The rationale for inflation targeting

I. Macroeconomic policy has many goals
   - low inflation
   - high real growth
   - low unemployment
   - financial stability

A consensus is emerging that price stability must be the primary long run goal of monetary policy.

This view is based upon three arguments:

1. Economists are less confident that monetary policy can be used effectively to moderate short run fluctuations in the economy. In the long run, the inflation rate is the only macroeconomic variable that monetary policy can affect.

2. Even moderate rates of inflation are harmful to economic efficiency and growth.

3. The establishment of price stability as the primary long run goal is an important conceptual elements in the overall framework of policy-making:

   It helps policymakers to:
   - Communicate their intentions.
   - Impose some degree of accountability and discipline.

An inflation target serves as a “Nominal Anchor” for monetary policy
II. What monetary policy can and cannot do

Thirty years ago most economists supported activist monetary policies:

Supporters of activism believed that there was a long run trade-off between inflation and unemployment known as the Phillips curve. According to this view monetary authorities could maintain a permanently lower rate of unemployment by accepting some degree of inflation.

This view proved wrong -- the recessions of 1973-74 and 1981-82 were the most severe of the postwar period.

The late 1960s and a decade of the ‘70s were plagued with rising and variable rates of inflation.

The 1981-82 recession was the result of restrictive monetary policy which had been made necessary by surging inflation.

Activist monetary policies of the ‘60s and ‘70s failed to deliver their benefits -- instead they produced inflationary pressures that could be subdued only at high cost.
Also, intellectual developments contributed to the fading reputation of strongly activist policies.

Three developments were influential:

1. Milton Friedman’s Monetarist criticism – the observation that monetary policy works only with long and variable lags.

2. The conclusion, also by Friedman, that there is no long-running trade-off between inflation and unemployment.

3. Increased understanding of the importance of central bank credibility to the effectiveness of monetary policy.
Monetarist criticism

Friedman argued that monetary policy, though powerful, is not a tool that can be used with precision. The problem is that policy works through the economy with long and variable lags and therefore its effects are unpredictable.

Friedman’s critics suggested that more powerful techniques such as optimal control could be used to compensate for lags between a given policy action and its effect.

Robert Lucas discredited this approach. Optimal control methods may be useless for guiding policy if they do not take into account the possibility that the public’s expectations about the future will change when policies change. This criticism by Lucas is now referred to as the Lucas Critique.

When the rules of the game change, actions will change.

Given the difficulty of anticipating changes in public expectations it is doubtful that policymakers will be able to control the economy with any degree of precision.

A related observation based on political theory:

Politicians and politically influenced central bankers tend to over manipulate the levers of monetary policy in attempt to control the economy. The interaction of long policy lags and short political horizons may lead to worse results that would a policy of restraint.
The Death of the Phillips Curve

The second intellectual development, also led by Milton Friedman, criticized the Phillips curve trade-off.

Inflation might stimulate the economy and lower unemployment for short periods:

If wage rates are fixed by contract and prices unexpectedly rise then the profit margins of firms will increase.

Firms produce more because unexpected inflation implies an unexpected decline in the real cost reduction.

Workers, however, cannot be continually fooled -- once they realize that inflation has risen they will demand more rapid wage increases to compensate for their lost buying power.

Once inflationary expectations have been adjusted by workers only the inflation rate has been affected by the expansionary monetary policy -- output and unemployment return to their normal or natural rates.

There is no long-running trade-off between inflation and unemployment.
Time Inconsistency

The policy credibility problem has to do with the likelihood that, even if it wants to keep inflation low, and activist central bank will also have a strong incentive to increase the rate of inflation above the level expected by the public.

Workers and firms understand the central banks incentives, leading them to adjust their inflation expectations and their wage and price setting behavior accordingly.

No matter how much they declare their intention to keep inflation low, central banks will be overexpansionist and inflation prone in practice. This produces inflation bias.
The Benefits of Low Inflation

Low inflation helps to promote economic efficiency and growth in the long run.

The cost of high inflation are well known:

- over expansion of the financial system
- increased susceptibility to financial crisis
- poor functioning of product and labor markets as prices become noisy measures
- costs of frequent repricing
- distributional effects often including the destruction of the middle class whose savings become worthless.

Many believe that even moderate inflation is costly.

It appears that the general public is confused about what inflation really is:

when members of the public talk about inflation they often stress the effects of changes in relative prices -- for instance rising gasoline prices or food prices or housing prices.

These are independent of the rate of inflation and beyond the power of monetary policy to correct

to some degree inflation has become perceived as a serious economic problem precisely because of the public’s confusion over what inflation is at about how to make adjustments for.
More sophisticated savers and investors find ways to insulate themselves from the effects of inflation (these efforts are not without costs).

Less sophisticated individuals are less likely to insulate their income and savings from inflation so that inflation induces redistribution of wealth among groups.

**Tax Considerations**

The most important cost of inflation at low to moderate levels comes from the interaction of inflation with the tax system which is rarely fully indexed to inflation.

An example is the practice of basing capital depreciation allowances on the historical cost of investment.

Stanley Fisher calculates the social costs of tax related distortions to be about 2% - 3% of GDP at an inflation rate of 10%.

While it is difficult to accurately measure, there are a number of studies that associate higher inflation with lower productivity and with lower rates of growth.
The need for a nominal anchor

The strongest argument for inflation targeting is that it can help to provide monetary policy with what economists call a nominal anchor.

Under a gold standard, the price of goods is determined by their marginal values relative to gold. For instance, because bread and goals are both intrinsically useful commodities, the price of bread in terms of gold cannot differ by too much from the relative marginal values of the two commodities to the users. In the case of famine, the price of bread will increase.

We have a fiat money system – money is intrinsically useless.

What determines whether a loaf of bread is worth one dollar or three dollars?

The short answer is that in a paper money system there is a need for some additional constraint on monetary policy -- called a nominal anchor -- to tie down the price level at a given time.

A nominal anchor can take the form of

quantity constraints such as the limits on the amount of paper money, or

a price constraints which legally fixes the value of the paper money in terms of some good or assets.
Nominal anchor and inflationary expectations

A nominal anchor is important because it helps to pin down inflationary expectations. Monetary policy is most effective in the presence of a firmly established nominal anchor, and the more understandable that anchor is to the public the better. The target rate of inflation communicates to the public price level the central bank is aiming to achieve at specified dates in the future.

Inflation targeting a framework, not a rule

Monetary policies have often been characterized as rules or discretion.

The authors maintain that inflation targeting should be treated as a framework, that is allowing for discretion ary policy.

The benefits of a rule have not been well established.

Tying the hands of monetary policy makers should reduce opportunism and hence the inflation bias associate with the policy credibility problem.

Increased credibility in turn leads the public to moderate its inflation expectations more quickly.

But, there is no evidence that inflation targeting has significantly reduced the real costs of bringing inflation down. The Deutsche Bundesbank and the Swiss National Bank, central banks whose pursuit of low inflation are well-established, have managed to achieve reductions in inflation only at high costs and lost output and employment.
Inflation targeting framework has two important functions:

1. Improving communication between policymakers and the public

2. Providing discipline and accountability in the making of monetary policy.

The announcement of inflation targets communicates the central bank’s intentions to the financial markets and to the public.

By making explicit the central bank’s medium-term policy intentions, inflation targets improve planning in the private sector, enhance the public debates about the direction of monetary policy, and increase the accountability of the central bank.

The public is far more likely to understand what is meant by the predicted rate of growth of consumer prices rather than the growth rates of the M1 money stock.

By linking policy to medium in long-term horizons, but without crippling the central bank’s ability to respond to short run developments, inflation targeting creates a rough compromise between the discipline and accountability of rigid rules and the flexibility of the discretionary approach.