

The move to inflation targeting

CENTRAL BANKS don't have it easy. Many of them are committed by law to achieving price stability—that is, ensuring that the rate at which price levels change is low and steady. Price instability causes uncertainty, distorting economic decision making and hampering economic growth. More often than not, the instability is the result of inflation—a persistent rise in the price level typically measured by the consumer price index (an indicator that measures the change in the cost of a basket of products and services, including housing, electricity, food, and transportation). Deflation—a persistent fall in the price level—has been rare since World War II, although it has recently resurfaced as a growing threat.

What causes inflation? Typically, it is excessive liquidity—that is, too much money chasing too few goods. Allowing more money to circulate induces people to increase their demand for goods and services. If this increased demand is not matched by an increase in output, prices are bid up. This relationship is best explained by the Equation of Exchange, developed by a nineteenth-century U.S. economist, Irving Fisher. Fisher's equation, $MV = PQ$, states that M (the money supply) multiplied by V (the velocity of money or the number of times the stock of money is turned over during a given period to finance spending on final goods and services) is equal to P (the price level) multiplied by Q (the quantity of the final output of goods and services). Since the velocity of money, V , is fairly stable, an increase in the supply of money, M , usually results in an increase in total spending. If M is increased in the short term, there is usually a corresponding increase in the price level, P , assuming that output, Q , cannot be increased in the short term. As a result, a short-term increase in the money supply will push prices up.

This formula suggests that central banks can influence the rate of inflation by changing the rate of growth of the money supply through monetary policy instruments. To do this, they can engage in open-market operations (buying and selling government securities) to achieve a targeted level of short-term interest rates, or set the discount rate (the rate at which the central bank lends money to commercial banks) directly. When they sell government securities (that is, when people purchase, for example, treasury bills), the supply of money available in the economy falls and thereby bids up the price of money, which is the interest rate. An increase in interest rates, in turn, reduces demand (especially for housing, consumer durables, and investment goods) and, in principle, brings down inflation. The converse should have the opposite effect.

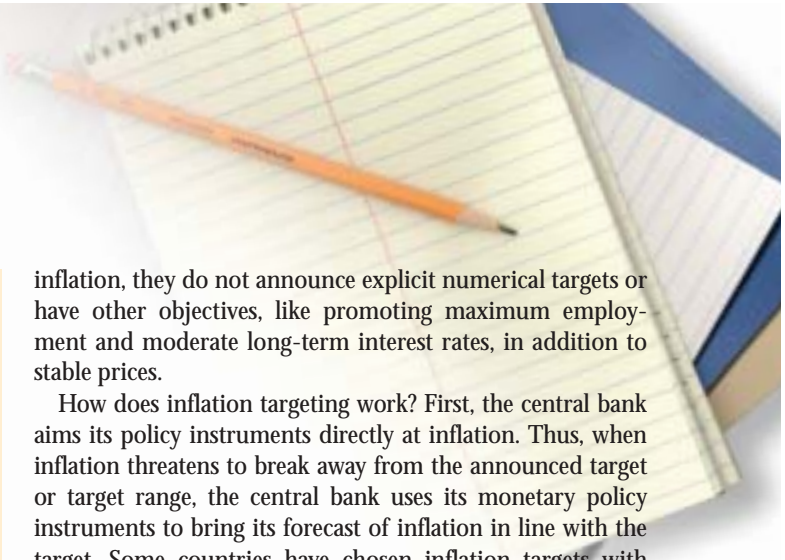
The real world, however, is more complicated. The velocity of money, for example, tends to vary in ways that are not always easy to explain. Also, the money stock is not always amenable to central bank control. In particular, for an open economy with a pegged exchange rate, domestic interest rates have to be such as to maintain the exchange rate at its pegged level. The central bank then loses control over domestic monetary expansion and inflation, which is determined essentially by inflation in the country whose currency provides the peg.

Falling from grace

Between the end of World War II and the early 1970s, the Bretton Woods system of pegged exchange rates made the control of inflation in the United States the anchor for price stability in other countries. Other countries' inflation rates could diverge significantly from the U.S. rate only to the extent that countries could achieve a degree of monetary independence through capital controls.

After this system collapsed during 1971–73, some countries—including most developing countries—maintained exchange rate pegs and relied on these to control inflation. Under this approach, countries pegged their exchange rates to the currency of a low-inflation country. The main drawback of this approach is that it constrains the central bank's ability to respond to shocks. Also, the conditions for maintaining fixed exchange rates have become more difficult with the growing and unstable movement of money across borders over the past 20 years, as evidenced by the currency crises of the 1990s.

Many other countries, including most industrial countries, adopted flexible exchange rates. They then needed a new domestic anchor for price stability. Beginning in the mid-1970s, many industrial countries adopted targets for the growth of monetary aggregates—the money stock defined in various ways. Under this approach, central banks sought to control inflation by aiming for intermediate targets for rates of monetary growth that, for given assumptions about the demand for money, could be expected to deliver the desired rate of inflation. Although this approach provided, in a number of countries, a framework for policies that were successful in reducing inflation from postwar peaks, persistent failures in hitting the monetary targets, and persistent instability in the relationship between monetary growth and inflation, led to the virtual abandonment of monetary targeting in most countries in the course of the 1980s. One source of instability in the demand for money was innovations in



Inflation targeters

	Year of adoption of inflation targeting	Inflation rate in year of adoption of inflation targeting (percent)	Targeted inflation rate as of 2001 (percent)	Inflation rate in 2001 (percent)
New Zealand	1989	7.5	0 to 3	2.6
Canada	1991	7.5	1 to 3	2.5
United Kingdom	1992	3.7	2.5	1.8
Australia	1993	1.8	2 to 3	4.4
Sweden	1993	4.6	1 to 3	2.4
Czech Republic	1997	8.6	2 to 4	4.7
Israel	1997	9.0	1 to 3 for 2003 on	-5.0
Brazil	1999	4.9	2 to 6	6.9
Chile	1999	3.3	2 to 4	3.6
Poland	1999	7.3	5.4 to 6.8	5.5
Colombia	2000	8.0	8 for 2001, 6 for 2002	8.0 in 2001, 6.3 in 2002
Korea	2000	4.1	2.5	4.1
South Africa	2000	5.1	3 to 4	4.8
Thailand	2000	1.5	0 to 3.5	1.7
Hungary	2001	9.1	5 to 7	9.1
Iceland	2001	6.4	2.5 (+ or - 1.5)	6.4
Mexico	2001	6.4	6.5 for end-2001, 4.5 for end-2002	6.4 in 2001, 5.0 in 2002
Norway	2001	3.0	2.5	3.0

Sources: Carare, Alina and Stone, Mark R., 2003, "Inflation Targeting Regimes," IMF Working Paper 03/9 (Washington); and IMF, *International Financial Statistics*, various years (Washington).

financial markets during this period of rapid change in financial technology.

Another problem in many cases was the lack of independence of central banks, making many captive to the government's need to accommodate fiscal policy.

Target practice

To overcome the shortcomings of monetary targeting, starting in the late 1980s, many countries with flexible exchange rates—initially industrial, and later, emerging market countries—began to adopt inflation targeting. Today, more than 40 countries aim at achieving low and stable inflation, but only 18 of them are classified as fully fledged inflation targeters (see table), with clear and credible commitments to an inflation target. These countries meet three criteria: they make an explicit commitment to meet a specified inflation rate target or target range within a specified time frame; they regularly announce their targets to the public; and they have institutional arrangements to ensure that the central bank is accountable for meeting the target—the key one being operational independence from the government, so that the central bank is free to pursue its inflation target, even though it may be set by the government. To support this independence, many inflation-targeting countries have also adopted budgetary reforms to keep the government's fiscal balance under control. Without this, the government might try to force the central bank to finance an excessive deficit through monetary expansion. Some countries, including the United States, are not classified as inflation targeters because, although their central banks are committed to achieving low

inflation, they do not announce explicit numerical targets or have other objectives, like promoting maximum employment and moderate long-term interest rates, in addition to stable prices.

How does inflation targeting work? First, the central bank aims its policy instruments directly at inflation. Thus, when inflation threatens to break away from the announced target or target range, the central bank uses its monetary policy instruments to bring its forecast of inflation in line with the target. Some countries have chosen inflation targets with symmetrical ranges around a mid-point, while others have identified only a target rate or an upper limit to inflation. All industrial countries have set their inflation targets in the low, single digits. An inflation target rate of zero is not recommended because it would not allow real interest rates to fall sufficiently to stimulate overall demand.

Inflation targeters have also chosen a variety of time horizons over which to reach their targets, depending on how high the starting rate of inflation is relative to the desired rate. A shorter time horizon would tend to bring inflation expectations under control more quickly and hasten the buildup of central bank credibility but at a higher cost in terms of lost economic growth and employment. To enhance transparency, inflation targeters use different vehicles—including periodic inflation reports, press statements reporting on the decisions and deliberations of the policy-setting body, and special publications—to convey information about the inflation-targeting framework and monetary policy decisions. In Brazil, for example, the decisions of the central bank's Monetary Policy Committee, which meets every five weeks, are announced immediately after the meeting, and the minutes are published within a week. And, to enhance accountability, inflation targeters also provide public explanations of deviations from targets. In some cases, like New Zealand, the minister of finance may even request the resignation of the central bank governor if a target is missed, although this option has not yet been exercised—even on occasions when the target has been breached.

On target?

Some economists say that, so far, inflation targeting has been quite successful. Inflation targeters have experienced low and stable inflation rates without inordinately sacrificing economic growth or destabilizing their economies. Some argue, however, that the international economic environment has been noninflationary in recent years and that the approach still needs to be tested in a more turbulent environment. Others add that there is no evidence that inflation targeting improves performance as measured by the behavior of inflation, output, or interest rates. But it is clear that, for many countries with flexible exchange rates, inflation targeting offers a framework for conducting monetary policy that has a number of advantages, including clarity and transparency. ■