Price Level Stability

On September 25, 1989, Congressman Stephen L. Neal introduced legislation requiring the Federal Reserve to eliminate inflation within five years. House Joint Resolution 409 states, in part:

“(1) the Federal Open Market Committee of the Federal Reserve System shall adopt and pursue monetary policies to reduce inflation gradually in order to eliminate inflation by no later than 5 years from the date of the enactment of this legislation and shall then adopt and pursue monetary policies to maintain price stability;

(2) inflation will be deemed to be eliminated when the expected rate of change of the general level of prices ceases to be a factor in individual and business decision making. . . .”

This Letter is based upon testimony on the Neal Resolution delivered by President Robert T. Parry on February 6, 1990, before the House Subcommittee on Domestic Monetary Policy.

The central bank and inflation
Inflation is a monetary phenomenon, in the sense that excessive growth of money is the root cause of sustained increases in the level of prices. Thus, the central bank is uniquely suited to control inflation in the long run. Monetary policy also affects the production of goods and services in the short run, until the price level adjusts to changes in the supply of money and credit. As a result, the central bank frequently must consider the transitory effects of its actions on the business cycle, even though its policies mainly should focus on the single variable it can control in the long run: the rate of inflation.

Federal Reserve officials consistently have made it clear that achieving price stability is indeed the long-term goal of the System. If enacted, House Joint Resolution 409 would provide clear legislative support for the attainment of this goal within a specified period and would minimize pressures to focus only on short-run concerns.

By reducing uncertainty about the future level of prices, the elimination of inflation would make a significant contribution to higher standards of living in the U.S. and around the world. These benefits are difficult to quantify, but they most likely are substantial.

Price stability would lead to better long-term planning and contracting by business and labor. It also would reduce the risk premia in long-term interest rates associated with uncertainty about the future price level, thereby increasing capital formation and productivity in this country. Moreover, it would avoid the many arbitrary transfers of wealth and income that occur when the general price level changes unexpectedly, and thus would reduce wasteful hedging activity designed to protect against these transfers. Finally, price stability would eliminate confusion between absolute price changes and movements in relative prices, leading to improved decisions.

The costs of eliminating inflation
Few would disagree that eliminating inflation is a desirable goal for the Federal Reserve. The debate centers on the costs of achieving that goal and how large these costs are relative to the benefits. Unfortunately, it is difficult to produce precise estimates of the costs.

The so-called Phillips curve relationship provides an upper bound estimate of the costs of eliminating inflation. The Phillips curve relates the rate of wage inflation to the actual unemployment rate, an estimate of the unemployment rate consistent with the economy operating at full capacity, and an estimate of expected inflation.

The Phillips curve suggests that the short-run costs of reducing inflation are relatively high, largely because this relationship incorporates the assumption that the public's expectations concerning future inflation adjust only gradually. Thus, a disinflationary policy regime may have to be in place for a relatively long period before
it has a measurable impact on inflation expecta-
tions and, therefore, on inflation.

Nonetheless, work at this Bank using computer
simulations of a Phillips curve-based model sug-
gests that a recession is not necessary in order to
reduce inflation from four to 4½ percent now to
around zero percent by 1994. The unemploy-
ment rate would need to rise by a maximum of
about 1½ percentage points above an estimated
cost of five to six percent "full-employment" rate. At
the same time, real GNP growth during the transition
period would need to be about one to two per-
centage points per year lower than the rate of
growth in productive capacity, which is currently
estimated at around 2½ to three percent a year.

Two points about these estimates should be
emphasized. First, these costs are one-time, trans-
itory costs only. In the long-run, there is no trade
off between inflation and unemployment. Once
inflation is eliminated, real GNP will go back to
its long-run potential path, and the unemploy-
ment rate to its "full-employment" level. The
benefits of price stability, however, continue
indefinitely.

Second, the figures represent average historical
relationships over the past 25 years, and should
be taken only as rough indications of the costs of
implementing the Resolution if inflation expec-
tations were to adjust only very gradually. How-
ever, the costs of achieving zero inflation within
five years probably would be smaller than these
estimates suggest. Presumably, the public's ex-
pectations of future inflation would decline more
rapidly than the historical Phillips curve relation-
ship indicates if it were to become apparent that
the Federal Reserve was pursuing a steady disin-
flationary policy. There is general agreement
within the economics profession that the costs of
reducing inflation are closely tied to the degree
to which the public believes the central bank's
anti-inflation policy to be credible. In this regard,
the legislative support provided by the Neal Res-
olution undoubtedly would hasten the decline in
inflation expectations, and would reduce the
costs of eliminating inflation.

Unfortunately, it is difficult to determine how
quickly expectations might respond in such an
environment. There is evidence that expectations
did not decline quickly in the period following
the Federal Reserve's implementation of a strong
disinflationary policy in October 1979. In the
current situation, however, the Federal Reserve
has much more credibility as an inflation fighter
than it did in the period of double-digit inflation
at the beginning of the 1980s. Thus, announcing
a policy to reduce inflation to zero within five
years may have more impact on expectations
today than it would have had earlier, particularly
if such a policy were mandated by the legisla-
ture. Moreover, inflation expectations could
decline even faster, and price stability could be
achieved even sooner if monetary policy were
supported by other policy actions, such as credi-
ble reductions in the federal budget deficit.

However, we cannot estimate the extent to which
inflation expectations will respond to such a
change in policy. Therefore, the possibility exists
that achieving zero inflation in five years might
involve the relatively high transitional costs out-
lined above. Only implementation of the Resolu-
tion will tell. Despite this uncertainty, a transition
period longer than the five years envisioned in
the Resolution does not seem advisable, as it
might reduce the credibility of the anti-inflation
policy.

Level or rate?
There is some ambiguity in the Resolution
concerning what the Federal Reserve would be
required to do once zero inflation is achieved:
should it aim at a constant price level over time
(price level stability) or at a zero inflation rate
over time (inflation rate stability)? Following an
unanticipated shock to prices, such as an oil
price shock, the objective of a stable price level
would require that a period of deflation (inflation)
follow a positive (negative) shock to bring prices
back to their pre-shock level. As a consequence,
this approach might imply a high level of vol-
atility in the short- to intermediate-run inflation
rate.

Alternatively, a stable inflation rate objective
would keep prices at their post-shock level, and
monetary policy would be geared toward permit-
ting no further change in prices. By accommo-
dating past price level movements, this approach
would involve less short-term volatility in infla-
tion, but would permit more long-run inflation or
deflation if the shocks tended to be one-sided.

Price level stability has a number of advantages
over inflation stability. First, the distortions
caused by inflation relate more closely to uncer-
tainty about the long-run price level than to
short-run volatility in the inflation rate. Moreover,
a price level goal probably would be more credi-
ble than a zero inflation rate goal. Permitting the
price level to drift (as could happen under a zero
inflation rate goal) inevitably would raise ques-
tions whether the Federal Reserve were serious
about controlling inflation, particularly if the
source of the price level shocks were uncertain.

Finally, there is nothing to be gained, and a lot
to be lost, from permitting the price level to drift
over the long run. Even in the case of a shock
like the oil embargo of the mid-1970s, the ap-
propriate response is to maintain price stability
in the long run. Following such a shock, real
GNP inevitably must fall to reflect the decline in
long-run potential output. This decline in output
will occur no matter where the price level event-
ually ends up, and thus there is nothing to gain
by allowing prices to rise in the long run.

However, there are short-run problems to con-
sider. For example, a recession could result from
attempts by the Federal Reserve to return prices
to their original level too quickly following a
large oil shock. Thus, it is important that the
Federal Reserve have some flexibility in imple-
menting the requirements of the Resolution.
Monetary policies designed to produce a gradual
deflation (or inflation, depending on the nature of
the shock) following a price shock would mini-
imize short-run dislocations, and yet still remove
the long-run uncertainty about the price level
that damages the performance of the economy.

What is price stability?
A flexible definition of price stability like the one
used in the Resolution is preferable to a specific
numerical target. Although a numerical target
would make it easier for the public to measure
the Federal Reserve's performance and, therefore,
might make the policy more credible, such a
standard might be counterproductive.

For a number of reasons, it is difficult to define
in advance a specific numerical target that rea-
sonably could be adhered to over a long period.
First, it is not clear which particular price index
should be targeted, and all indexes most likely
will not exhibit zero rates of change when "price
stability" is achieved. Second, there may be up-
ward biases in the price indexes because they
may not adequately adjust for improvements in
the quality of goods and services. This bias could
be addressed by allowing some upward drift in
the price index, but it is difficult to estimate the
appropriate magnitude of this adjustment. Third,
a numerical target would reduce the Fed's flex-
ibility in responding to relative-price shocks,
leading to increased risk of undesirable effects
on economic activity.

Relying on a flexible definition of price stability
inevitably will lead to debate over how the Fed-
eral Reserve's performance stacks up against its
objective. This judgment will require evaluation
of a large number of different price indexes.
Other considerations also could play a role.

Does a recent supply shock justify the inflation
observed in a given year? Have there been sig-
ificant biases in price indexes because of mis-
measurement of quality change? These issues
can be discussed and evaluated in the context
of the Federal Reserve's semiannual policy report
to the Congress, as specified in the Resolution.
In any case, these issues likely will become less
worrisome over time, as it becomes clear that the
Federal Reserve's policies are indeed moving the
economy towards price stability.

An important step
Eliminating inflation would be the most signifi-
cant contribution that the Federal Reserve could
make to the attainment of the highest possible
standards of living in the United States and
around the world. House Joint Resolution 409
would provide a legislative mandate for this goal
and a deadline for attaining it. Once this goal is
achieved, monetary policy should be geared
toward maintaining a stable price level over the
long run so that businesses and individuals do
not need to be concerned about long-run infla-
tion in making their economic decisions.

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