

Current Lessons from the Past: How the Fed Repeats Its History

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Introduction

“Here, then, the rulers of society have an opportunity to show their wisdom or folly. Monetary history reveals the fact that folly has frequently been paramount; for it describes many fateful mistakes.” Wicksell (1906), quoted in Issing and Wieland (2013, 424)

The Federal Reserve System came into existence exactly one hundred years ago this month after lengthy debate and discussion. It seems timely to look back on its founding, its history and development, and to consider its major successes and failures. This paper looks at that history and discusses how the past is reflected in the present.

The new institution had little scope for discretionary policy actions. None of the parties discussing the proposed act doubted that it would follow a monetary rule, the international gold standard. Actions and initiatives remained greatly restricted by the Act. Monetary, credit, and interest rate actions consisted principally of setting discount rates on commercial paper and banker’s acceptances. Rates influenced the amount of discounting, but the initiative for discounting remained with the banks. The Federal Reserve could purchase or sell bankers acceptances on its own initiative, but individual Reserve banks could decide whether to participate.

Agreement about economic issues included more than the gold standard. A series of financial disturbances in the 1890s and 1907 convinced most of Congress, the Wilson administration and the informed public that the social cost of bank failures could be greatly reduced by creating a lender-of-last-resort with power to lend on acceptable collateral in a financial crisis. The gain came from protecting the payments system, not, as now, protecting banks.

Agreement on another vital economic issue concerned the financing of government borrowing. The 1913 Act prohibited any direct loans to the Treasury. The authors understood, perhaps better than their modern counterparts, that financing government debt was likely to bring inflation.

Many economists act as if monetary policy is entirely an economic issue. Many papers analyze optimal economic policy. These papers neglect that the Federal Reserve is governed by

political as well as economic concerns. That has been true since the founding, and it remains true, perhaps even truer now that discretionary actions have replaced the very restricted rules in the original design.

Article 1, Section 8 of our Constitution assigns the monetary power to Congress. The Federal Reserve is its agent. That makes political influence inescapable. Despite words about independence, it takes a very strong chair to remain independent. As former Chairman Martin said: the Federal Reserve is independent within government, not independent of government. (Meltzer, 2003) That is not a very restrictive definition of independence.

The gold standard and discounting did not delay the 1913 legislation. The agreements that were difficult to reach were political issues,¹ two especially. Who would control the new agency the Board in Washington or the twelve Reserve Banks spread across the country? And where would the Reserve Banks be situated? The law assigned the second issue to a three person board.

President Wilson, a former political science professor, proposed a compromise. The Reserve Banks would be semi-autonomous, with directors drawn from their region, with power to approve or dissent from purchases and authorized to set regional discount rates with Board approval. The Board in Washington had a supervisory role. The compromise satisfied the western and southern populists who thought that the Board would keep New York from setting interest rates at levels that would squeeze farmers and merchants. The large financial firms in New York preferred a structure like the Bank of England with no government participation. They did not get that, but they regarded the new arrangement for discounting as a very profitable opportunity to finance the annual crop movement to Europe in place of foreign banks, British especially, that could borrow from the Bank of England.

Popular discussion referred to the Board as “political representatives” and the Reserve Bank officials as “bankers.” Populist concern that the bankers would run the system for their benefit continues throughout history. Most crises reduced the role of Reserve Bank directors, broadened director membership, ended their authority to decide on portfolio purchases and sales at their bank, and centralized discount rates and made them uniform. The last was as much the result of the creation of a national money market as a political decision to restrict Reserve Bank

¹ To call them political issues does not mean that there were not major economic effects. The discussions did not dwell on the economic implications, though they were clearly important background knowledge.

influence. The Board, located in Washington, was subject to political pressure and influence, so a change in its relative power increased efforts at political influence. Political influence increased after World War II as a consequence of the Great Depression and passage of the Employment Act.

The Past

The Wilson compromise got the legislation passed but did not end the struggle for control. Soon after the Federal Reserve began, the United States was at war. The Fed helped to finance wartime spending not by buying government debt as in later years, but by lending on favorable terms to banks that bought large amounts of debt. The prohibition against direct lending to the Treasury was still strong.

The prohibition was soon after circumvented. It is not correct to repeat that the Federal Reserve or Benjamin Strong discovered open market operations. The Bank of England first used open market operations about 100 years earlier. What the New York Fed learned was that open market purchases and sales could be used to change commercial bank reserve positions. The 1920-21 effort to control reserves by raising discount rates, as the Bank of England did, caused a political backlash and renewed fears of high rates dictated by New York. Raising rates, especially the selective high discount rates at several southern Reserve banks, created the need for an alternative means of control. (See Meltzer, 2003 for details of the episode.) Punitive interest rates at some southern and western Reserve Banks raised political concerns. The Wilson compromise had not worked to keep interest rates low as the act's sponsors had claimed. The conclusion was that raising rates for farmers and merchants was not a monetary control mechanism that worked in the United States. This was as much a political as an economic judgment, but it retained a controlling influence in 1928, when the board repeatedly vetoed discount rate increases above 6 percent. The political decision to avoid raising rates above 6 percent remained in effect until the Great Inflation and the anti-inflation policies of 1981-82.

In the 1920s, the Reserve Banks controlled decisions. Under the leadership of Benjamin Strong of New York, the Reserve banks established the open market committee to agree on purchases and sales of government securities and setting rates for acceptances. Open market operations circumvented the outright prohibition on financing the federal government. The Reserve Banks could not directly lend to the Treasury, but they could purchase Treasury issues

in the open market at rates that they influenced by their decisions. One of the main restrictions on inflationary policy was gone. The gold standard remained but not much longer.

Strong was not an inflationist. In the 1920s, he agreed with Montague Norman of the Bank of England to allow gold flows to affect rates as long as they did not cause inflation. Other Reserve Bank Governors (as they were called at the time) went along with Strong's policy because it provided income to pay reserve bank operating costs and the dividends promised on the member banks' shares. In the 1920s, some of the regional banks had insufficient earnings in some years.

The New York Reserve Bank managed the system's international transactions in the 1920s. Senator Carter Glass strongly opposed Strong's decision to lend to Great Britain to sustain return to the gold exchange standard. And he blamed the New York Bank for causing the Great Depression. In the 1933 and especially the 1935 legislation, Glass reduced the role of the Reserve Banks and strengthened the Board's role. Glass always opposed having a central bank. He would ask the regional governors: "Do we have a central bank?" The required answer was, no, we have an association of Reserve Banks. Yet, Glass, probably unwittingly, sponsored the Banking Acts of 1933 and 1935 that centralized control of monetary, credit, and interest rate policy in the renamed Board of Governors. Gone were the Reserve Banks control of their portfolio and power to refuse to participate in purchases and sales. Board members had often attended open market meetings in the 1920s but they had no vote at the meeting. They could veto the action using their supervisory responsibility. The new legislation gave them majority representation on the open market committee. After 1935, New York lost the right to a permanent seat. In 1942, the Board restored New York's position on the Federal Open Market Committee (FOMC).

The next major changes came in the early to middle 1950s, William McChesney Martin, Jr. was chairman of the Board of Governors and the FOMC. In a series of steps, he gained support for procedural changes that transferred control of policy operations from New York to the Board. One very controversial action was to adopt a "bills only" policy. This limited New York's power to intervene in long-term markets when demand for Treasury issues shifted. The Martin Fed maintained that the Federal Reserve should limit its operations entirely to the money or bill market. The Democrats in Congress disliked bills only. After President Kennedy's

election Martin and the Board made the political decision to cooperate with the new administration. One part of cooperation was an end to bills only.

The Heller Council of Economic Advisers wanted the Federal Reserve to cooperate in the administration's effort to end the 1960-61 recession while reducing the capital outflow. To do this, they wanted the Federal Reserve to raise short-term rates and lower long-term rates. Martin was part of a small group that met with President Kennedy to coordinate economic policy. At these meetings, Chairman Heller and James Tobin encouraged the president to urge Martin to follow administrative interest rate policy.

Policy coordination sacrificed much of the Federal Reserve's independence. Martin did so willingly in some instances. One of his main reasons was his belief that the Federal Reserve was independent within government not independent of government. In practice, Martin said, Congress passed the budget and the president signed it, the Federal Reserve should not refuse to finance budget deficits even if the deficits were large.

That was a large departure from independence and especially of the founder's principle of separating the Federal Reserve from responsibility for financing the Federal government. Politicization of the Fed continued in the 1960s and 1970s.

In 1966, the Fed raised interest rates to slow inflation. Inflation responded quickly, but unemployment rose. The Fed reversed its actions. Markets learned a lesson about the Fed's priorities. The response of inflation and long-term interest rates was never again as rapid.

Chairman Arthur Burns worked to support his friend Richard Nixon. After observing the much greater weight on unemployment and the failure to continue anti-inflation policies when unemployment rates rose, markets did not reduce long rates as much as in the past following reductions in short rates. Orphanides (2002 and elsewhere) documents the errors in the 1970s. Most of the errors were errors of commission. The Federal Reserve was slow to recognize Irving Fisher's earlier difference between real and nominal rates and slow to accept that the Phillips Curve trade-off was at most a short-term trade-off. As Paul Volcker later reminded the staff, the Congress, and the public, contrary to the Phillips curve inflation and unemployment rose together in the 1970s and fell together in the 1980s.

In the Bernanke Fed, the Phillips curve is again a guide to action. Prior to the credit crisis, the Board's staff relied for guidance on Woodford's model (2003) in which money is irrelevant, credit markets and asset prices are missing and long-term rates are always at their

rationally expected value. This model encouraged staff neglect of the very markets in which problems arose. Earlier work by Friedman (1956), Tobin (1969), and Brunner and Meltzer (1993) considered some or all of the credit, monetary, and asset price variables. Absence of credit and asset markets from the Woodford model missed the source of the 2008 credit crisis. Taylor (1995) and Meltzer (1995) insist on the role of money and credit markets in the transmission process for monetary policy.

The neglect of concern for the transmission process is puzzling. No less puzzling is the staff's use of either large scale econometric models or the bare bones Woodford model. It is analytically elegant, but we must recognize that it is inadequate.

Monetary policy without money is a serious mistake. The reason for dismissing money, I believe, is that the staff believes that quarterly velocity movements are not predictable reliably as a function of short-term rates. My history plots annual velocity against a long-term rate (that more adequately reflects expected inflation) from 1919 to 1995. The velocity relation remained remarkably stable over most of this period, 76 years. And the Bundesbank successfully used annual money growth to supplement and interpret policy effects. Issing and Wieland (2013 and elsewhere.)

One additional flaw or missing element in the Federal Reserve's procedure is its treatment of its role as lender-of-last-resort (LOLR). We all know that this is a main reason for having a central bank. And we know, too, that failure to serve as lender-of-last-resort was central to making the Great Depression a disastrous policy failure.

In his speech to the National Bureau's recent conference, Bernanke (2013), the Chairman recognized the Fed's responsibility to serve as LOLR. He references Bagehot (1873), and he points to the massive response in 2008 that spared the country and the world economy from a collapse of the payments system. That was necessary, courageous, and appropriate. It should remind each of us that unpredictable events occur and require responses that are not part of normal operating policy rules or judgments.

Bernanke's discussion of LOLR is deficient for two main reasons. First, in its 100 year history the Federal Reserve has never announced a LOLR policy rule. The need for announcing and following a rule is the main point of Bagehot's criticism of the Bank of England. Bagehot did not criticize the Bank for failing to act appropriately. He cited examples to show that, although the Bank delayed, its actions eventually calmed the markets. His criticism is an early

rational expectations claim – that the Bank failed to inform the markets of its LOLR policy rule. Announcing the rule that the Bank would lend on good collateral reduced uncertainty and encouraged prudent banks to hold appropriate collateral.

Second is the failure of regulators to understand that Bagehot makes them responsible for sustaining the payments system not the troubled banks. The main reason for regulation is to close the gap between private and social cost as much as feasible. The main social cost is the collapse of the payments system. Economic activity cannot proceed. Sustaining the payments system does not require regulators support of failing banks. It requires four rules:

- (1) A clearly stated rule for the lender-of-last-resort. Bagehot's rule, lend freely against collateral at a penalty rate remains appropriate;
- (2) Protect the payments system, not the troubled bank or banks;
- (3) By protecting the payments system, prevent the problem from spreading to other banks and financial institutions by lending on good collateral;
- (4) Require equity capital sufficient to absorb all anticipated losses.

We have considerable evidence that these rules work. Bagehot's book gives a number of examples. And in the climactic years, 1929-32, no large New York bank failed. They held 15 to 20 percent equity capital.² Failures in 1929-32 were almost entirely small and medium-sized banks. Calomiris (2013) discusses the many problems in financial regulation policies. Borak (2013) reports on the difficulty of writing the many new rules proposed by the Dodd-Frank legislation. Many of these rules transfer responsibility for risk management to the regulators. Increasing banks equity capital puts the incentives in the proper places.

Currently, many central banks, including the Fed, have greatly increased their responsibility for financial stability, I urge them to avoid the intense pressure to take responsibility for regulating portfolios or portfolio risk. That substitutes regulators' judgment for banker's judgments. It has several drawbacks, chief among them, that it will at times require actions that are in conflict with proper monetary policy. Giving organizations multiple objectives that can conflict is a bad idea. Also, there is little reason to believe that regulators can make better judgments than bankers if the bankers are required to hold much more equity capital. We know that in the years before 2007-8, the Federal Reserve and other regulators had many

² Readers may wish to cite failure of the Bank of the United States. It was not a major bank. Regulators discussed saving the bank but did not. See Meltzer (2003).

examiners in the largest banks observing portfolio decisions. I have been told by a leading examiner that they did not object to any transaction. Further, we know that regulators permitted large banks to open subsidiaries that acquired mortgages but had little or no equity capital. Government agencies were willing to buy and hold poor quality mortgages. It should not surprise us that markets supplied the mortgages. Some, like Countrywide, earned millions of dollars that way. In hindsight, the mistakes should be obvious. What few willingly recognize is that there was a strong, political dimension that appealed to leaders of both major parties. Presidents Clinton and Bush, and many members of Congress, welcomed the spread of home ownership down the income distribution. They neglected to wonder about what the buyer owned if they took out a no down payment loan. What they had is not equity in a house. They had an option to gain if prices rose and to lose if they fell. We know now how that tale ended in tears and regrets as such tales often end.

This does not give much confidence in regulator presence or political forbearance. I believe we will do better by applying my four rules.

To summarize the historical evidence, I conclude that the much restricted agency intended to follow a rule vanished long ago. Political influence increased with the shift of power to the Board from the Reserve Banks.

How has discretionary policy under the Board's control worked? In my judgment not well at all. It has two difficult, possibly impossible, hurdles to overcome. One is its short-term focus based on a quarterly forecast. Forecast errors are large, larger than the often large revisions to quarterly data. The other is a fundamental fact about economics. Whether one learned economic theory using Modigliani's or Friedman's theory of consumer behavior, one learned about persistent and transitory events. Macroeconomic theory is more reliable when it concentrates on persistent effects. Transitory changes may be random, quickly reversed events. The Fed's response to monthly and quarterly data as it is announced increases uncertainty and encourages the army of financial market participants to pressure the Fed to respond.

There is some useful information in monthly and quarterly data. I have proposed that Muth's (1960) paper offers a useful procedure for extracting it. It uses the relative size of the variance of persistent and transitory components of the data to give weights to the two components. Perhaps there is a better alternative. Relatively large permanent variance implies that little weight should go on current data. More weight on current observations is appropriate

if it is relatively more responsible for changes. Brunner, Cukierman and Meltzer (1980) show how Muth's procedure can be implemented to extract useful information.³

A simple example illustrates how monthly data can mislead. Reported monthly inflation is a mixture of the underlying rate of inflation and large relative price changes. The Federal Reserve now excludes energy and food price changes from its core inflation data. In the 1970s, it treated oil price rises as inflation. That was another error. But not all food or energy price changes are transitory. Some of the Reserve Banks use median price changes to exclude changes out in the tails of the distribution. These procedures are better than announcing large relative price changes as inflation. It is better to not respond by raising interest rates but instead letting the market adjust to relative price changes on its own. The Fed finally adopted this change when oil prices rose early in this century.

Summary: Federal Reserve Errors

My reason for pointing out some of the Federal Reserve's errors is that many are repeated now. The principal errors relevant to the present or recent past include:

- (1) Wrong choices of models; neglect of money and credit.
- (2) Failure to distinguish between real and nominal events.
- (3) Excessive attention to monthly and quarterly data; neglect of permanent changes.
- (4) Failure to announce and follow a rule; politicization.

Since I focus on past errors that influence recent and current actions, I will start by offering some praise of some Federal Reserve's achievements. The Federal Reserve has never had a major scandal. A few minor problems occurred like occasional leaks of decisions, but a largely unblemished record. In part, this reflects another achievement – the very strong organizational structure and the loyalty of officials. At the operational level, the Federal Reserve developed from its very limited original duties to become the world's leading central bank.

From the 1920s on, it undertook research in ways that became a model for other central banks.

³ A recent manuscript, Anderson, Chauvet, and Jones (2013) studies permanent and transitory components of monetary aggregates using a more elaborate procedure.

My theme in this paper is that current and recent Federal Reserve policy has had little effect on output and inflation. I, and others, predicted that the Fed would cause inflation by continuing a high rate of reserve growth after the initial crisis. My error was to expect that increased money growth would follow reserve growth. History supported this belief. There was only one exception. During the Great Depression, especially in 1932 but also after 1937, banks used only a small part of their increased reserves to expand money and bank credit. I did not expect a repeat of the 1930s, and I was wrong.

We do not have inflation because we do not have excessive money growth. In the familiar words: inflation is always and everywhere a result of money growth substantially faster than the growth of output. (Friedman 1969) As this is written, October 2013, annual M_2 growth is 6.4 percent and quarterly growth is 6.0 percent. Commercial and Industrial loans at all banks have increased about 2 percent in the past year. Annual growth of bank reserves is 81 percent. The Federal Reserve no longer reports “excess reserves.” A recent estimate is \$2.3 trillion; required reserves are approximately \$7.5 billion.

A main reason for the extraordinary increase in idle reserves is that the Federal Reserve expanded reserves in the actions known as QE2 and QE3. More than 95 percent of the reserves supplied under these programs remained idle on banks’ balance sheets. Domestic and foreign banks receive \$5.7 billion in interest payments for holding idle reserves. This policy permitted banks to rebuild capital, pay dividends and bonuses. The payments are made using money that would otherwise be paid to the Treasury. I doubt that Congress would vote for this transfer to banks, if it understood the Federal Reserve program.

A main effect of the policy of accumulating massive amounts of idle reserves is that money and credit growth remains low. The UK and Japan now permit money and credit to expand. Output in both countries has increased. I will return to the role of money and credit below.

Choice of Models: Real and Monetary

The members of the Board or the Federal Open Market Committee have never agreed on a model. The Board’s staff has a sophisticated econometric model, but most or all of the Reserve Banks have their own models. When I refer to “the” model, I have the Board’s staff model in mind. When reading my comments, the reader should remember that the principals require the

staff to present forecasts at policy meetings based on models with which they disagree. An example is the Board staff use of a Phillips Curve to forecast inflation. Paul Volcker and Alan Greenspan explicitly rejected those forecasts. Volcker publicly stated the anti-Phillips Curve: over time inflation and unemployment rise and fall together. Volcker added: the way to reduce unemployment was to lower expected inflation. (Meltzer, 2009b)

Bearing that caveat in mind, here are some examples of major policy errors based on faulty models. The real bills doctrine was written into the Federal Reserve Act. The Board and some of the Reserve Banks believed that it was a mistake to expand reserves during the years 1929-32. The Governor of the Philadelphia Fed expressed the argument succinctly. He said, we would be putting out reserves when they were not wanted and would have to withdraw them when they were. That mistake does much to explain the mistaken policy driving the Great Depression.

Simple Keynesian models were used in the 1960s to encourage policy coordination. The economists in the Kennedy and Johnson administration and on the Board's staff insisted that the Federal Reserve should coordinate with the administration by expanding money growth when budget deficits increased. The Federal Reserve did. However, President Johnson was reluctant to coordinate by reducing the budget deficit and slowing money growth. When he, after years of delay, agreed to raise tax rates temporarily in 1967, Arthur Okun and the Board's staff wanted lower interest rates and faster money growth. (Meltzer, 2009b) That error increased inflation, a major mistake. The Federal Reserve and the Nixon administration were unwilling to allow unemployment to rise for political reasons.

Inflation continued. Milton Friedman's presidential address to the American Economic Association (Friedman, 1968) carefully distinguished real and monetary effects and used that analysis to show why the Phillips Curve trade-off had to be a temporary response of employment to inflation. The Federal Reserve continued to try to lower unemployment by inflating during most of the 1970s. (Orphanides, 2002 and elsewhere.)

The Federal Reserve frequently failed to distinguish between real and monetary influences. One example is the misinterpretation of low interest rates as "easy" in 1931-32. Another is the misinterpretation of interest rates during the Great Inflation. Still another is the attempt to reduce the unemployment rate by increasing inflation, an operation that continued after Milton Friedman's (1968) paper showed the error. And the error continues currently.

My history reports this related error. During the Volcker disinflation, the FOMC interpreted increases in member bank borrowing as contractive because nominal interest rates initially rose. This interpretation ignores the expansive effect of the increase in reserves. This is a traditional Federal Reserve error based on the belief that banks are reluctant to borrow, so the increased borrowing would be temporary. This ignores the evidence showing that cumulative borrowing typically continued to increase, thereby increasing money and credit. See Meltzer (2009b, 1030)⁴

The current weak recovery is mainly a real problem that cannot be solved by printing reserves or making real interest rates more negative. The main real drag on growth is the uncertainty about administration budget and regulation policies, President Obama's insistence on increasing tax rates, increasing costly regulations, and promoting labor unions. See Plosser (1989).

Some of the evidence that the problems are mainly real, not monetary, stares everyone in the face. Banks hold huge idle reserves. They can do anything the Fed can do to increase growth of credit and money. Corporations hold enormous idle balances. They do not choose to finance investment, so investment remains low and much of the investment is made for labor-saving robots and computer programmers. These idle balances at banks and corporations scream loudly that there is no unsatisfied demand for money.⁵

Porter and Rivkin (2012) asked 10,000 Harvard Business School alumni, officers at major corporations, about investment. They summarized the replies. The replies cited real factors, the complex U.S. tax code, an ineffective political system, a weak public education system, poor macroeconomic policies, complicated regulation, deteriorating infrastructures, and a lack of skilled labor. Many said they would move investment out of the United States.

A recent working paper, Carlino and Inman (2013) found that many real problems result from the Obama administration's fiscal policy mistakes. They avoided permanent tax cuts and favored welfare spending that had small multiplier effects.

⁴ As the statement was made, borrowing increased (Meltzer, 2003b, n. 27).

⁵ Some interpret the large idle balances as evidence of a liquidity trap. Brunner and Meltzer (1969) show that a liquidity trap cannot occur in a multi-asset model except possibly in a full equilibrium. Currently Fed injection of reserves changes asset prices, contrary to a liquidity trap.

An earlier op-ed by John Taylor and John Cogan (2010) made very similar criticisms. They wrote: the Obama stimulus “was a triumph of Keynesian wishful-thinking over practical experiences.” Meltzer (2013) develops this assessment more fully.

Earlier I noted a recent example of the Fed’s poor choice of model—the staff’s reliance on Woodford’s (2003) elegant model to judge the thrust of monetary policy and a possible recession. Since the Woodford model neglected asset prices and credit and money growth, it could not give correct information.

The Board staff also disregarded the Volcker and Greenspan warnings about relying on inflation forecasts generated by the Phillips Curve. That error continues.

In 1973, following months of rapid money growth during the period of price and wage controls, the economy was described as operating at 96 per cent of capacity. The staff saw “clear and present danger of further overheating.” (Meltzer, 2009b, 223) Chairman Burns drew the right conclusion. “The basic reason [for rapid monetary growth] was that the System had been supplying reserves to commercial banks at a very fast rate. The rapid growth of the monetary aggregates was a most disturbing development.” (idem.)

Despite this monetarist interpretation, members did not recognize that nominal interest rates included an expectation of continued inflation. Some members “expressed concern about the consequences of a federal funds rate above ten percent.” (idem.)

A final example is the failure to distinguish between large positive relative price changes and rise in the general price level. Only the latter is properly called inflation. Chairman Burns urged some type of wage and price selective controls and later wage and price controls. The case for selective controls was also based on the mistaken belief that inflation was “cost-push” so that the rise in the general price level could be prevented by controlling a subset of relative prices.

The Federal Reserve and much of the profession interpreted the 1973 and 1979 increases in oil prices as inflation. By 2000, the Federal Reserve recognized that the oil price increase would increase the reported price level as a large relative price shock. It now excludes fuel and food price changes from its principal measure of inflation.⁶

⁶ The Shadow Open Market Committee in 1974 pointed out that the Fed misinterpreted the oil price increase.

Short-Term Focus; Rules and Discretion

One of the most foolish decisions in the Federal Reserve's one-hundred year history is its current decision to make the reduction in reserve growth depend on current labor market data. First, the data is noisy and often subject to large revisions. Second, current QE policy increases idle reserves by \$1 trillion dollars a year, so the problem expands. Third, and most important, the withdrawal of reserves to restore the Fed's balance sheet will require years of following a conditional rule. The Fed must develop a strategy.

The Fed's lack of strategy in managing the reduction of idle reserves is an example of its excessive attention and response to noisy monthly and quarterly data. This is a long-standing problem, probably reflecting political pressures and the excessive influence of the New York Federal Reserve Bank. That Bank has a permanent voice at the FOMC. Too often it is a captive of the large New York banks and financial firms.

The Federal Reserve's excessive weight on near-term events and reluctance to follow rules explains both its current mistakes and many past errors. Here are some examples from the past.

In 1976, the Fed announced targets for money growth, but it missed the M_1 target often by large amounts. Stephen Axilrod, the Chief of Staff, explained the reason for the errors. "A large part of the Board's problem came from its short-term focus. ... [I]f the objective was to have 6 percent M_1 growth six months ahead, I could do it better by telling you what nonborrowed reserves to list than what FF [federal funds] rates to hit." (Meltzer, 2009b, 982) Axilrod recognized that the main reason the Federal Reserve failed to come close to its monetary targets was that it put most of its efforts into managing the Federal funds rate within a narrow band. He was not alone. The staff of the Philadelphia Reserve Bank found that the reason was "the constraints of modest week-to-week changes in the federal funds rate." (idem.)

During the Volcker disinflation, some members favored more attention to unemployment. He responded to one challenge by insisting on the importance of maintaining a consistent policy and ignoring short-term deviations and criticisms. "Our credibility will be related more to making the right decision than to worrying too much about what the market says about it in the short-run." (Meltzer, 2009b, 1098) And to those who proposed to trade-off more inflation for lower unemployment, Volcker said: "More inflation has been accompanied not by less, but by more unemployment and lower-growth." (ibid., 1099).

The years when Volcker was chairman are one of the few periods in which the Federal Reserve was less influenced by short-term events. Volcker followed the successful disinflation by relying for guidance on a Taylor rule after 1985. His successor, Alan Greenspan, continued that policy until 2003. This produced the longest period in Federal Reserve history of price stability with relatively stable growth, and short, mild recessions. This period is known as the Great Modernation. I believe that the reduction in fluctuations is mainly the result of a rule-based policy that focused more attention on the medium-term than on current data.

I believe that using the Taylor rule as a guide abetted modernation – reduced variability of output and inflation—by preventing large fluctuations in either inflation or output. The usual Fed operation focusses on one of the two variables. Expanding to reduce unemployment increases actual and expected inflation. Policy shifts to prevent inflation until unemployment rises and output falls. Variability is greater than a policy of stabilizing both.

Conclusion

The Federal Reserve's current mistakes are the third major blunder in its first 100 years. I have tried to show that the Fed repeats its history. Current errors are versions of past errors.

History has an important message for theory and policy. The two longest periods of stable growth, low inflation, and mild recessions are the years when the Federal Reserve was guided by a rule, the gold-exchange standard from 1923 to 1928 and the Taylor rule from 1985 to 2003.⁷ There is no similar period of stability and low inflation when the Fed exercised discretion. The closest example is 1953-60, when budget deficits were small in non-recession years and the budget was in surplus several times. But 1953-60 had three recessions, including a deep recession in 1957-58.

Kydland and Prescott (1977) show why rule-based policy achieves better results than discretion. Taylor (1993) proposed a rule that many central banks have used as a guide. Theory and evidence strongly suggest that the Congress should enact a rule such as the Taylor rule.

No rule will work well in all circumstances. Unforeseen events may require suspension of the rule, just as Britain and others suspended the gold standard in the 19th century. Suspensions of the rule should be followed by explanations and accompanied by offers to resign.

⁷ Deep, prolonged recessions followed both rule-based periods. I believe policy errors explain what followed stability, but careful analysis should be done.

The authorities can accept the explanation or the resignation. That closes the wide gap between Federal Reserve operating authority and political responsibility for outcomes. Past Federal Reserve major errors never resulted in dismissals.

A major advantage Congress gains from a rule is that they can greatly improve oversight. The rule provides a framework for judging outcomes. Congress has constitutional authority, but currently no effective means of implementing it. A rule based policy provides a better standard by which to judge outcomes.

Markets would benefit from increased information about policy actions. Instead of the present guessing game, markets would forecast policy actions and would monitor any departures.

In addition to a monetary rule, legislation should require the Federal Reserve to announce a follow up rule for acting as lender-of-last-resort. That rule should recognize that the public good that the lender supplies is protection of the payments system, not, as currently, protector of troubled banks. In its first hundred years, the Federal Reserve has discussed its crisis policy internally, but it has never announced and followed a rule.

A rule guides banks to hold collateral and to increase equity reserves. Instead of replacing bankers' responsibility for safety and soundness with many rules and shifting regulatory responsibility to central bankers and governments, giant banks should be required to hold 15 percent equity capital.

Rules instead of discretion and regulation should guide both prudential policy and monetary policy. I believe that is the main lesson that the first century gives to make the next century much freer of policy errors than the last.

Let me end by repeating that in its first 100 years the Fed has completed many commendable actions. Like most others, I give the Bernanke Fed high praise for prompt and effective action in 2008. But it has made other mistakes including frequent neglect of its responsibility as manager of the world's currency, failure to develop an international monetary arrangement that combines the public goods of more stable exchange rates and greater price stability. And the Fed has sacrificed its independence repeatedly. My aim has been to highlight errors from the past that the Fed has repeated recently and is repeating now. As Knut Wicksell wrote, before there was a Federal Reserve, "folly has often been paramount."

References

- Anderson, Richard G., Chauvet, Marcelle, and Jones, Barry (2013). “Nonlinear Relationship between Permanent and Transitory Components of Monetary Aggregates and the Economy,” Working Paper, Federal Reserve Bank of St. Louis, May.
- Bagehot, W. ([1873]1962). *Lombard Street*. Homewood, Ill.: Richard D. Irwin.
- Bernanke, Ben (2013). Speech to NBER. Xeroxed, Board of Governors.
- Borak, Donna (2013). “Regulators Still in Dodd-Frank Quagmire Three Years Later.” *American Banker*, July 19, www.AmericanBanker.com.
- Brunner, K., Cukierman, A., and Meltzer, A.H. (1980). “Stagflation, Persistent Unemployment, and the Permanence of Economic Shocks.” *Journal of Monetary Economics*, **6** (October): 467-92.
- Brunner, K., and Meltzer, A.H. (1968). “Liquidity Traps for Money, Bank Credit and Interest Rates,” *Journal of Political Economy*, January – February.
- Brunner, K., and Meltzer, A.H. (1993). *Money and the Economy: Issues in Monetary Analysis*. Cambridge, U.K.: Cambridge University Press for the Raffaele Mattioli Foundation.
- Calomiris, C. (2013). “How to Promote Fed Independence: Perspectives from Political Economy and U.S. History”, Xeroxed, Columbia University.
- Carlino, Gerald and Inman, Robert (2013). “Macro Fiscal Policy in Economic Unions: States as Agents,” Working Paper #19559, National Bureau of Economic Research.
- Cogan, John F. and Taylor, John B. (2010). “The Obama Stimulus Impact? Zero,” *The Wall Street Journal*, December 9.
- Friedman, M. (1956). “The Quantity Theory of Money: A Restatement.” In M. Friedman (ed.) *Studies in the Quantity Theory of Money*, 3-21. Chicago: University of Chicago Press.
- Friedman, M. (1968). “The Role of Monetary Policy”, *American Economic Review*, **58** (March), 1-17.
- Friedman, M. (1969). “The Monetary Studies of the National Bureau.” Chapter 12 in *The Optimal Quantity of Money and Other Essays*, Chicago: Aldine.
- Issing, O. and Wieland, Volker (2013). “Monetary Theory and Monetary Policy: Reflections on the Development over the Last 150 Years,” *Jahrbucher fur Nationalokonomie und Statistik*, 233, 3, 423-45.

- Kydland, Finn and Prescott, Edward (1977). "Rules Rather than Discretion: The Inconsistency of Optimal Plans." *Journal of Political Economy*, **85** (June), 473-92.
- Meltzer, A.H. (1995). "Monetary, Credit and (Other) Transmission Processes." *Journal of Economic Perspectives*, 9: 49-72.
- Meltzer, A.H. (2003). *A History of the Federal Reserve: Vol. 1: 1913-1951*. Chicago: University of Chicago Press.
- Meltzer, A.H. (2009b). *A History of the Federal Reserve: Vol. 2, Book 2: 1970-1986*. Chicago: University of Chicago Press.
- Meltzer, A.H. (2013). "A Slow Recovery with Low Inflation," Xeroxed, Carnegie Mellon University for the Brookings Hoover Conference, October 1.
- Muth, J. (1960). "Optimal Properties of Exponentially Weighted Forecasts," *Journal of the American Statistical Association*, **15** (June), 299-306.
- Orphanides, A. (2002). "Monetary Policy Rules and the Great Inflation." *American Economic Review*, **92** (May): 115-20.
- Plosser, Charles (1989). "Understanding Real Business Cycles," *Journal of Economic Perspectives*, **3** (3), Summer, 51-77.
- Porter, Michael E. and Rivkin, Jan W. (2012). "The Looming Challenge to U.S. Competitiveness," *Harvard Business Review*, **90**, 3 (March), 54-61.
- Taylor, John B. (1993). "Discretion versus Policy Rules in Practice," *Carnegie Rochester Conference Series on Public Policy*, **38** (December), 195-214.
- Taylor, J.B. (1995). "The Monetary Transmission Mechanism: An Empirical Framework." *Journal of Economic Perspectives*, **9** (4): 11-26.
- Tobin, J. (1969). "A General Equilibrium Approach to Monetary Theory." *Journal of Money, Credit and Banking*, **1** (February): 15-29.
- Wicksell, K. (1906). *Lectures on Political Economy*. Vol. 2, Money, London.
- Woodford, M. (2003). *Interest and Prices: Foundation of a Theory of Monetary Policy*. Princeton, N.J.: Princeton University Press.