During the 1970s and early 1980s, America saw inflation and unemployment soar and public confidence in the economy plummet. Much of the blame for this performance was pinned on the Federal Reserve, which most certainly was not fulfilling its new mandates for price stability and maximum employment. Prompted in part by this episode, a sense of urgency grew to develop theories based on better ways for achieving macroeconomic stability. Two strains of work took the lead: one on “rational expectations” and the other on policy rules. What happened next was a reshaping of how central banks around the globe conducted monetary policy.

Rational Expectations

Hard as it may be to imagine, there was a time not that long ago when economic policymakers cared little about what the public expected. Then came the “rational expectations” revolution. While many economists were crucial to this revolution, Nobel Prize winner Robert Lucas was at the fore.

Before the rational expectations revolution, typical models of how the economy was thought to work either ignored expectations about the future or treated them as backward-looking. At the time, the conventional wisdom was that being secretive made monetary policy more effective. Although the pre-rational-expectations models did not necessarily justify this conventional wisdom, they did not do much to counteract it, either. In these models, the simplistic treatment of expectations meant that the public might be routinely surprised by monetary policy, which was part of the reason secrecy was considered an asset for the Federal Reserve.

By contrast, the idea behind rational expectations is that firms and consumers fully understand the economy’s structure and the behavior of monetary policy and form their expectations of the future accordingly. While people can still make errors in their forecasts, they do not make systematic errors.

This concept was revolutionary because it helped policymakers appreciate the importance of the public’s expectations in determining the effectiveness of monetary policy. Because of rational expectations, modern macroeconomic models assume that firms and consumers base their economic decisions on both today’s federal funds rate and expectations of future federal funds rates. And when people’s behavior is based partly on their expectations, policymakers must pay close attention to what they themselves say because it influences peoples’ expectations and, in turn, their behavior.

High inflation and unemployment in the 1970s coincided with the development of new theories for maintaining economic stability. The “rational expectations” revolution showed the importance of setting clear and understandable policies. Policy rules gave Federal Reserve officials guideposts for becoming much more systematic and predictable about their actions in order to make policy more effective.
A football analogy: Glancing at past statistics, an innovative but inexperienced coach might decide to call more passing plays on offense, because those plays historically gain more yards. But if the coach did implement that plan, the opposition’s defenses would invariably adjust and the pass-heavy offense would be less effective than the old statistics led the coach to believe. A seasoned coach anticipates that defenses will respond that way, and his game plan takes that into account.

It is far from a perfect analogy, as the central bank and the public are not adversaries. But in general, the same holds with policymaking—the public will modify its behavior, raise wages, for example, if it thinks the Federal Reserve is trying to increase inflation; it will not just stand pat and be surprised. In that case, the Federal Reserve’s efforts to stimulate the economy probably would not result in more economic activity but only in higher prices. Monetary policy that does not take people’s expectations into account is doomed to fail.

Understanding rational expectations, policymakers realized that if the Federal Reserve is to meet its goals of price stability and maximum employment, the public must view policy as highly credible and must have a clear understanding of the goals of policy and the economic and financial factors to which policy systematically responds. So the Federal Reserve embarked on a decades-long communications effort that continues to this day. A small sampling of changes includes these:

- Up until the mid-1960s, policy decisions were announced with a one-year delay. In the mid-1970s, responding to requests from Congress, the Federal Reserve began to provide semi-annual reports on monetary policy and to publish economic forecasts.
- In the early to mid-1990s, the Federal Reserve began to publish statements after FOMC meetings to briefly explain policy changes and to immediately disclose its target for the federal funds rate.
- Recently, the Federal Reserve has increased the frequency of its public forecasts, added some information on the expected path of monetary policy, and launched quarterly press conferences to explain policy decisions. Clear communications about future policy actions have also become an essential tool for the Federal Reserve in providing accommodation while the federal funds rate is at the zero lower bound.
- In 2012, as noted earlier in this essay, the Federal Reserve established a numerical objective for price stability to formalize a long-run inflation goal of 2 percent that some people viewed as implicit in previous Federal Reserve policy actions and statements.

Policy Rules

Of equal impact on the practice of monetary policy was the development of policy rules. Until recent decades, the Federal Reserve’s approach to adjusting monetary policy could hardly be called systematic; policy actions were not guided by a consistent, overarching method. Some might say the Federal Reserve was following a “discretionary” approach to monetary policy. Federal Reserve officials felt free to set policy as they saw fit at each point in time, based on all available information and on their judgment. By comparison, under a strictly “rule-based” approach, policy would be set according to a simple, publicly announced formula, with no deviation.
“The first 100 years, as Mao said about the French revolution, it’s too early to tell. I think we’re reminded that the Fed is a work in progress. There’s a lot of debate and controversy around the measures that the System is taking at the moment in response to the financial crisis and slow recovery. But history reminds us that it’s not the first time the Federal Reserve System has repeatedly evolved in response to events and in response to crises. That will continue.”

Barry Eichengreen, University of California, Berkeley
By the 1980s, a convincing case was being made that policy based on rules could deliver better macroeconomic outcomes—with lower inflation and more economic stability—than could be achieved under an entirely discretionary approach.

Stanford University economist John Taylor became the standard-bearer for the rule-based line of research. In the 1990s, he famously observed that Federal Reserve monetary policy under then-Chairman Alan Greenspan could be captured very well by an equation relating the federal funds rate to three terms: a constant reflecting the average or normal real rate of interest, inflation relative to a target of 2 percent, and real GDP relative to the economy’s potential. For example, when inflation moved up and/or GDP was running above potential, the federal funds rate tended to move up. This suggested that Greenspan’s Federal Reserve was, in practice, following a systematic “lean against the wind” approach to monetary policy. As it turned out, this approach was good for the economy. Later research showed that policy based on rules similar to what became known as the Taylor rule fared well in stabilizing economic activity and inflation.

Over time, many Federal Reserve policymakers came to view the prescriptions of various policy rules as useful guideposts. Nonetheless, policymakers recognized that the economy was far more complex than the macroeconomic models in which Taylor-like rules performed well. For example, a strict Taylor rule might not pick up on the need for very accommodative monetary policy during a credit crisis because it takes its cues only from inflation and output.

Still, the recognition of policy rules’ value as guideposts probably helped monetary policy become more systematic in responding to fluctuations in economic activity and inflation. Arguably, the result was indeed greater stability—in the form of the decades-long period of low inflation and relatively steady growth known as the Great Moderation. Even today, with policy rules less helpful because they would prescribe negative interest rates, which are impossible, the Federal Reserve has adopted a systematic approach to using its unconventional policy tools. At present, the Federal Reserve is buying Treasury bonds and mortgage-backed securities to achieve a monthly target, under the proviso that the target will be systematically adjusted in response to changes in the economic outlook and financial conditions.

Lessons Applied

Forty years ago, the words “systematic” and “clear” would not have been associated with Federal Reserve policy. Quibblers might argue that the Federal Reserve has not quite achieved that level of association even today, although some progress has been made. The Federal Reserve of the twenty-first century is leaps and bounds ahead of its twentieth-century self in terms of its systematic behavior and transparent communications.

It took the confluence of unwelcome economic events and welcome economic theories to produce this new approach. Policy rules help to guide public expectations, and consistently adhering to policy rules reinforces those expectations. Who knows what events or theories will shape the future? Depending on the times or the thinking, there may be many ways for the central bank to fulfill its objectives. The methods and approaches have changed, but the goal of economic growth and price stability has not.