
FRBSF WEEKLY LETTER

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Central Bank Credibility and Disinflation in New Zealand

The "credibility" of a central bank with the general public is usually considered essential if it is to orchestrate a policy of disinflation at the lowest possible cost in terms of lost output and rise in unemployment. Credible in this sense means that the public believes the central bank will follow through with the degree of monetary tightening necessary to lower inflation, even if it causes a recession.

A high degree of credibility reduces the cost of disinflation because firms and wage earners quickly adjust their expectations of future inflation, in turn lowering upward pressure on prices and wages. This lessens the extent to which disinflation requires costly reductions in aggregate demand (lowering prices) and higher unemployment (lowering wages)—the traditional means by which a central bank "wring[s]" inflation out of the economy.

But how does a central bank achieve credibility with the public? One way may be to implement institutional changes which allow the central bank to focus on price stability and help insulate it from political pressures to stimulate aggregate demand excessively. This is exactly what the Reserve Bank of New Zealand Act of 1989 sets out to do: The Reserve Bank of New Zealand (RBNZ) has considerable independence from political influence, price stability is the single objective of monetary policy, and the Bank is held accountable for achieving this objective.

By contrast, the old-fashioned way to achieve credibility is to earn it by simply pursuing a tight monetary policy over a sustained period, gradually gaining the reputation as a tough inflation-fighter as firms and wage earners actually witness the decline in inflation and its maintenance at

a low level. However, this traditional approach typically incurs high costs. This *Weekly Letter* considers these two explanations by looking at the RBNZ's experience in gaining credibility.

Disinflation in New Zealand

The Reserve Bank Act mandates that the central bank governor and the minister of finance agree to a definition of price stability and announce it publicly in the Policy Targets Agreement (PTA). The first PTA specified a year-over-year inflation rate target range of 0 to 2 percent by December 1992, and price stability thereafter. The new government elected in October 1990 deferred the target by one year, however, partly out of concern over high adjustment costs. In February 1991, the Bank announced interim targets of 2.5 to 4.5 percent by December 1991, 1.5 to 3.5 percent by December 1992, and 0 to 2 percent by December 1993.

As it turned out, inflation already had fallen below the 2 percent upper target range by December 1991, and since then it has fluctuated in the 0 to 2 percent target range, achieving the PTA two years ahead of schedule. (See Figure 1.)

Expectations and forecasts

How were expectations influenced by the announcement of the PTA targets? Did newfound credibility associated with the PTA, though revised, lead to a decline in inflation expectations and thereby contribute to the sharp fall in inflation?

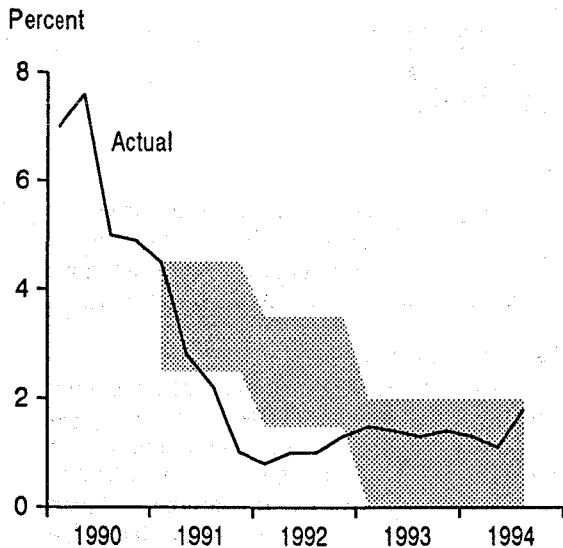
To answer this question, we begin by looking at the Bank's year-ahead inflation "forecasts," which have been published for many years. These forecasts are issued quarterly at roughly comparable points in time and have been consistent with the

PACIFIC BASIN NOTES

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Figure 1
Actual Inflation and PTA Target Ranges



PTA target ranges. Each forecast is conditional upon the assumed path projected for the nominal exchange rate. If underlying inflation is in danger of exceeding the target range, then the exchange rate projection is modified to reflect the amount of monetary tightening or loosening required to bring the conditional forecast for underlying inflation back within the target range. In this sense, the forecast implicitly incorporates the Bank's own behavior in setting monetary conditions. The public may have different ideas, however, about either the central bank's resolve or its ability to achieve the forecasted inflation rate. Public expectations may not fully incorporate the central bank's intended policy adjustments, for example, perhaps leading them to expect a different path for the exchange rate, and, hence, inflation.

The extent to which the Bank's forecasts are "believed" by the public therefore may provide some indication of credibility. This belief may be measured by the difference between the Bank's conditional forecast and expected inflation, where expectations are taken from the Bank's Survey of Expectations (SOE) and the National Bank (NB) Survey.

In the period up to the passage of the 1989 Act, the central bank's inflation forecasts were much lower than the survey measures of expected inflation—1.9 and 2.7 percentage points lower, on

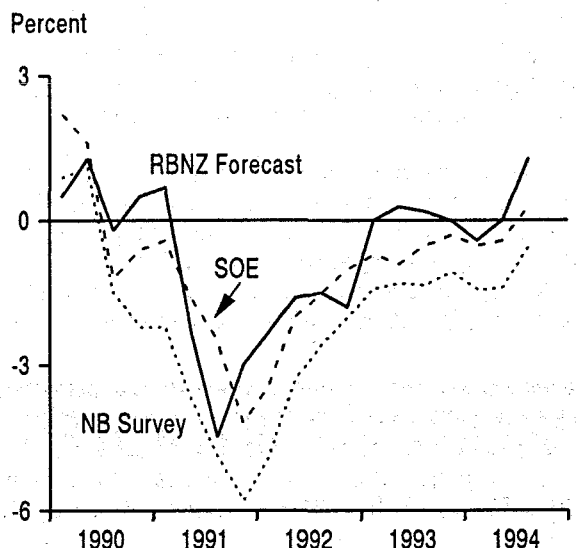
average, for the SOE and NB measures, respectively. Once the Act was implemented, however, the differences became much smaller, with the SOE measure about the same as the Bank's forecasts (an average difference of only 0.25 percent) and the NB measure 1.4 percentage points higher on average. The closer alignment between inflation expectations and the official forecasts suggests that the Act may have contributed to the Bank's credibility.

Surprising fall in inflation

Although credibility may have helped somewhat, the sharp fall in inflation (exceeding the PTA requirements) was largely unexpected. As the Bank's forecast and the survey measures show, both the central bank and the public seriously underpredicted the decline in inflation in 1991, 1992, and early 1993, indicating that the actual inflation decline "led" the fall in inflation expectations. Figure 2 shows these prediction errors (CPI inflation less expectations).

By early 1993, however, forecast and expected inflation measures started tracking actual inflation developments more closely. And it appears that the economy settled down to a lower equilibrium inflation rate, in the sense that expected and actual inflation were consistent with each other, in line with the PTA target. Lower expected inflation associated with newfound credibility of the central bank following the 1989 Act did not seemingly cause the decline in inflation. But once inflation fell, inflation expectations gradually followed suit.

Figure 2
Inflation Forecast and Expectation Errors in New Zealand
CPI Inflation Less Expectations

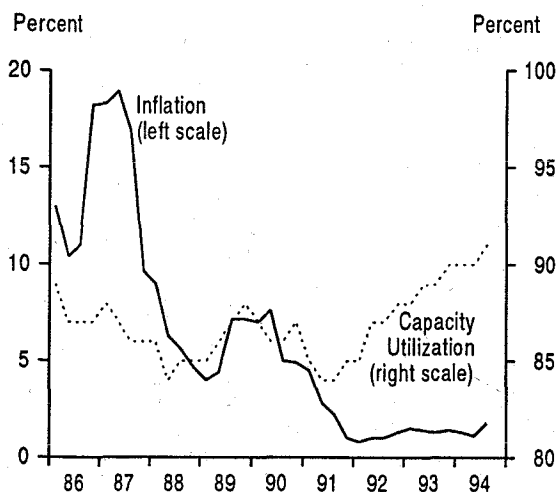


Output loss and disinflation

If not credibility, what caused the fall in inflation? Unemployment in New Zealand stood around 7 percent in early 1990 when the Act was implemented. It rose rapidly in subsequent months, peaking at about 11 percent in the third quarter of 1991—a rise of 4 percentage points in little more than a year. Similarly, economy-wide capacity utilization fell from 87.2 percent in early 1990 to 83.7 percent in the third quarter of 1991.

The decline in inflation mirrored the fall in capacity utilization and the rise in unemployment, suggesting that the deep recession in New Zealand led to the moderation in wages and prices. This is consistent with prior episodes, suggesting a link between short-run movements in economic activity and the rate of inflation (known as the short-term Phillips curve). The measures of capacity utilization (right-hand scale) and inflation (left-hand scale), in Figure 3, show that disinflation in 1990–1991 follows a pattern similar to earlier episodes of declining capacity utilization and weakness in the economy.

Figure 3
Inflation and Capacity Utilization



Credible at last?

The evidence surveyed here suggests that central bank credibility played only a secondary role in lowering inflation in New Zealand. Rather, it appears that the weak economy was primarily responsible, and the decline in inflation then fed through to lower inflation expectations over a period of several years. This fits the conventional picture of a disinflation process, except that in this instance the central bank did not anticipate such a sharp recession. The economic downturn was partly attributable to tight monetary policy, but domestic structural reforms and weak international demand conditions also played a role. An interesting feature of Figure 3, however, is that capacity utilization has increased dramatically over the past three years, from 84 to almost 91 percent, without a surge of inflation.


Does this mean that “credibility,” though earned by delivering on low inflation but perhaps strengthened by institutional change associated with the 1989 Act, may now be relied upon to moderate future inflation? Clearly, this would be a very favorable and hoped-for development. In the meantime, the RBNZ tightened monetary conditions, raising interest rates substantially during the course of last year to dampen inflation pressures.

Nonetheless, the RBNZ monetary policy statement issued last December forecast almost 2 percent “underlying” inflation (at the top of the PTA target) for 1995. The unadjusted consumer price index, which includes some one-time price level effects not part of the underlying rate, was forecast to rise by over 3 percent. Keeping expected inflation from rising, and maintaining the PTA, will be difficult under these circumstances without slowing the economy substantially. Successfully doing so would indeed be a triumph of central bank credibility over the historical link between economic activity and inflation in New Zealand.

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