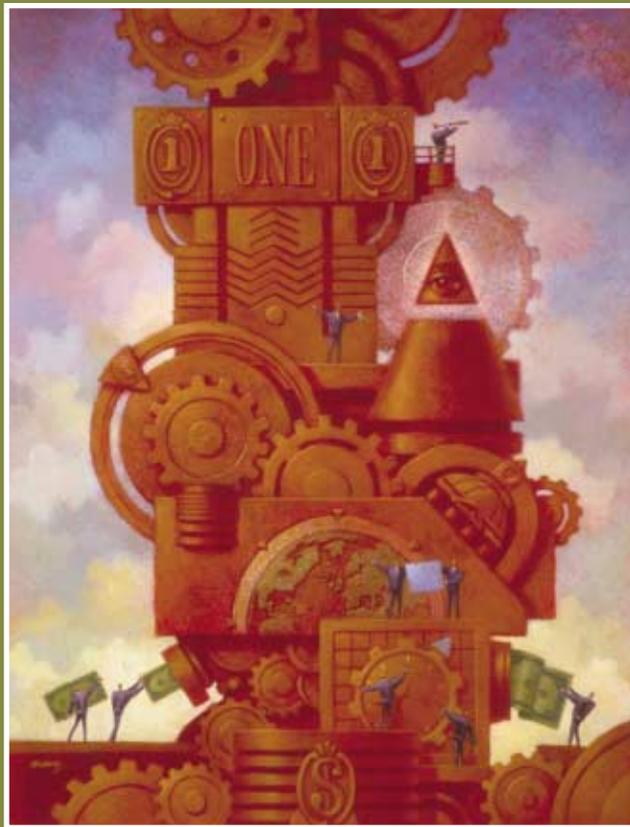


RHETORIC ALIGNED WITH THEORY:  
TALKING PRODUCTIVELY ABOUT  
INTEREST RATES



“... the past decade is a telling reminder of how little economists know about managing the business cycle and, ironically, how much they know about promoting economic welfare...

Indeed, the most important theoretical developments of the past 20 years call into question the notion that substantial benefits are to be had from policies aimed at smoothing [short-run] economic fluctuations.”

—Federal Reserve Bank of Cleveland,  
“Theory Ahead of Rhetoric: Economic Policy for a ‘New Economy,’”  
*1999 Annual Report*

“The lessons of economic theory and hard experience have taught policymakers to mistrust arguments that realized economic growth rates are — when they deviate from average experience — imperfections to be hammered out by an industrious central bank.”

—Federal Reserve Bank of Cleveland,  
“Theory Ahead of Rhetoric: Measurement and the ‘New Economy,’”  
*2000 Annual Report*

According to the National Bureau of Economic Research, the official arbiter of business cycle dating, the record-setting economic expansion that began in 1991 came to an end in March of 2001. In the first week of 2001, the Federal Open Market Committee initiated what would become the most rapid federal funds rate descent since the early 1980s, a period when sharp rate declines accompanied a substantial disinflation.

As we write in early 2002, opinion is weighted toward the belief that the recession is over, or nearly so. If this forecast proves true, it will be hard to argue against the sentiment that the U.S. economy has drifted through some fairly treacherous waters with minimal damage. Indeed, with GDP already having registered a gain in the fourth quarter of 2001, it seems likely we've witnessed the most moderate recession in the postwar era. To many, no doubt, the 475 basis point reduction in the federal funds rate engineered by the FOMC will be one of the heroes of the recovery–expansion story.

Should we not, then, re-evaluate the position this Bank has taken in the past—that policymakers should keep their eyes on their long-term objectives rather than reacting to perceived, short-term gaps between output and its “potential.” Don't the economic developments of the past year suggest there are indeed “substantial benefits to be had from policies aimed at smoothing economic fluctuations”? Didn't aggressive “easing” in the form of federal funds rate cuts help to stimulate the economy last year, speeding recovery and making the downturn more shallow and less protracted than it might have been otherwise?

As we have argued, we do not believe the rhetorical framework behind these questions is a useful description of monetary policy. In particular, we do not agree that the FOMC's actions over the past year are best described as “easy money” policy, required to pull the economy out of recession by stimulating aggregate spending. At the same time, we believe the 475 basis point reduction in the funds rate was justified under the circumstances.

How can these seemingly contradictory positions be reconciled? How can we claim that aggressive lowering of the federal funds rate in 2001 was appropriate and necessary, while maintaining that monetary ease is not the panacea for short-term economic ills? Our answer is that it is incorrect to characterize persistent reductions in the federal funds rate as, everywhere and always, evidence of “aggressive monetary ease.” Likewise, it is a mistake to believe such actions can contribute to economic recovery *if and only if* they directly prompt an acceleration of private spending.



“That monetary policy can wreak havoc on financial markets

and can be a disruptive influence on the economy is unquestioned...

In the short run, it is important to strike a balance between

the quantity of money demanded and the amount the central bank supplies.”

—Federal Reserve Bank of Cleveland,

“Theory Ahead of Rhetoric: Economic Policy for a ‘New Economy,’”

*1999 Annual Report*

Which brings us to our central question: If we hesitate to endorse a policy that is expressly designed to stimulate the economy, by what rationale do we support the federal funds rate cuts of the past year?

We believe that changes in the federal funds rate should be considered on the basis of where economic forces are taking market interest rates, a perspective stemming from several presumptions about the way our economy works. First, “a balance between the quantity of money demanded and the amount the central bank supplies” requires the federal funds rate to adjust roughly in alignment with changes in real—that is, inflation-adjusted—returns to capital. Second, episodes of economic weakness typically are characterized by declining capital returns and greater demand for liquid financial assets. Third, when the funds rate fails to adjust to these realities, monetary policy can slip into a disinflationary, or even deflationary, stance. There is little question that the resulting contractionary policy impulse would be a misguided course in the face of weakening economic conditions.

From this perspective, there is no contradiction between supporting aggressive federal funds rate reductions and deep suspicion of policies designed to force growth to conform to some predetermined path. In an economy in which weak demand and falling productivity are reducing capital yields and market interest rates, fed funds rate cuts are *not* equivalent to policy ease as it is traditionally understood. Stable monetary policy—a stance that induces neither inflationary nor deflationary pressures, that seeks to avoid both artificial stimulation and inadvertent retardation of real economic growth—requires, paradoxically, active management of the federal funds rate. It is hard to imagine a coherent view of monetary policy without first disentangling defensive rate adjustments that maintain policy neutrality from rate changes that are, in fact, designed to go beyond neutral and stimulate the economy.

“...the language of monetary policy is replete with concepts and empirical constructs inherited from an era when damping business-cycle fluctuations was the *sine qua non* of successful economic policy. The deep theoretical weaknesses of these ideas — embodied in such notions as ‘potential’ output, ‘the’ noninflationary rate of unemployment, growth ‘speed limits,’ and the like — have manifested themselves with a vengeance over the past decade, prompting casual observers to hail the so-called ‘New Economy.’

In fact, it’s not that the economy is new, but that the policy lexicon is old.

That is, the puzzling evolution of the current expansion is not a failure of economic theory, but of economic *rhetoric*.”

—Federal Reserve Bank of Cleveland,  
“Theory Ahead of Rhetoric: Economic Policy for a ‘New Economy,’”  
1999 Annual Report

We have argued in the past that central bankers' ability to articulate a cogent vision of noninflationary economic growth has been hampered by a rhetorical framework that is almost necessarily constrained to an activist view of monetary policy. The same rhetoric makes it virtually impossible to conceive of the FOMC's actions in 2001 as anything but an attempt to create economic growth. But there is another interpretation—in our view, a more appropriate one—in which funds rate changes represent the central bank's contribution to a stable monetary and financial environment, neither inflationary nor deflationary, in which the economy's natural allocative forces can operate.

In an activist world, monetary policy will either get credit for judicious stimulation when the economy expands or take the heat for its lack of responsiveness if recovery lags. Neither judgment will be entirely deserved. Monetary policy is either part of the solution or part of the problem, but that determination will depend on its capacity to maintain the integrity of the currency and to sustain a healthy financial system in which workers and entrepreneurs can flourish.

## Monetary Policy without Money

Striking just the right stance in monetary policy is no simple matter in practice, not least because policymakers may disagree about what that stance *should* be at any given moment. But even absent divergent opinion about short-run policy objectives, operationalizing monetary policy is a complicated task.

In simple textbook models of the aggregate economy, monetary policy is either expansionary, contractionary, or neutral with respect to the real economy, and either inflationary, disinflationary, or neutral with respect to the price level, depending on the pace at which the money supply expands relative to demand. Making use of this framework, however, requires that supply and demand for money have a stable relationship to economic activity and prices. Unfortunately, experience demonstrates that these relationships do not have the stability needed to transform the textbook model into a dependable, real-time policy tool.

In the 1970s, the Federal Open Market Committee relied on the "M1" measure of the money supply—essentially, the sum of cash in circulation and the quantity of checkable deposits. But the predictability of the relationship among M1 growth, prices, and GDP began to fade as the FOMC embarked on efforts to halt the acceleration of U.S. inflation in the latter part of that decade. During the mid-1980s, the "M2" measure, which added money market mutual funds, time deposits, small certificates of deposit, and the like to M1, moved center stage.

From the mid-1980s through 1993, the FOMC established annual growth rate objectives for the M2 monetary aggregate as the primary indicator of financial conditions in the economy. Although the Committee was not legally bound to achieve the monetary targets, deviations of M2 growth from its annual objective alerted policymakers to potential imbalances in the stance of policy. By the early 1990s, however, it had become evident that M2—like M1 before it—was unpredictable, and that these monetary targets could not provide adequate guideposts toward the central bank's longer-term objectives.

In retrospect, we should not have been surprised. Stability in the relationship among money, prices, and output fundamentally depends on the financial relationships and institutions that define the processes by which central bank actions are translated into broad macroeconomic outcomes. In 2000, we emphasized the extraordinary challenges to meaningful economic measurement that fast-paced technological change creates. The rapid evolution of physical, human, and organizational capital wrought by the information revolution—the New Economy, if you will—touched the financial sector as much as, if not more than, other parts of our economy. If we add regulation, deregulation, and re-regulation—from the Monetary Control Act of 1980, to the Federal Deposit Insurance Corporation Improvement Act of 1991, to the recent Gramm-Leach-Bliley Act—to the ever-changing mix, the likelihood that static definitions of money will be very useful for very long seems very remote.

The formal practice of targeting money, or even monitoring it in a serious way, was abandoned in 1993. In its stead, the FOMC adopted a procedure of directly setting the federal funds rate—the overnight rate on loans between banks—without any reference to an intermediate objective.

This change has had an immense impact on the way monetary policy actions are conceived, communicated, and understood. To begin with, the demotion of monetary aggregates from the constellation of variables that drive short-run policy actions has made it difficult to remember that monetary policy can, in the end, only determine the price level, which it does by influencing the pace of money creation. Furthermore, directly targeting the precise average value of the federal funds rate has reinforced the unfortunate notion that monetary policy's *only* role is to control economic fluctuations by controlling market interest rates.

These perceptions make it easy to forget, or to fail to appreciate, two essential facts. First, market interest rates—especially real (inflation-adjusted) rates—have a life of their own, independent of monetary policy. Second, when events conspire to move inflation-adjusted market rates, maintaining a given funds rate requires the Federal Reserve to alter the pace at which it injects liquidity into the economy. The latter observation means that when circumstances in the rest of the economy change, failing to move the funds rate is likely to alter the stance of monetary policy by default.

## The New Economy, Interest Rates, and Policy

Economic theory instructs us that technological growth is a fundamental determinant of the equilibrium real interest rate. Periods characterized by rapid growth in technology—such as the late 1990s—generally produce brisk economic growth, high returns on new business investment, and high real interest rates. Conversely, during periods of economic weakness, returns to capital tend to fall, lending prospects dim, and market interest rates soften. Thus, the equilibrium real interest rate fluctuates as economic activity rises and falls in response to economic fundamentals.

The central problem faced by the policymaker, then, is first to recognize interest rate movements for what they are—that is, distinct from changes caused by shifts in inflation expectations, for instance—and then to formulate an appropriate response in the federal funds rate target.

There is no better example than the past year. The list of reasons why capital returns declined is not difficult to assemble. Excess capacity, in part a response to Y2K as businesses shifted capital acquisition to the period just prior to the date change and away from the following period. Diminished profit expectations in the wake of the “dot.com bust.” Rising costs following September 11, as traveling became more time consuming, security expenses rose dramatically, and so on. All of these developments fostered an environment in which real interest rates would be expected to fall.

As economic fundamentals put downward pressure on market interest rates, the only way the Federal Reserve can maintain the federal funds rate target is to restrict liquidity. In other words, by *not* adjusting the funds rate target downward—in concert with pressures driving market returns to capital down and the demand for liquid financial assets up—monetary policy will become more and more restrictive. Reducing the federal funds rate target is the only way to preserve neutrality in the stance of policy. This is nothing more than striking a balance between the quantity of money demanded and the quantity supplied.

That calibrating the federal funds rate to external market forces is complicated goes without saying. For one thing, declining income and production are likely to be associated with falling interest rates, which, in turn, increase the quantity of money demanded. Accommodating a more rapid pace of money creation—with federal funds rate cuts—can be fully consistent with our definition of monetary stability (or neutrality) as a condition in which policy is not biased in a stimulative or contractionary direction. Moreover, it is certainly true that, at some point, reducing the funds rate will yield what is commonly called “easy money” policy. Our point, however, is that over some set of circumstances and range of adjustment, appropriate changes in the funds rate are best thought of as purely defensive—that is, striving for monetary neutrality.

These distinctions go beyond the academic or the purely semantic. It is our view that the vast majority of changes in the federal funds rate over the past decade should be legitimately interpreted as defensive adjustments in the service of maintaining monetary neutrality. It is, of course, always treacherous, if not entirely inappropriate, to ascribe specific motivations to committee decisions that represent the consensus of individuals with varied perspectives and opinions. It is not our intention to ascribe such motivations here, but to suggest an alternative to the traditional rhetoric of “tight” and “easy” that accompanies most commentary on FOMC decisions.

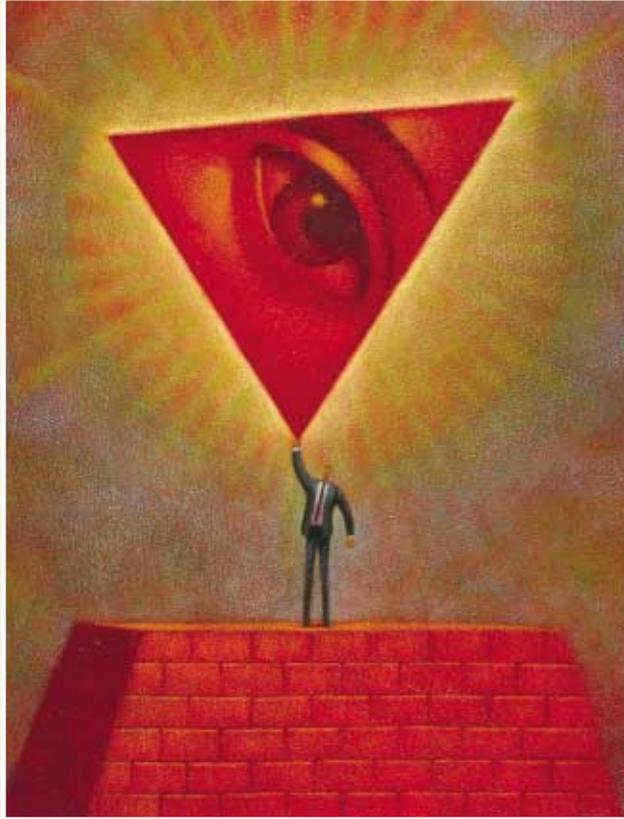
## A Rhetorically Revisionist History

The recovery of 1991 was characterized by highly unusual circumstances. The financial sector was undergoing pervasive structural change. Tax law changes in the early 1980s had favored investment in commercial real estate, leading to a glut in office space across the country. The tax incentives ultimately were eliminated in the Tax Reform Act of 1986, but not before contributing to a bust in commercial real estate by the end of the decade.

In the face of this glut, return on investment in structures fell dramatically, pulling down the whole constellation of returns and interest rates. Long-term interest rates continued to fall into the third year of the recovery. The situation was compounded by the fact that the boom had been financed by depositories that were poorly supervised, and hence especially vulnerable. Many depositories, particularly thrifts, could not survive. Those that did survive had to build back capital, and that required time. In effect, the adjustments inhibited credit supply.

Recognizing the restraining effects on credit conditions, the FOMC engineered 11 rate cuts between February 1991 and September 1992. The federal funds rate fell to a level that approximated inflation expectations and remained there for 15 months. Although the yield curve steepened, long rates maintained their downward trend, largely reflecting diminished expected returns to investment and swollen demand for liquidity.

Supplying bank reserves at a zero real interest rate transmits an inflationary impulse under normal circumstances, but the interval from 1991 through 1993 was unusual. In light of the fundamental forces yielding prolonged weakness in capital returns (and nominal GDP growth), it is questionable whether the low funds rate during this period should be characterized as an “easy” money policy.



“Short-term interest rates are currently abnormally low in real terms. At some point, absent an unexpected and prolonged weakening of economic activity, we will need to move them to a more neutral stance.

Such an action would not be taken in order to cut off or limit the economic expansion, but rather to sustain and enhance it.

The foremost contribution monetary policy can make to achieving higher standards of living in the United States is to provide the stable financial foundation for continued economic growth.”

—Chairman Alan Greenspan, January 31, 1994<sup>1</sup>

Just as aggressive rate cuts are sometimes necessary to achieve monetary neutrality, so too are aggressive rate increases. Beginning in February 1994, the FOMC responded to rising market rates and signs of incipient inflation by increasing the federal funds rate 300 basis points in little more than a year. Surely, at least some of the increase was necessary to align the funds rate with changes in the equilibrium real market interest rate. Conditions had improved immensely in 1994, especially in the banking and commercial real estate sectors, lifting the rate of return on capital and necessitating a realignment of the funds rate. To characterize the full 300 basis points as evidence of “policy tightening” is clearly misleading.

In August of 1998, the FOMC faced a crisis situation: The Russian government had defaulted on its debt, sending shock waves through world financial markets and even threatening the integrity of the U.S. financial system. The Russian default immediately precipitated the failure of Long Term Capital Management, the large and prominent hedge fund, further roiling already troubled markets. Problems in international capital markets persisted throughout the balance of the year, culminating in the devaluation of the Brazilian *real* in January 1999.

As it had after the 1987 stock market crash, the FOMC responded to the string of crises by providing the liquidity that nervous investors demanded, engineering three federal funds rate decreases of 25 basis points each during the fall of 1999. Long-term market rates, however, actually began to rise at about the time the first cut was implemented. The movement in market rates might have been expected in the face of market participants’ heightened perceptions of risk, but the upward trend continued throughout 1999, well after the turmoil had passed. As the insightful observation below conveys, inaction on the funds rate in the increasing interest rate environment of 1999 would have led to a more expansionary creation of money than would have been consistent with containing inflationary pressures.

“As I think I indicated to you previously, I don’t think we did ‘pop the bubble,’ as you may put it.

We did raise interest rates in 1999, and the reason we did is, real, long-term rates  
were beginning to rise because the economy was beginning to accelerate.

Had we not raised the federal funds rate during that particular period, we could have held it  
in check only by expanding the money supply at an inordinately rapid rate...”

—Chairman Alan Greenspan, March 7, 2002<sup>2</sup>

Once again, we have a ready explanation for actions on the federal funds rate target that appears to be fully consistent with what we call “monetary neutrality” or “stability.” To be sure, each element of our narrative might be cast by others in more traditional terms, in which higher funds rates are designed to actively restrain the economy, lower funds rates to stimulate. This merely reflects the reality that, sometimes, a specific course of action is congruent with several different models of how the economy functions. If policymakers are not sensitive to their own rhetoric, and to that of their colleagues, they may not recognize when their agreements about a particular action stem from coincidence or consistent economic frameworks. Our concern applies most seriously to situations in which policymakers reach the wrong conclusion about the stance of policy because “activist” rhetoric clouds their judgment.

1 Chairman Alan Greenspan, Statement to Congress, January 31, 1994, *Federal Reserve Bulletin*, March 1994, pp. 230–33.

2 Chairman Alan Greenspan, Testimony before the U.S. Senate Committee on Banking, Housing, and Urban Affairs, response to Sen. Bunning, March 7, 2002.

## The Road Ahead

“In a world where expectations matter,  
the language of policymakers can have real consequences.”

—Federal Reserve Bank of Cleveland,  
“Theory Ahead of Rhetoric: Economic Policy for a ‘New Economy,’”  
*1999 Annual Report*

Simply put, maintaining a neutral policy stance—and conditions in which the economy’s natural resiliency can emerge—requires the federal funds rate to fall in light of the market interest rate pressures typifying economic downturn. The requirement is, of course, symmetrical: The softness of capital returns that accompanies recessions generally reverses in recovery. Consequently, the funds rate typically must rise in an expansion, lest the failure to adjust induce an inflationary policy.

Once the economy gets rolling, we should expect returns to new business investment to rise, perhaps rather quickly. Under such circumstances, market-determined interest rates will increase as scarce savings are allocated to the best opportunities. If FOMC actions persistently lag behind rising equilibrium real rates by failing to adjust the federal funds rate, eventually they will tempt the inflation fates. Appropriate rate increases would not, in our view, cut off or limit economic expansion; rather, they would sustain and enhance it by ensuring that monetary policy stays a course that is neither restrictive nor unnecessarily stimulative.

The problem is that many observers (even sophisticated ones) will interpret ascending funds rates in the early phase of expansion as an attempt (misguided, they will say) to restrain inflation by restraining the recovery. It can scarcely be otherwise, as the “activist” language of monetary policy has tied itself inappropriately to the federal funds rate without reference to the monetary and real phenomena that give a particular target meaning. The ability to distinguish lower funds rates from “easy money” and higher funds rate from “tight money” has become almost wholly absent in public discourse. Moreover, it leads to vacuous characterizations of policymakers as “hawks” and “doves.”

As we have argued in the past, we believe that central banks ultimately can deliver more economic growth by abandoning preoccupations with output gaps (and the like) in favor of a price-stability rhetoric and a policy orientation that meets this objective with the least interference to the natural, dynamic forces of the economy. Board of Governors economist Athanasios Orphanides provides new and intriguing evidence that, despite the rhetorical legacy of activist demand-management policy, the reality of policymaking over the past several decades has, in fact, been very much in this spirit.<sup>3</sup>

Credibility is the currency of central banks. Indeed, the rapid decline in the funds rate implemented by the Federal Open Market Committee in 2001 was a luxury bought with public confidence in monetary policy gained over the course of the past expansion. But such confidence is a precious and tenuous commodity, too much so to be squandered by frustration with a policy that is misperceived as anti-growth after a period of protracted economic weakness. In some business cycle episodes, the appropriate funds rate movements may be the same regardless of the chosen lexicon. But we contend that changing the rhetoric will improve policy because it will be better aligned with both the practice of monetary policy and the results it is truly capable of achieving.

<sup>3</sup> See Athanasios Orphanides, “Monetary Policy Rules, Macroeconomic Stability and Inflation: A View from the Trenches,” Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series, no. 2001-62. Orphanides estimates the FOMC’s response to internal Board staff forecasts of inflation and available estimates of the output gaps, both before and after 1979. He finds that in the earlier period, the FOMC systematically altered the funds rate in response to changes in the output gap measure. However, he finds no evidence that the Committee’s response to inflation changed across the two periods. Because the latter period was associated with lower inflation and lower output variability, Orphanides concludes that policy improved as a consequence of suppressing temptations to manage the output gap.