

What Have We Learned from 100 Years of Federal Reserve History?

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In my view, the Fed has performed at least as well over its first 100 years as could have been expected given the limits of, and evolution in, our understanding of how the economy operates and given the Fed's institutional structure and political environment. The key to improving performance in the future is to give the Fed the tools it needs to do its job, to allow the Fed free rein in using those tools as it sees fit, to demand that the Fed explain its actions to the public contemporaneously, and to hold the Fed accountable for any failure to achieve its objectives that could reasonably have been prevented. My biggest worry is that the Fed faces more restrictions on its powers than any of the world's other major central banks, raising the risk that it may be unable to achieve its objectives at some time in the future.

Objectives of the Federal Reserve

Congress created the Federal Reserve System in 1913 "to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes." I'm not sure what other purposes Congress had in mind, but the rest of the preamble strikes me as eminently sensible and still relevant 100 years later. The creation of the Fed was in large measure a response to the banking panic of 1907. There was a strong desire for a more stable economy and the path to a more stable economy was a more stable financial system.

In the 1970s Congress added an explicit monetary policy objective "to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." This new language brought the concept of an elastic currency into the modern age, while retaining the objectives related to the financial system. Basically one can summarize the Fed's

objectives as to encourage the flow of credit in a sound and stable financial system in order to have a strong and stable economy with low inflation.

Many students of central banking, including my colleague Adam Posen, have made the case for central bank independence in the context of democratic institutions. In their view, which I share, central bank objectives should be set by political leaders; central banks should have operational independence and the tools to achieve those objectives; and central banks should be transparent and accountable to political leaders for their performance (Posen 2013).

Successes and Failures

1914-39

I pass over the first few years of the Fed's existence as it may have been too soon for it to have had a systematic economic effect and those years were disrupted by the first world war. The 1920s were a period of rapid growth with low inflation, an apparent success of Fed policy. However, late in the decade, a leverage-fueled bubble emerged in the stock market. Given the tools it had, it is not clear what, if anything, the Fed could or should have done to minimize the bubble. Afterwards, the Banking Act of 1933 gave the Fed authority to determine margin requirements on stock loans. I believe that strict enforcement of these requirements (currently 50 percent) has been hugely beneficial, a point to which I will return later.

The aftermath of the 1929 stock market crash gave rise to the Fed's greatest failure—the Great Depression. The work of Milton Friedman, Anna Schwartz, Ben Bernanke, Allan Meltzer and others has led to widespread agreement that the Fed turned a recession into a depression by allowing the money supply to contract and allowing prices to fall by 25 percent from 1929 through 1933 (Friedman and Schwartz 1963, Bernanke 2002, and Meltzer 2003). Recovery began with the loosening of the gold standard, the devaluation of the dollar, and the bank holiday

of 1933 (Romer and Romer 2013). But it is important to recognize that very few people at the time understood the Fed's role in enabling the Great Depression, so perhaps we should not expect the leaders of the Fed to have known any better.

1940-65

World War II and the decades immediately afterward were a golden era for the US economy, with rapid growth and generally low inflation. To some extent, this may reflect a certain amount of good luck. Perhaps also, it may reflect that the heavily regulated financial system of the era was not allowed to run amok.

1966-1979

In light of the concerns expressed by many about the consequences of recent Fed policies for future inflation, it is important for us to understand how and why inflation got out of control in the 1960s and 1970s. The Fed's good luck began to run out in the late 1960s when the Vietnam War and the Great Society caused the US economy to overheat. The rise of inflation was not a single event and not a consequence of a single Fed error. Rather, as shown in the attached chart, inflation rose in three separate waves. During each wave, the Fed was initially reluctant to fight inflation, but it eventually tightened policy enough to reverse the upward drift in inflation. After the first two waves, the Fed eased policy before inflation was truly defeated. It was only under the tenure of Paul Volcker that high inflation was conquered for good.

When one reviews the statements of Fed officials and the FOMC during the period of escalating inflation, what is apparent is a denial of responsibility and a blaming of other forces for rising inflation. Also, as described by Christina and David Romer (2013), the Fed at times argued that it had little power to counteract the inflationary forces at work. Over time, this abdication of responsibility caused expectations of future inflation to become unanchored. When

the oil shocks of 1974 and 1979 hit, firms and workers rushed to raise prices and wages because they thought, in part correctly, that the Fed would allow inflation to ratchet up once again.

The upward drift of inflation and inflation expectations did not happen all at once. The Fed had many opportunities to fight inflation and regain credibility. And when Paul Volcker was appointed chairman, it finally did. The lesson for today is that inflation is not baked in the cake years in advance. It responds to Fed policy with a lag of a year or two. The key is a firm and predictable Fed tightening whenever inflation threatens to rise above a narrow range around its target.

1980-2003

The Great Moderation, as it is sometimes called, reflected a combination of good luck and good policies. Economists still do not fully agree on the balance between luck and policy. In my view, good policy was important. After Paul Volcker, the Fed learned the lessons of its previous errors and did not allow inflation to drift upwards. I note, however, that during the 1980s, inflation stabilized around 4 percent and this was viewed as a great success. In a shift that has come to be known as “opportunistic disinflation,” targeted inflation dropped to 2 percent after the recession of 1990-91, where it has remained (Orphanides and Wilcox 2002).

2004-13

This is the period of the housing bubble and the Great Recession. Some observers say that the Fed kept interest rates too low in 2003-05 and that this was the most important cause of the housing bubble (Taylor 2007). I agree that policy was too easy in 2004 and 2005, but the overheating this caused was minor by historical standards. Moreover, as my colleague Adam Posen (2011) has written, there is no systematic evidence connecting loose monetary policy with financial bubbles. Rather, I and many others blame the Fed for lax regulation of the mortgage

market and for turning a blind eye to off-balance-sheet risks at commercial banks. Other regulatory agencies also share considerable blame. The main lessons I draw are that leverage and debt burdens of borrowers were too high, capital at banks and other financial institutions was too low, and the complexity of structured financial products proved to be a huge vulnerability when the system was tested.

During and after the financial crisis, the Fed eased policy quickly and made extraordinary efforts to stabilize the financial system. I agree with Chairman Bernanke (2012) that the size of the 2008 shock—in terms of loss of wealth, bankruptcy, forced deleveraging, and global reach—was probably greater than that of 1929. The only reason we are not in the midst of a second Great Depression is that policymakers in the United States and elsewhere responded much better in the current episode.

But better is not necessarily best. As I argued back in 2009, the Fed should have engaged in much more quantitative easing (QE) at an early stage (Gagnon 2009). Doing so would have put the US economy on a stronger growth path, keeping millions more employed and reducing the federal budget deficit. Paradoxically, more aggressive monetary ease in 2009 and 2010 would have pulled forward the time we return to more normal interest rates and probably prevented the need to launch QE2, Operation Twist, and QE3. Given the unprecedented nature of, and controversy surrounding, QE, it is perhaps unfair to criticize the Fed for not doing more sooner. But the current episode demonstrates that being too timid can be just as risky as being too bold.

Lessons Learned

Objectives

Would the Fed's objectives be improved by making them broader or narrower or numerically

specific? With respect to financial stability I don't see any useful modification. With respect to macroeconomic stability, the discussion centers around whether the Fed should be given a single target or a dual target and whether the target or targets should be specified numerically.

Experience shows that successful central banks do not focus solely on inflation even if that is their sole legislated objective (Posen 2013). Stabilizing employment is a socially valuable objective in itself and it helps to stabilize inflation. Making the dual mandate explicit is an acknowledgment of reality that has benefits for credibility, transparency, and accountability.

It is widely agreed that central banks should not be given a numerical goal for employment, but many believe that political leaders should specify a numerical goal for inflation. We are all aware of the dangers of inflation that is too high and the evidence is accumulating of the harm from inflation that is too low. The target should not be set below 2 percent, and some believe that a slightly higher target would be beneficial, perhaps as high as 4 percent (Blanchard et al. 2010 and Ball 2013). I don't have a strong view on that, but I note that an average inflation rate of 4 percent in the late 1980s was widely viewed as a huge success. If the simplicity of a single target has strong appeal, then one might consider targeting growth of total spending, or nominal GDP, at 5 percent.¹

Rules versus Discretion

A policy rule is a mathematical relationship between the value of an economic policy indicator and underlying economic variables. The most famous monetary example is the Taylor rule, which relates the short-term interest rate to the inflation rate and the gap between actual and potential output (Taylor 1993).

¹ Nominal GDP is the product of output, or real GDP, and the price of output. Because employment is tightly linked to output, nominal GDP combines both elements of the dual mandate. Growth of nominal GDP at 5 percent would yield average inflation of 2 percent if output grows at 3 percent on average or inflation of 3 percent if output grows at 2 percent. The Fed has little control over the long-run average growth rate of output, but any outcome for inflation in this range would be acceptable.

The chief economic arguments for strict observance of a policy rule are that it provides greater certainty to market participants and that it eliminates the temptation of a policymaker with a short-term outlook to boost output and employment now at the expense of higher inflation later. Experience has shown, however, that it is possible to eliminate the problem of the short-sighted policymaker by appropriate structuring of the policymaker's mandate and accountability.

The chief arguments against strict observance of a policy rule are that there is no agreement on the optimal policy rule and that it is probably impossible to design a policy rule that can allow for all possible contingencies. John Taylor showed that his rule provided a reasonably good characterization of Fed policy during a part of the Great Moderation and thus it may have distilled an important principle of good monetary policy. But the period Taylor examined was short and we don't know whether some other rule might have been even better, especially if other shocks had been hitting the economy. A number of researchers have written papers arguing that Taylor's rule can be improved in important ways, but there is no agreement on any one rule.

The best strategy is for the Fed to continue to study policy rules and to use various rules in assessing the appropriate stance of policy. Whenever it sets policy far from the dictates of historical rules, the Fed should have a good reason and should communicate that reason clearly to the public to avoid confusion and uncertainty.

If one is searching for a guiding principle for formulating and communicating policy, the optimal forecast approach of Lars Svensson (2003) has much to commend it. Variants of this approach are implemented by some foreign central banks. Under this approach, the Fed would set its policy to minimize forecasted deviations from its objectives in the future, with deviations in the distant future discounted more than those in the near term. If the Fed were to provide the

market with its own forecast of monetary policy, it might learn whether private forecasters agree with its forecasts of how closely it will achieve its objectives. Any disagreements could lead to a dialogue between the Fed and market participants that would help each to understand the different views of the other and to reduce uncertainty.

In recent years, the Fed has undershot both its employment and inflation objectives repeatedly, despite setting policy, via QE, lower than the original Taylor rule would imply. Other versions of the Taylor rule, however, called for large negative policy rates, which might be interpreted as calling for even more QE. Depending on whose policy rule you like, Fed policy was either too loose or too tight. My own call for more QE back in 2009 was based on the fact that the Fed itself did not forecast a return to full employment and target inflation within three years. According to the Svensson approach I just described, this was a clear example of a policy error. Looking forward over the next three years, there still seems to be room for easier Fed policy, but the case is less strong than it was back in 2009.²

Policy Tools

The resort to QE in recent years highlights an important issue. Of the world's major central banks, the Fed has the most restrictions on its powers. It can buy only government-issued or government-guaranteed debt, including that of government agencies. Other central banks can buy corporate debt, equities, and even real estate.

As long as the Fed has a clear mandate, with sufficient transparency and accountability, there is no reason to restrict its ability to achieve that mandate. Indeed, arbitrarily restricting the Fed's powers could have serious consequences, particularly if the housing agencies are wound down and the pool of agency-backed debt diminishes. Restricting the Fed's operations to

² In my testimony on March 5, 2013, I noted that there are potential costs to QE but that the benefits currently appear to be greater than the costs (Gagnon 2013).

Treasury securities might dangerously reduce its capacity to influence the economy, especially if at some future time Treasury securities in private hands are scarce.

In order to avoid the appearance or reality of favoritism and corruption, Fed operations in private securities should be ordinarily conducted in broad-based baskets, preferably as wide as possible and using weights based on market capitalizations. The Bank of Japan is buying Japanese equity and real estate on this basis as part of its fight against deflation.

Another important tool is the ability to impose loan-to-value limits and/or debt-to-income limits on consumer and business loans. Strict margin requirements kept the equity bubble of the 1990s from causing excessive damage when it burst in 2000. We need similar limits on leverage in real estate.³ Also needed are higher capital standards for banks and plans for orderly resolution of systemically important financial institutions. It remains to be seen how effective the new Dodd-Frank regulations will prove in achieving these goals.

Lender of Last Resort

During the recent crisis the Fed made a number of emergency loans to specific institutions, which attracted considerable criticism. In research I hope to release soon, my colleague Bill Cline and I show that the Fed was scrupulous in requiring sufficient collateral on its loans, as evidenced by the fact that all of its loans were repaid with interest and profits that exceeded the Fed's own cost of funds. The one prominent case of a loan that was denied was that of Lehman Brothers. My research supports Chairman Bernanke's statement that the Fed was not able to lend to Lehman because Lehman lacked sufficient collateral for a loan. It is arguable whether, on balance, the taxpayers might have been better off if the Fed had prevented a disorderly bankruptcy by Lehman even at the cost of significant loan losses. Personally, I think the

³ To some extent, the Fed and other financial supervisors have this tool, but the inter-agency process of using it is cumbersome. Moreover, supervisors fear the political backlash that would result from significantly increasing down-payments on home mortgages or tightening terms on other forms of credit.

recession would have been essentially the same if Lehman had not failed. But others may take a different view. In any event, what is clear is that the Fed took both its mandate for financial stability and the legal limits on achieving that mandate seriously.

The new limits on the Fed's ability to make emergency loans do raise the risk of disorderly failures in the future, and it is not clear how much this risk is ameliorated by the advance resolution plans that are now required of large-scale financial institutions.

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