

ECONOMIC COMMENTARY

Federal Reserve Bank of Cleveland

Monetary Policy: An Interpretation of 1994, a Challenge for 1995

by David Altig

In the realm of monetary policy, 1994 was an eventful year. In February, the central bank's Federal Open Market Committee (FOMC) engineered the first of what would eventually number six increases in the closely watched federal funds rate — the interest rate that banks charge each other for overnight loans.¹ In contrast to 1993, a year characterized by remarkable stability in short-term interest rates, these actions culminated in federal funds rates that, by year-end, matched levels not seen since 1989.

What should be made of this experience? The professional punditry speaks clearly on this subject: Economic activity in 1994, as measured by the annual growth rate of real GDP, attained a level not enjoyed in this country since the Reagan era. In the minds of the inflation-fearful Federal Reserve, such growth must be restrained, lest price pressures boil over. Hence, it is asserted, in 1994 the FOMC embarked on a campaign of ever higher interest rates, and ever "tighter" monetary policy, to slow the pace of economic activity.

To most people, this is strange behavior indeed. It seems to contradict the publicly stated mission of the FOMC to ensure "maximum sustainable growth by pursuing and ultimately achieving a stable price level."² How can the pursuit of price stability be inconsistent with, and simultaneously promote, economic growth?

My response stresses two essential points: First, the level of interest rates is, in general, a poor indicator of the stance of monetary policy. Most, if not all, of last year's rise in the federal funds rate has been inappropriately characterized as monetary tightening. Second, commentary on recent FOMC actions fails to distinguish the relationship between inflation and economic growth in the short run from that which might exist in the long run.

Although this second point has long been fodder for debate among economists, its import is far more than academic. The widely held belief that the monetary authority must fight economic growth in order to combat inflation results directly from the fact that the Federal Reserve lacks a concrete long-run mandate to protect the purchasing power of money. Indeed, I argue here that the absence of a clear objective can force a monetary authority to focus unduly on short-run fluctuations in prices and output that are unimportant in the long run and largely uncontrollable in the short run. At best, this orientation reduces clarity of purpose. At worst, it fundamentally compromises the ultimate mission of monetary policy.

■ Interest Rates in 1994: A Real Explanation

Why were interest rates higher at the beginning of 1995 than they were at the beginning of 1994? Connoisseurs of conventional wisdom might recognize this straightforward story: Interest rates rose over the course of 1994 because

How should we consider the Federal Reserve's policy moves in 1994 — as strict monetary tightening to slow economic growth, or as a series of defensive moves to maintain the desired rate of monetary growth in the face of other rising market interest rates? And what is the appropriate policy focus for the central bank in 1995? The author offers his perspective on these questions and suggests formal multiyear commitments to specific inflation objectives as a way to both enhance the Federal Reserve's credibility and allow it to focus properly on long-run objectives.

that's what the Fed wanted. Although appealing in its simplicity, this claim misconstrues the Fed's role in interest-rate determination and ignores compelling developments in the real economy that offer a nonmonetary explanation for the events of last year.

To make the argument concrete, think first of a market for a familiar good, say apples. Little confusion or controversy surrounds the determination of prices in this market—when the demand for apples rises or the supply decreases, the price of apples goes up.

Thinking in terms of simple supply and demand is useful because an interest rate, after all, is just a price. Specifically, market interest rates represent the price that

borrowers pay, and lenders receive, for loanable funds. Just as the price of apples rises when the demand for apples increases, interest rates tend to rise when the demand for borrowing increases.

This scenario—a rising demand for credit leading to higher interest rates—provides a good description of the economy over the past two years. Near the beginning of 1993, household saving rates reversed a nearly three-year upward trend. At the same time, consumer loans issued by commercial banks began to move sharply higher. By the end of the year, the pace of economic activity had accelerated, consumer borrowing demand had continued to grow, and long-term interest rates had begun to rise. A shift in expectations toward higher sustained GDP growth emerged, and the dollar value of commercial and industrial loans abruptly reversed its own three-year skid and began to increase rapidly.

As 1994 unfolded, the growth rate of output and incomes notched a level higher, and loan demand continued to build. As the economy finally emerged from the shadow of the 1990–91 recession into a cyclical phase more typical of an expansion, this increased demand for resources led to continued upward pressure on long-term interest rates. Beginning in early 1994, short-term rates also began to head higher. By the end of the year, the rebound in market rates had brought real, or inflation-adjusted, interest rates to levels closer to those considered to be the long-run norm.

■ Interest Rates and the FOMC

How does the preceding explanation of market interest-rate movements relate to the decisions of the FOMC, and in what way are such considerations informative about monetary policy?

Let's return to our apple-market metaphor. Suppose an entity known as the Central Seed Authority (CSA) oversees the functioning of the apple market by regulating the supply of apple trees to fruit suppliers. On any given day, the CSA smooths temporary fluctuations in the demand for apple trees by agreeing to supply trees in such a way as to keep their price constant (providing, in the jargon of

economists, a perfectly elastic supply of apple trees in the short run). However, this policy—which implies that demand shifts will determine the quantity of apple trees supplied by the CSA—applies only to transitory market bumps that are expected to reverse course in relatively short order. In the long run, the CSA desires to neither increase nor decrease the quantity of apple trees.³

What, then, if the market experiences a permanent upswing in the demand for apples? Clearly, apple prices will rise and suppliers, sensing profit opportunities, will demand more apple trees. If the CSA were to maintain its short-run policy of constant tree prices, it would have to accommodate this extra demand completely and increase the quantity of trees. But this is ultimately inconsistent with the CSA's long-run policy of keeping the tree supply constant. If the higher demand for apples proves permanent, so will fruit suppliers' demand for apple trees. Thus, the tree price that is consistent with the Authority's desired long-run quantity of trees will be higher than the price that prevailed before the change in demand.

With a bit of simplification, the FOMC is in a situation similar to our fictional Central Seed Authority. The Fed supplies money (bank reserves) to fuel bank intermediation activities in the same way the CSA supplies apple trees to fruit sellers. Furthermore, in the short run, reserves are supplied in such a way as to keep the relevant price—the federal funds rate—near a constant, predetermined level.

When market loan demand expands, interest rates rise and the demand for bank reserves increases. Maintaining a constant interbank lending rate, then, requires that the Fed accommodate the higher reserve demand. However, if this pattern is sustained, it is likely to result in a more rapid expansion of the money supply than that consistent with central-bank objectives. Thus, to maintain a neutral policy stance, the federal funds rate at which the FOMC is willing to supply reserves must increase. Consequently, in the long run, the price of reserves supplied by the central bank will rise along with market interest rates.

To assess the plausibility of this scenario for 1994, recall that market interest rates did in fact begin rising prior to any FOMC move to implement higher interbank lending rates: The yield on 10-year government securities bottomed out in October 1993, almost four months before the change in the FOMC's target federal funds rate (announced on February 4), and at a time when few market participants expected any significant, imminent change in policy.⁴

This is not to say that market interest rates, especially short-term rates, are completely unaffected by changes in the interbank lending rate brought about by FOMC policy. Nor are all monetary policy actions equivalent. However, careful thought about the economic developments of the past several years, as well as about the nature of monetary policy, supports a key conclusion: Most, if not all, of the six increases in the federal funds rate associated with FOMC decisions in 1994 are inappropriately characterized as restrictive monetary policy actions. On the contrary, they can be thought of as defensive moves required by the higher real rates associated with growing confidence in the economy and the resulting strength in private spending. The goal of such actions is not to raise the level of market interest rates, but to maintain the desired rate of monetary growth in the face of rates that are rising for reasons unrelated to FOMC policy per se.

■ Money and Prosperity

But why the emphasis on restraining the growth rate of money? Doesn't the availability of more money promote economic growth and prosperity?

The answer must be no, and it is at this point that my apple-market metaphor begins to fail. Unlike apples, money is not an intrinsically valuable good. In other words, monetary assets in modern industrial economies have value only to the extent that they represent purchasing power over the real goods and services that households and businesses wish to acquire. But the central bank directly controls only the dollar, or nominal, value of money. If the Federal Reserve provides the banking sector with a greater rate of reserves than is consistent

with the private sector's willingness to hold monetary assets, the result will not be more wealth, consumption, or investment, but a reduction in the purchasing power of money.

■ The Complex Relationship between Inflation and Growth

The core responsibility of any nation's monetary authority is to avoid the disruptive influences of a fluctuating value of money. In the United States, the rationale for this responsibility is often expressed as follows: To foster maximum sustainable economic growth, the Fed must provide an environment of low inflation. But sometimes, this objective requires restraining economic growth. Thus, faster growth requires low inflation, but low inflation requires slower growth.

A bit confusing, isn't it? The key distinction that isn't being made clearly here—or, for that matter, in many public discussions of monetary policy—is between the short run and the long run. Long-run price stability fosters the conditions for achieving maximum sustainable economic growth. This widely accepted assertion does not rule out a positive relationship between inflation and the pace of economic activity in the short run.

Over the course of a typical business cycle, it would not be unusual to witness sympathetic movements in price-level and output growth. That is, at some stage in an expansion, prices may rise faster than normal as demand growth outpaces supply. Conversely, at some stage in an economic slowdown, the price level may fall or rise at a slower-than-normal rate as demand growth weakens. On average, however, changes that are faster than normal will be offset by those slower than normal. Thus, the short-run correlation between inflation and GDP growth is not informative about the long-run impact of the average inflation rate on output growth, standards of living, and economic well-being.

It is exactly these long-run relationships that should be the primary concern of the Federal Reserve: Ultimately, it is how policy decisions impact the price-level trend, or average inflation rate, that affects the functioning of the economy. Consequently, the long-run path of

prices, and not short-run deviations from the path, would seem to be the appropriate focal point of monetary policy.

■ The Credibility Factor

But if this contention is valid, why do some members of the FOMC itself appear overly concerned about the price-level consequences of capacity constraints, an "overheating" economy, and "unsustainable" rates of output growth? More important, why do they appear ready to act on such concerns by risking, or even pursuing, actions that would move monetary policy from neutral to restrictive?

For some, the answer may be credibility. If the FOMC operated under a clear, verifiable, and single-minded objective for maintaining long-run price stability—and price stability alone—short-run fluctuations in the rate of inflation would matter little. To be sure, in any given year the rate of inflation might be higher than normal as a result of cyclical developments that are largely independent of the long-run stance of monetary policy. But such inflation effects would eventually be offset by contrary developments at other stages of the business cycle. Because these short-run fluctuations in the price level net to zero over time, they would have no real consequence for the long-run purchasing power of money and would also have minimal consequences for the operation of monetary policy.

Unfortunately, many private-sector market participants believe that the Federal Reserve has not been given a clear mandate to pursue policies that will deliver long-run price stability. As a result, many believe that Federal Reserve policymakers must earn their inflation-fighting bona fides by actively resisting all price-level pressures—even those that would not ultimately require monetary reactions to preserve the purchasing power of money. In other words, because the Fed lacks a credible long-run price goal, some policymakers may believe that they should react quickly to inflation blips, lest the public question their resolve to contain inflation.

This unfortunate state of affairs not only promotes the unproductive perception that the Fed must fight growth to fight

inflation: It also promotes an environment in which monetary policy must take a far more activist stance than is necessary, leading the public to mistakenly label price stability policies as anti-growth.

■ A Proposed Framework

Most of the federal funds rate increases engineered by the FOMC in 1994 were defensive actions taken not to implement restrictive policy, but to guard against an overly accommodative policy. Nonetheless, monetary actions that result in higher federal funds rates must at some point cease to be neutral. Just as clearly, the level at which this occurs is a matter of considerable ambiguity. When is enough enough? More important, on which side of neutral should the FOMC err? Does the calculation change if (as most economic forecasters expect) the U.S. inflation rate accelerates in 1995 as a natural by-product of cyclical developments?

That the economy would experience rising interest rates last year during such an expansion phase of the business cycle was a foregone conclusion, the federal funds rate being no exception. But as the economy continues to expand and as real interest rates approach levels more conformable to historical norms, policy decisions become more difficult. The credibility of the FOMC and private-sector inflation expectations will inevitably loom large in determining the appropriate actions to be taken as 1995 unfolds.

The task ahead is complicated enormously by the lack of an institutional framework that clearly identifies price stability as the sole long-run objective of monetary policy. One sensible framework that merits consideration is a formal and public multiyear commitment by the FOMC to specific inflation objectives. This commitment need not include a monthly or even yearly requirement that these objectives be continuously realized—thus leaving room for the possibility of cyclical fluctuations in the growth rate of the price level. Nor would it require changing the Fed's short-run operational methods and objectives. But it would impose a higher standard of accountability for the economy's price outcomes that are, in the long run, determined by the monetary authority.⁵

The complex issues of credibility and public expectations cannot, of course, be solved single-handedly with publicly announced objectives. Moreover, although even formal multiyear price-level goals may not resolve all of the ambiguities in the current policy structure, they would certainly offer some advantages. Ultimately, convincing the public that monetary policy actions are taken to promote long-run sustainable growth will surely require that the Federal Reserve be more explicit about its long-run inflation objectives, and be held accountable for pursuing policies consistent with achieving them.

■ Footnotes

1. A seventh increase followed the FOMC meeting of January 31–February 1, 1995.

2. Testimony of Federal Reserve Chairman Alan Greenspan before the Subcommittee on Economic Growth and Credit Formation of the Committee on Banking, Finance, and Urban Affairs of the U.S. House of Representatives, July 22, 1994.

3. Why would such a policy make sense?

This is a good question, and one I will, for the most part, simply beg. However, consider the following: Suppose apple demand is highly seasonal, but that the private stock of apple trees is relatively fixed. In the absence of the CSA, seasonal fluctuations in demand could cause fairly large seasonal swings in the price of apples. If society deemed these transitory price effects harmful, it could create the CSA to provide an elastic supply of apple trees in the short run, thereby decreasing or eliminating such effects.

In the long run, however, it may be clear that a determinate number of apple trees is best, perhaps due to concerns about soil conservation. Thus, although fluctuations in the tree supply may be optimal in the short run, the CSA would be charged with maintaining a relatively fixed supply on average to ensure that the long-run quantity of trees is consistent with maximum *sustainable* production in the apple market.

4. The consensus outlook according to the October 1993 issue of *Blue Chip Financial Forecasts* held that "... interest rates are expected to drift sideways over the next six months ... [and] Fed policy is expected to remain on hold until the spring of next year." Although 30-year yields had risen some 35

basis points from mid-October to mid-November, the consensus in December held that "... the Fed will hike its federal funds rate target by 25 basis points in March or April ... No additional tightening of policy by the Fed is expected until autumn. Short-term interest rates are expected to rise by only 50 to 75 basis points over the course of the year"

5. A specific example of how price-level objectives might work in an operational sense is given in William T. Gavin and Alan C. Stockman, "A Price Objective for Monetary Policy," Federal Reserve Bank of Cleveland, *Economic Commentary*, April 1, 1992.

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