Achieving and Sustaining Price Stability

Allan H. Meltzer
Carnegie Mellon University, am05@andrew.cmu.edu

Follow this and additional works at: http://repository.cmu.edu/tepper
Part of the Economic Policy Commons, and the Industrial Organization Commons
Achieving and Sustaining Price Stability

By Allan H. Meltzer
Carnegie Mellon University and the American Enterprise Institute

Prepared for the conference
“An Institutional Framework for Monetary Stability”

Frankfurt, Germany
December 5-6, 2002
Achieving and Sustaining Price Stability

By Allan H. Meltzer
Carnegie Mellon University and
The American Enterprise Institute

The topic of this conference, An Institutional Framework for Monetary Stability, properly highlights one part of the problem of achieving and sustaining price stability. Without a supporting set of institutions, and public support of those institutions, a central bank finds it difficult, and in some countries impossible, to control inflation or deflation. Argentina is probably the best-known example of a developed country with inadequate institutions that prevent price stability, but it is not alone.

There are other parts of the problem, however. The Central Bank must have the technical competence and the knowledge to achieve its mandate. And central bankers must have the courage to take unpopular actions. The monetary history of the twentieth century includes both the Great Depression and the Great Inflation and their aftermaths. These events occupy as much as one-third of the century, 1929-41 and 1965-84 in the United States and roughly similar periods in many other developed countries. The two events were not caused by willful, evil men and women. They did not persist because malevolent central bankers wanted to harm their countries or the world. I am persuaded that errors of judgment and mistaken theories or interpretations had a large role in causing the policy mistakes to be made and perpetuating them once they were made.

Political concerns and lack of courage played a role also. The only way Germany could have avoided an average inflation rate of about 3 percent under the Bretton Woods system was
by revaluing its currency. In 1961 and 1969, it took some small steps, but inflation reached 7% at the start of 1973, before the first large oil shock. Neumann (1999, 273) Action was not delayed because it was unknown but because it was politically costly.

The thesis I propose is that the task of maintaining stable prices and stable markets has three main parts. First is making the expectation of price stability as firm as can be. This requires repeated commitments by central bankers and, most important, actions that reinforce the commitments. Second, as part of its commitment, the central bank must keep its policy actions independent of the government’s budget position and it should avoid multiple objectives. Monetary policy can achieve only one goal, and it must be a nominal value such as the price level, inflation rate or exchange rate. Current quarrels over the European stability pact remind us that even a treaty committing governments to small deficits and an independent central bank encounters difficulty as soon as governments must choose between reducing spending and violating their treaty obligations.

Those who want to amend the stability pact, or discard it, emphasize the importance of expansive fiscal policy, or even current budget deficits, as a counter-cyclical policy. They neglect, however, the stabilizing effect of sustaining expectations of low future inflation by maintaining the pact through its first, relatively mild, economic downturn and period of slow growth. It is worth recalling that Prime Minister Thatcher faced exactly that choice under more difficult circumstances in the early 1980s. Despite the overstated warnings of many leading British academic economists about dire consequences, the economy recovered and inflation fell. A firm anticipation that inflation will not return acts as a stimulus. Firms look to productivity improvements, not price increases, to support the wage structure.
Third, to reduce variability coming from the external sector, I have often proposed agreement by the principal central banks to target the same rate of inflation. A common anticipated inflation rate, for example zero, would have many advantages. I will mention two. Fluctuations in exchange rates would then reflect principally real exchange rate changes, a stabilizing effect. Also a common inflation rate for the large monetary or political units permits smaller units to import both stable exchange rates and price stability (or low inflation). Therefore, it permits larger units to trade at fixed exchange rates with their smaller trading partners. There would be fewer independent central banks, thus fewer opportunities to finance government spending by printing money. Countries that follow a Taylor rule or have an inflation target would substitute the common inflation rate as their target.

Almost two hundred years ago, Henry Thornton proposed a rule for the Bank of England that is as applicable now as it was then. Thornton's rule instructed the central bank to:

"Limit the amount of paper money issued, and ... resort for this purpose, whenever the temptation to borrow is strong, to some effectual principle of restriction; in no case, however, materially to diminish the sum in circulation, but to let it vibrate only within certain limits; to allow a slow and cautious extension of it as the general trade of the kingdom enlarges itself; to allow of some special, though temporary, increase in the event of extraordinary alarm or difficulty; ... this seems to be the true policy of the directors of an institution circumstanced like that of the Bank of England. To suffer the solicitations of the merchants, or the wishes of the government, to determine the measure of the bank issues, is unquestionably to adopt a very false principle of conduct. (Thornton, 1962, 259)"
Thornton's proposal calls for a monetary rule to maintain price stability, similar to Friedman's rule. My addition permits countries to reduce exchange rate variability while maintaining price stability. A commodity standard is another way of achieving relatively stable prices and exchange rates. It differs by assigning greater weight to exchange rate stability and lesser weight to price stability than a monetary rule or an inflation target.

The idea of a monetary rule and the benefit of price stability have been known for centuries. Modern economists have given these ideas a more formal structure without changing our understanding of the benefits and costs. The principal costs are: The signals given by market prices lose clarity, distorting resource use. Resistance to cost increases weakens. Individuals and firms use extra resources to manage cash balances. As inflation increases, the number of banks and bankers increases also. And, though not a necessary consequence of inflation, controls and distortions increase with inflation. Full indexation of all money prices is difficult to achieve. Judging from experience in Brazil, Italy, and Israel, it has not been achieved, where it was attempted. One consequence is social tension arising from beliefs, possibly mistaken, that some gain at the expense of others.

Why, then, did countries experience so much inflation in the twentieth century? It seems useful to separate industrial countries from others and to focus on the industrial countries in the rest of this essay.

**Responding to Political Intervention**

Start with political pressure. In practice, central bank independence from direct political pressure is as much a matter of tradition and popular support as of law. It is useful for the central
bank to have a law to support its independence, but legal defenses can be breached if they lack public support or bank officials lack the courage to insist on independence.

A few examples illustrate the point. Neumann (1999, 290-91) recounts the clash between the Bank deutscher Lander (predecessor of the Bundesbank) and Chancellor Adenauer in 1956. The issue started as a decision to increase interest rates by one percentage point taken at the Central Bank Council meeting on March 8, 1956. In May, the Council voted for an additional increase of one percentage point. A week later the Chancellor gave a speech criticizing the Bank as “responsible to no one (ibid., 291). Then he added: “it is the little ones who will suffer most...the guillotine falls on the man in the street, and that is what grieves me so much.” (291)

Despite this maudlin appeal, the press and public supported the Bank. Politicians took note. The Bank had strengthened its independence of politics. But it did not control the exchange rate, so it was not independent of events abroad or the government’s decisions about revaluation.

The Bank’s record on the exchange rate under Bretton Woods does not always suggest strong commitment to price stability or the political courage to oppose the export industries. It was the Economics Minister, Ludwig Erhard, not the Bank, that pushed hard for currency revaluation in 1961. The President of the Bundesbank opposed revaluation almost to the end. Holtfrerich (1999, 373-75) In 1969, the Bank took the lead and after many months, the government agreed to let the DM appreciate. After a few weeks of floating, the official parity rose by 9.3 percent against the dollar (ibid., 389)

The final break with the fixed exchange rate system began in 1971. This time it was the German research institutes and Sachverstandigenrat, not the Bundesbank, that urged the
government to let the currency float. Von Hagen (1999, 411) The Bundesbank took advantage of the floating rate, once the government approved, to institute a restrictive monetary policy. The lesson I draw is that public support is vital, but so is courage and determination to oppose inflation whether produced at home or abroad. Raising interest rates or appreciating the exchange rate is costly to vocal groups. Granting the central bank independence is a way to shift responsibility away from politicians and ministers, but it works only if the central bank accepts responsibility, acts promptly, and has credibility and public support.

History gives many additional examples. I put wartime inflation aside, not because it should be different but because the reason for inflation is clear. Many wartime inflations continue long after war ends. Germany's hyperinflation was a postwar event. France took even longer to stabilize after both world wars. The Federal Reserve was unwilling to confront the Treasury after both world wars. In 1919-20, the Federal Reserve knew that its policy was inflationary, but it could not get the Treasury to agree to end special, low, wartime interest rates for more than a year after the war ended. Annual rates of increase in the consumer price index reached 18 percent at war's end. The 12-month average inflation rate remained between 12 and 21 percent for the next two years. Operating on what they believed was the gold standard principle—that all wartime and postwar increases had to be purged from the system, and that both Britain and the United States had to deflate to restore the pre-war exchange rate—severe deflation followed in both countries. In the U.S. deflation lasted for two years, reaching a monthly peak of 38 percent at annual rates and a twelve-month average rate of 15 to 17 percent from May through July 1921.

This experience carries an important lesson for central bankers. Nominal interest rates were higher at the trough of the recession than at the previous peak, the only time that short-term
market interest rates rose during a recession in the almost 90 years of Federal Reserve history. With double-digit rates of deflation, ex post short-term real interest rates reached 40 percent or more. As late as January 1922, after six months of recovery, monthly consumer prices fell at a 26 percent annualized rate and a 12 percent annual rate. Real interest rates were, therefore, very high well into the recovery.

How did the economy recover? The government reduced wartime expenditure to reduce the deficit and produce a budget surplus. My explanation of the recovery combines the resiliency of the private sector and the role of money.

The mechanism is classic. Falling prices raised real balances. With the rates of deflation mentioned earlier, two classical mechanisms were at work. First, the public found it had excess real money balances. Despite the historically high real interest rates, the public reduced its excess supply of real balances by spending on goods and services. Second, the gold standard adjustment mechanism worked. Deflation brought a gold inflow, increasing the domestic money stock. As real balances rose under the combined effects of falling prices and a rising gold stock, the excess supply of money rose. To reduce its rapidly rising balances, the public purchased goods, services, and assets. Deflation did not end until months after stock prices and industrial production began a sustained expansion.

In the 4½ years after World War II ended, the Federal Reserve continued its wartime policy of pegging interest rates. The ceiling long-term rate remained 2.5 percent. The Federal Reserve took only a few very hesitant steps before 1951 to raise interest rates or to challenge the Treasury and the president. Short-term rates rose from 3/8 percent to 1.2 percent before the start of the Korean War. With a fixed ceiling on long-term rates, debt holders concentrated their
holdings in long-term issues as long as they believed that the Federal Reserve would maintain the peg.

Three events strengthened the Federal Reserve's resolve. First, Senator Paul Douglas chaired a Congressional hearing about conflict between the Federal Reserve and the Treasury. Under his guidance, a majority of the committee agreed to a report that called for restoration of independent monetary policy. Second, the Korean War heightened concern about renewed wartime inflation. The Federal Reserve recognized that unless it increased interest rates and ended pegging, it would be responsible for wartime finance and inflation. It had the support of the officials in charge of wartime preparation who feared that their costs would rise. Third, the Treasury and President Truman made a serious misstep. After Treasury Secretary Snyder announced publicly that he expected the Federal Reserve to support the 2.5 percent long-term bond rate. A journalist commented on his speech in the New York Times.

"In the opinion of this writer, last Thursday constituted the first occasion in history on which the head of the Exchequer of a great nation had either the effrontery or the ineptitude, or both, to deliver a public address in which he has so far usurped the function of the central bank as to tell the country what kind of monetary policy it was going to be subjected to. For the moment at least, the fact that the policy enunciated by Mr. Snyder was, as usual, thoroughly unsound and inflationary, was overshadowed by the historic dimensions of this impertinence." (Quoted in Meltzer 2003, 702-03)

Overreaching by the Treasury and the administration worked in this case as it later did for the Bank deutscher Lander in its confrontation with Chancellor Adenauer. Within five weeks, the Treasury agreed to restore independence and, with only modest changes, accepted the draft agreement prepared by Federal Reserve staff.
Nearly twenty years after the Treasury-Federal Reserve Accord, inflation had returned to the United States. Several aborted attempts to slow or stop inflation destroyed central bank credibility and convinced the public that the Federal Reserve would not sustain its policy once unemployment rose.

Courage and credibility were lacking until Chairman Paul Volcker and President Ronald Reagan withstood the pressure to change policy. This incident reinforces my belief that both political courage and public support of the policy are necessary conditions for restoring and maintaining price stability or low inflation.

**Economic Errors**

The Great Inflation in the United States started in 1965 and, under the Bretton Woods System, spread to the rest of the world. Lack of political courage and political support for ending inflation had a role. More important this time, I believe, were errors of analysis and judgment. Economists within the Federal Reserve and outside made several errors. I discuss the four that seem most important.

*Neglect of Real Rates of Interest*

The idea of a “real” rate of interest does not appear to influence policy decisions until after the mid-1970s. Through much of the 1970s, ex post short- and long-term interest rates were negative much of the time. The Federal Reserve regarded a nominal interest rate of 8, 10, or 12 percent as high without considering actual and anticipated rates of inflation. Unwilling to raise interest rates high enough to end inflation, it succeeded in reinforcing the belief that it would not end inflation. This increased the cost of disinflation.
Simple Keynesian Theory

The 1960 election brought leading exponents and developers of Keynesian models into government. Until the Phillips curve was added, the Keynesian model did not explain inflation except at full employment of resources.

The Phillips curve added a seemingly attractive, but false, choice: policymakers thought they could decide on their desired combination of employment and inflation. A little more inflation permitted unemployment to fall. Even after Friedman (1968) pointed out the neglect of anticipations and emphasized the distinction between real and nominal magnitudes, this model continued to influence policy.

Neglect of Money Growth

Administration economists in policy advising roles and the chairmen of the Board of Governors did not believe that faster money growth, if sustained, implied higher inflation. They dismissed money growth as a useful indicator of future inflation, as a supplement to other indicators, or in the terminology of the European Central Bank (ECB), as a variable that they monitor. At the time, economists in the U.S., the administration and the central bank gave many reasons for dismissing the role of money, just as numerous papers now both criticize the ECB’s claim to monitor money growth and insist that in practice the ECB does not react to money growth changes.

If the Federal Reserve had followed Thornton’s or Friedman’s rule, money and real output would have grown at about the same average rate, and the Great Inflation would not have happened.
Financing the Deficit

The Chairman of the Federal Reserve at the start of the Great Inflation, William McChesney Martin, Jr., disliked inflation. Through the 1950s, he acted repeatedly to prevent inflation. By early 1960 price stability was restored.

One of the puzzles of the 1960s is: Why did Chairman Martin permit inflation to start and reach about 6 percent at the time he left the Federal Reserve? My answer places considerable weight on Martin’s beliefs and his analysis of financial and economic events.

Based on extensive reading of Federal Reserve minutes and attendance at consultants meetings with the Board in the 1970s, I conclude that Martin had little interest in economics and dismissed or disregarded economists’ forecasts. The minutes contain many statements of the kind: “I do not understand the money supply.” Combined with his failure to distinguish between real and nominal interest rates, this left him unaware of the Federal Reserve’s role in starting and sustaining inflation. He and members of his senior staff often explained inflation by what Karl Brunner called “the upper tail theory of inflation.” The cause of inflation was said to be the relative price that recently increased most. It was always caused by a special factor, unrelated to Federal Reserve actions. Wage push was common, but joined by several others.

That alone would not explain why inflation rose, why Chairman Martin and his colleagues did not raise the short-term interest rate more or slow the growth of money. I propose two main reasons. The first is political. Raising interest rates is unpopular, as all central bankers learn. In addition, the Federal Reserve followed an “even keel” policy of not raising interest rates when the Treasury had a refunding or new issue in the market and for weeks after. During the Vietnam War years, Treasury operations became more frequent, and the time for restrictive
policies shrank. It would have required bolder actions in the few available time periods, as it eventually did, when Chairman Volcker, determined to reduce inflation, allowed the market to set the interest rate.

The second reason depends on Martin's understanding of the central banks' role and responsibility. Martin often described the Federal Reserve as independent within the government, not independent of the government. Phrases such as this are open to many interpretations of where independence begins and ends.

For Martin, the boundary was related to the actions of Congress. Congress approved the budget and the implied deficit. The Federal Reserve could appropriately raise interest rates to restrict private spending to the amount of available supply. Public spending was a different matter. The Federal Reserve, in Martin's view, had to finance part of the budget deficit that Congress voted.

In practice, the policy implications were not very precise. It limited the rise in interest rates when government spending increased to finance the Vietnam War and President Johnson's "Great Society," but it did not prevent a rise. It left open how much of the deficit the Federal Reserve would finance, and it prevented a consistent, sustained anti-inflation policy. Martin left himself the options of complaining about deficits, and deploring fiscal policy, while financing much of it.

Martin's successor as chairman, Arthur Burns, not only failed to end inflation, he allowed it to increase. He, too, complained about budget deficits and even more about wage increases. President Nixon had been elected on a promise to end inflation without causing recession. It was an impossible commitment to keep, and he could not keep it. The commitment reflected the political concern that the public would be unwilling to support a policy that increased
unemployment temporarily to reduce inflation permanently. It also reflected a lack of courage or commitment to low inflation.

**Conclusion**

The historical episodes illustrate a main proposition of this paper. Inflation is costly but disinflation is costly also. The modern central bank is a peculiar institution. Though independent of government, it cannot be independent of a political process broadly defined. It must have the support of the public for its actions. This requires the central bank to persuade the public that costs borne today are more than compensated by the future benefits of low inflation. A lesson of the Great Inflation is that the best course is to keep inflation from getting underway. Repeated failures to end inflation convince the public that it will not end.

Until the twentieth century, inflation was mainly a wartime and postwar event. The public believed that wartime deficits caused inflation. In the second half of the twentieth century, it learned a new lesson: that war was not a necessary condition for deficit spending. Financing peacetime deficits by sustained increases in money growth above the growth rate of output produced peacetime inflation.

Now that we are well into the era of independent central banks using rules or quasi-rules to control inflation, three big problems remain. First, many central banks, often supported or guided by econometric research, have dismissed the old rule that called for comparing the maintained growth rate of money to the growth of output. Fortunately, this is not part of the canon at the European Central Bank.

Second, every central bank is urged to respond to changes in quarterly data. These data are often inaccurate and later revised. Some of the changes persist; others are transitory and
reverse. Rules for inflation targets do not distinguish between persistent and temporary changes in the rate of price change or between shocks to the price level and shocks that raise the maintained rate of price change. Any positive change in the price level is called inflation. This is a potential source of excess variability induced by policy and also a source of error. Orphanides (2001) has given some impressive evidence of inaccurate data used in the policy process.

Third, economists’ models usually contain one interest rate. When that interest rate is close to zero, these models imply that monetary policy is useless. This ignores the portfolio effect of holding real balances in excess of desired balances, a classical mechanism. It ignores also the role of relative prices other than the short-term interest rate, such as the exchange rate and the relative price of new and existing capital.

As experience in Japan has shown in the last decade, the benefits of price stability are difficult to achieve if central banks operate with incomplete or improperly specified models. Invalid theories have misled central bankers, as the examples here show. In studying the history of the Federal Reserve, I find that one main source of the big errors in monetary policy is believing what is not true. The real bills doctrine, the simple Keynesian model, the Phillips curve are examples of ideas that dominate policy analysis but are now less widely held. A second large source of error came from reliance on noisy and imprecise short-term data. The third is failing to respond to the changes in the sustained growth of money, both when it fell in the Great Depression and rose in the Great Inflation.

A commitment to price stability is necessary but not sufficient.
Bibliography


