made by the Chicagoans to the field of monetary policy rules is to have recognized that the critical factor underlying the inefficiency of discretion is its inability to fruitfully "manage" private-sector expectations. Under discretion, indeed, private agents have no reason to believe any announcement concerning future actions from the policy-maker since this latter is not bound by previous promises. Hence, the monetary authority has no ability to stabilize private-sector expectations once a shock hits the economy. In contrast, by committing the policy-maker to a predictable course of actions, a policy rule does provide the monetary authority with this ability. In the context of the Chicagoans' theory of the business cycle, stable expectations would help to stabilize the velocity of circulation of money—thereby reducing the amplitude of business cycle fluctuations.

The ability to fruitfully manage private-sector expectations is also the most important attribute of policy rules pointed out by the recent literature emphasizing the superiority of rules over discretion. Again, chapter 7 of Woodford's seminal book illuminates this aspect. There, the author shows that a commitment to a policy rule would present the central bank with a much better trade-off between stabilizing output and stabilizing inflation around their respective target levels. In particular, when a shock hits the short-run aggregate supply curve (the so-called cost-push shocks), a commitment to a policy rule would steer private-sector expectations in a direction that reduces the resulting shift of that curve—thereby mitigating the volatility of both output and inflation.

Discretion, in contrast, does not allow such a management of expectations. The short-run aggregate supply curve thus displays a larger shift in response to a cost-push shock, inducing larger fluctuations in both output and inflation.

The third contribution the Chicagoans made to the modern approach to monetary policy rules is to have originated the systematic evaluation of alternative rules. This practice was initiated in a memorandum written in November 1933 by Simons (on behalf of other members of the University of Chicago economics faculty). In that memorandum, six different rules—among which were the constant-money-growth rule, a rule involving a fixed quantity of money, and the gold standard—were assessed. Thereafter, Chicago economists would systematically compare alternative rules when addressing monetary policy issues. For instance, in his book entitled *Monetary Policy for a Competitive Society* (1950), Mints devoted two chapters (amounting to 58 pages) to an evaluation of alternative rules.

Confronting alternative policy rules has become common practice in monetary economics. This practice now amounts to comparing the performance (in terms of their ability to stabilize both nominal and real variables around their target levels) of the competing rules. This kind of comparison has even been the object of conferences. For instance, in 1990, a Brookings conference was organized on “Evaluating Monetary Policy Regimes: New Research in Empirical Economics.” In this perspective, participants prepared papers that assessed the performance of various policy rules across a variety of models of the world economy. While money supply and exchange rate rules were the primary rules considered, the organizers asked the participants to evaluate interest rate rules. It was found that these latter rules performed surprisingly well in a wide variety of models. This robustness induced Taylor (whose multi-country model had been used to perform some of the simulations) to start working on interest rate rules—leading to the presentation, 3 years later, of his celebrated rule. Similarly, in 1998, Taylor organized a National Bureau of Economic Research (NBER) conference on “Monetary Policy Rules.” On top of deriving the optimal policy rules from the different models they were using, participants were asked to simulate five simple Taylor-type rules (differing in their coefficients on the output and inflation gaps, and in their incorporation of some degree of interest-rate smoothing). It was notably found that, in some models, the simple rules performed nearly as well as the optimal rules. More recently, a session on “Monetary Policy Frameworks and the Zero Lower Bound” was organized at the 2019 annual meeting of the American Economic Association. On that occasion, participants—including, among others, Ben Bernanke, John Williams, and Woodford—assessed

the performance of various policy rules when the economy is constrained by the so-called zero lower bound on nominal interest rates. A main conclusion was that rules involving some form of price-level targeting (rather than inflation targeting) performed fairly well across different dynamic stochastic general equilibrium models.

Finally, Chicago economists suggested several criteria that a rule should meet to be adopted in practice. In the November 1933 memorandum, in particular, it was stressed that a rule should be free from political interference, simple (that is, easy to communicate to the public), definite, and compatible with fiscal discipline and should not involve judgment in its implementation. Providing such criteria is also at the heart of the recent literature on monetary policy rules. For instance, chapter 8 of Woodford's book is entirely devoted to this endeavor. According to Woodford, a suitably designed policy rule should be conducive to a unique equilibrium (to avoid indeterminacy issues, and especially the emergence of sunspot equilibria), direct (in the sense of involving only target variables), time invariant in form (in the sense that its expression should not depend on the conditions prevailing at the time of its adoption), and robustly optimal (in the sense that its expression should not depend on the statistical characteristics of exogenous disturbances).

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