

The title is written in a calligraphic, hand-drawn style on a grid background. The words "WHAT SHOULD A" are in a simple, outlined font. "CENTRAL BANK" is in a larger, blue-filled font with a hatched texture. "LOOK LIKE?" is in the same simple, outlined font as the first line. A large, red question mark is positioned at the end of the second line, overlapping the word "BANK".

By William T. Gavin and William Poole

The primary goal of a central bank is to develop and maintain an efficient monetary system whose primary goal is price stability, but it remains an open question as to what a central bank should look like. The answer to this question is important, but it would be a mistake to believe that there is one best way to organize a central bank. Most high-income countries, and many low- and middle-income countries, have achieved success in maintaining low inflation, even though there are substantial differences in the organization and structure of their central banks. We need to think rather abstractly about the design of the central bank and recognize that there are different ways to achieve the same end. Success in achieving low and stable inflation—price stability—is relatively recent. We may well discover that some institutional arrangements are more robust over time, as we observe how various arrangements stand up to stresses not yet observed.



An institution as important as a central bank cannot take a particular form without substantial public understanding of the reasons for that form. A century ago, most people believed that the only sound basis for a monetary system was for paper money to be convertible into gold. Yet, adherence to the gold standard during the early 1930s led to a large deflation that contributed to the Great Depression.

Looking back today, we see that the countries that stayed with the gold standard the longest had the worst depressions. Throughout the Depression in the United States, a number of economists argued that central banks should not be constrained by a rigid link to gold, but the economists could not sway public opinion.

For some years after World War II, most observers believed that fixed exchange rates were essential to monetary stability. And, therefore, governments around the world were able to set up an international monetary system in which a central bank's primary job was to monitor and maintain a fixed exchange rate vis-à-vis the dollar. But, for an individual country, maintaining a fixed exchange rate vis-à-vis the dollar was tantamount to accepting the inflation consequences of U.S. monetary policy. This system failed because the United States followed a monetary policy that yielded an inflation rate considered unacceptably high by some important countries.

In both eras, economists lobbied for institutional changes long before they became politically feasible. Today, too, we see potential reforms that we believe would improve economic performance—reforms such as setting a target for inflation. But such changes are still difficult to make because popular opinion and understanding of economic ideas impose limits on our ability to transform the economy by changing laws.

Economic Background

The logical place to begin an analysis of how to design an optimal central bank law is with a simple statement of economic principles that should guide our thinking:

- Inflation—anticipated and especially unanticipated—above some threshold rate is costly. Deflation is also costly. The costs of departures are not symmetric; deflation of 5 percent per year is likely to be much more costly than inflation of 5 percent per year.
- There is no long-run tradeoff between

inflation and unemployment, and the short-run tradeoff may be too unreliable to be useful for policy-makers.

- Market expectations about future monetary policy (and future economic policies generally) are extremely important in determining how well monetary policy will work.

Central Bank Law

Because inflation and deflation are costly, a central bank ought to have an explicit inflation target. We believe that the appropriate target is zero inflation, properly measured—that is, after accounting for measurement errors in price indexes. Others believe that a small, positive rate of inflation is appropriate. (See chart on Page 9.) The difference between 0 and, say, 2 percent inflation per year is a minor matter relative to other issues. In particular, reasonable stability in the rate of inflation and especially in the expected rate of inflation over the medium term are more important than whether the target is 0 or 2 percent per year. Whether the target is expressed as a point or a range is an interesting issue, but it is not fundamental.

The weight of public opinion must be behind the idea of an inflation target, whether it is legislated or not. If the public doesn't support the target, the target will not be effective, even if it is legislated. The United States does not have a legislated target, but since the mid-1990s the Federal Reserve has been successful in achieving and maintaining a low average rate of inflation. What is needed is not so much a legislated inflation target but a target framework that the public regards as having constitutional force. A law or practice has constitutional force if it cannot be changed without resort to lengthy discussion and, in the case of a law, by a super majority or its equivalent. For example, in the United States, the gold standard once had constitutional force even though it was never written into the Constitution explicitly.

In many countries, debate over a legislated inflation target has been extremely valuable in helping to create a consensus of constitutional force. In this debate, central bankers and others must constantly explain the reasons for a legislated target to ensure that it is not simply absorbed into the immense mass of legislation that is widely ignored and largely forgotten.

Not only must central bankers continually explain such a need, they must be consistent in this explanation—and in all of their policy explanations. Such consistent policies build credibility and market confidence over time. If credibility is lost, regaining it takes time and a willingness

to endure short-run pain where the short run may be measured in years. Maintaining credibility over time requires institutional strength that transcends current leadership. Absent crisis conditions, policy should evolve relatively slowly over time, with each change studied carefully and then explained fully. Otherwise, the predictability upon which credibility depends may be incomplete. The purpose of sustained low inflation is to minimize price level shocks that upset business planning and that redistribute income and wealth arbitrarily. For the same reason, the central bank should strive to avoid surprises in its own policy procedures.

One of the most difficult and hotly debated issues is whether monetary policy should be confined to an inflation objective or should also have an employment or growth objective. It does not make economic sense for the central bank to have objectives stated in terms of the level of employment or the rate of growth of real GDP. It is within the power of the central bank to achieve a long-run inflation objective, but not to achieve an objective for the level of employment or the real GDP growth rate. In the long run, the level of employment and economic growth are determined by non-monetary factors such as capital accumulation, advances in science and technology, well-defined property rights and other regulations that allow markets to work well. No organization should be assigned an objective that it cannot achieve or, at best, can achieve only temporarily.

The central bank does have the power, however, to contribute to employment stability. Historically, the largest spells of high unemployment have followed periods in which the central bank lost control of inflation and had to raise interest rates very high to regain control. Preventing these bouts of high inflation is the best way to avoid having bouts of high unemployment. Provided that the central bank's short-run policy decisions do not shake confidence in the long-run policy, it can direct short-run policy to help cushion employment fluctuations. It is reasonable to interpret a number of episodes in the United States since 1982 in this way; most recently, it appears that the Fed's rapid reduction in its federal funds rate target in 2001 helped to soften the extent of the recession. Of course, we cannot judge the success of a policy by one incomplete episode.

The point to emphasize is that success on the inflation front is necessary if the Fed is to stabilize short-run fluctuations in real economic activity. Thus, it makes sense to assign a central bank an objective of contributing to real economic sta-

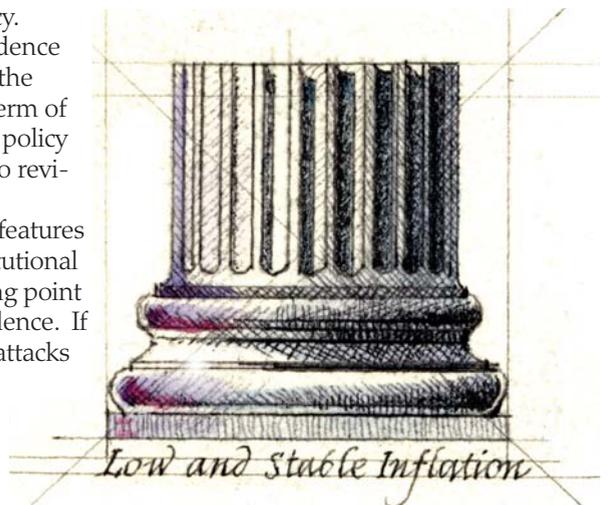
bility as long as it does not jeopardize the inflation objective. The Federal Reserve operates under a vague legislated instruction—vague in the sense that no numerical targets are specified—to contribute to achieving high employment and price stability. If the statutory language is interpreted as suggested above, then such objectives make perfectly good sense.

A legislated employment stabilization objective complicates the relationship between the elected government and the central bank because the central bank must maintain a long horizon. That horizon is typically considerably longer than the horizon of elected officials, who quite naturally and understandably have an intense focus on the next election. Because of the way the economy works, a central bank must be willing to back away from efforts to stabilize income and employment when such efforts threaten the inflation objective. Failing to maintain the primacy of the inflation objective only puts economic stability at risk over the longer run. The United States and many other countries had ample experience with this scenario in the 1970s; excesses in short-run recession fighting created higher inflation over the longer run and deeper recessions later on.

Central Bank Independence

There is widespread agreement that central bank independence leads to better monetary policy. The logic of independence can be seen by looking at the different horizons of elected officials and of central banks. Democratic leaders compete for office promising change and improvement rather than continuity and stability, whereas an incoming head of a central bank will almost certainly want to continue the policies of a successful predecessor and will emphasize his or her commitment to do so. Political independence and non-partisan monetary policy provide the promise of policy stability over time, which in turn stabilizes expectations in asset markets. Such stability and continuity are essential to a successful monetary policy.

Central bank independence requires that the head of the bank have a substantial term of office and that individual policy decisions not be subject to revision by the government. However, such structural features of the central bank's institutional design are only the starting point for central bank independence. If the government publicly attacks the central bank's policies, then independence will certainly be incomplete. This subject is a



very difficult one for a democratic society: How can an important area of public policy be off limits for comment and criticism by elected officials? Yet, such criticism clearly unsettles markets and damages the effectiveness of monetary policy.

One way around this problem is for the government to exercise great forbearance and confine criticism to internal discussions with the

central bank. That has come to be the practice in the United States, but it has not been established long enough that it can be regarded as institutionalized.

Consideration of this issue makes clear that optimal central bank design goes far beyond legal issues, per se; it is ludicrous to consider the possibility of passing a law saying that the

government is not allowed to comment on central bank policy! Clearly, though, if the government does not retain confidence in the central bank, the country is in substantial trouble. In this situation, the government must be prepared to replace a failing central bank leadership when terms expire.

Although central banks are governmental functions, the most successful banks are those with the fewest political overtones. The organization of the Federal Reserve System fits this perspective very nicely. Members of its Board of Governors are appointed by the president of the United States and confirmed by the Senate. However, presidents of the Reserve banks are appointed by the directors of the Reserve banks, subject to approval by the Fed's Board of Governors. Directors of Reserve banks have powers and responsibilities that are closer to those of a private company than those of a government agency. At each Reserve bank, six of the nine directors are elected by the commercial banks that are members of the Reserve bank; the other three directors are appointed by the Board of Governors on the recommendation of the Reserve bank. The directors are explicitly nonpolitical; they are drawn from the local community and are not permitted to hold partisan political office or participate in political activity, such as heading campaign committees or leading political fund-raising efforts. The directors, in turn, select the bank president and first vice president, subject to approval by the Board of Governors.

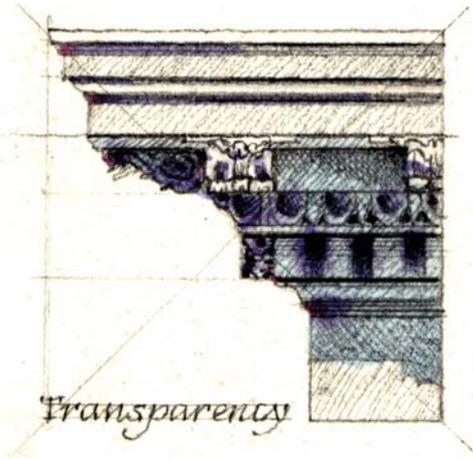
This institutional arrangement clearly involves ultimate control of the Federal Reserve System through the political process centered on the Board of Gover-

nors. Yet, a considerable part of the System's leadership obtains office through what is essentially a private-sector process. What this private-sector process does is to reinforce the non-political nature of the Federal Reserve System. The process also involves the Reserve bank directors in an important way. The Federal Reserve pays the bank directors very little; what they get out of service as director is the opportunity for public service that includes an intense education in monetary policy. Over their years of service, and for years thereafter, the directors spread knowledge of monetary policy processes and challenges throughout their communities. Having community leaders from many different professions serving as directors builds support for sound monetary policy. Consider, for example, the breadth of experience on the current St. Louis board. It includes CEOs of commercial banks, the managing partner of a major law firm, CEOs of both large and small businesses, a university professor who also manages a family farm, an expert in the venture capital industry and the CEO of a nonprofit community organization. Taking the 12 Federal Reserve banks together, directors are drawn from every sector of the economy and every geographic region.

Equally important to the Federal Reserve is the flow of information from Reserve bank directors to bank presidents, who in turn use this information to make decisions on monetary policy. Valuable information also comes from numerous advisory committees that meet from time to time at the Board of Governors and at the Reserve banks, and from contacts between Federal Reserve officials and their audiences as the officials travel to speak at various events and meet with business and community leaders. The Federal Reserve has what is known in the United States as grassroots contacts throughout the country and continuously over time. Although this organization of the Federal Reserve System did not prevent the monetary policy mistakes that contributed to the Great Depression and the Great Inflation of the 1970s and 1980s, we believe that the current process contributes greatly to the prospects for continued sound monetary policy in the years ahead.¹

Transparency

In recent years, central banks have become more open in many different ways.² In the past, central bankers often discussed monetary policy in obscure ways and seemed to relish the mystique of central banking. Particularly given central bank independence, openness is essential to political accountability.



Whether by law or confirmed practice, good central bank design calls for central banks to make timely reports about policy actions, including the reasons for these changes.

Importantly, prompt disclosure of policy decisions and their rationale is necessary for markets to function efficiently. Monetary policy works through markets; if markets expect one policy direction when the central bank intends another, both the markets and the central bank are likely to be surprised at some point and disappointed by the results.

Conclusion

There is no uniquely optimal way to write a central bank law and to institutionalize central bank practices. Different countries have different histories and different preferences. Among those successful in promoting price stability and economic growth, there are three common elements.

First, the government should assign clear and obtainable objectives to the central bank. A legislated inflation target is a good idea, but more important than legislation is an understanding in the society that low and stable inflation is the central bank's responsibility and that the bank should be judged on how well it achieves that objective. A government may assign to the central bank a policy goal of contributing to stability in income and employment, provided there is a clear understanding that there can be no central bank target for the level of employment or the rate of growth of GDP.

Second, the central bank should operate independently within the government; the head of the bank should have a reasonably long term of office and should not be subject to removal by the elected head of government, except for cause through an impeachment process. The head of government should not be able to overturn individual monetary policy decisions and, ideally, should confine comment on those decisions to confidential communications with the central bank.

Third, the central bank should be transparent in the way it makes decisions and implements policy. Political accountability requires transparency, as does the efficient operation of the markets through which monetary policy affects the economy.

These three principles broadly characterize all major central banks today. We should not, however, take that fact as reason to assume that the issue is settled. We are bound to face stresses in the future when many will question these principles. Stating them now, defending them and explaining them represent our best hope for improving public understanding and maintaining the progress of recent years

that is so evident to all central banks and students of central banking.

A sample of countries with inflation targets

Data as of end of year 2002.

Country	Price index that is targeted	Target for 2003
Australia	CPI (Consumer Price Index)	2-3%
Brazil	CPI	8.5% (5.5% for 2004)
Canada	CPI excluding indirect taxes, food and energy prices (operational exemption)	1-3%
Czech Republic	CPI	2.5-4.5%
European Union	HICP (Harmonized Index of Consumer Prices)	Maximum of 2%
Hungary	CPI	Maximum of 4.5%
Israel	CPI	1-3%
South Korea	CPI excluding non-cereal agricultural products and petroleum-based products	1-4%
New Zealand	CPI excluding credit services	1-3%
Poland	CPI	2.5%
Sweden	CPI excluding indirect taxes, subsidies and house mortgage interest expenditure	1-3%
Switzerland	CPI	Maximum of 2%
United Kingdom	Retail price index excluding mortgage interest payments	2.5%

The targeted price index is usually for a broad basket of consumer products that often excludes items or changes in prices that may obscure the link between monetary policy actions and the underlying inflation trend. The excluded items cover at least three categories: 1) prices in highly volatile sectors such as energy; 2) price changes that can be directly linked to changes in tax policy; and 3) price changes that depend on interest rate expenses. Generally, countries that have targeted low inflation rates have been successful in hitting targets and keeping them relatively stable. Many of the countries listed above had serious problems with inflation in the 1980s and early 1990s that appear to have been solved with the adoption of inflation targeting. The United States and Japan do not have inflation targets, partly reflecting the fact that they were able to get control over inflation in the early 1980s without actually adopting explicit inflation targets.

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ENDNOTES

- For more on this point, see "Anecdotes Help Fed to Steer the Economy," by William Poole and Howard J. Wall on pp. 12-13 of the October 2002 issue of *The Regional Economist*.
- More information about the importance of central bank transparency can be found in two speeches by William Poole on the St. Louis Fed web site. They are "Central Bank Transparency: Why and How?" presented at the Federal Reserve Bank of Philadelphia on Nov. 30, 2001, and "Getting Markets in Synch with Monetary Policy," presented at the University of Missouri-Columbia on May 4, 2001. The speeches can be found at www.stlouisfed.org/news/speeches.html.