Remarks by David Dodge Governor of the Bank of Canada to a Conference on the occasion of the 80th anniversary of the Banco de Mexico Mexico City, Mexico 14 November 2005

Inflation Targeting in Canada: Design, Lessons, and Challenges

Today, I want to share with all of you Canada's perspective on the design of an inflation-targeting system, some of the lessons we have learned over almost 15 years of experience with explicit inflation targets, and some of the challenges that remain. This topic is timely, because the Bank of Canada's inflation-targeting agreement with the Canadian government is up for renewal next year, and I am pleased to note that, earlier today, the Government announced its intention to renew our agreement for another five years. At the Bank, we are always reflecting on our framework; deciding what works well and what we can improve. My intention today is to spend relatively less time on history and, as is fitting for central bankers, to be more forward looking in terms of the issues that we continue to face as we refine our inflation-targeting regime.

Our Framework

Canada's history with inflation targeting began in 1991 with an agreement between the Bank of Canada and the federal government that set out a series of targets for reducing inflation. This agreement has since been renewed three times. And since the end of 1995, our target for the annual rate of total consumer price inflation has been the 2 per cent midpoint of a 1 to 3 per cent range.

Let me emphasize four points about our framework. First, the Bank of Canada and the Government of Canada have agreed that the best contribution that monetary policy can make to sustained economic growth and high employment over the medium term is to keep inflation low, stable, and predictable. Inflation targeting is viewed not as an end in itself, but as a means to achieving solid growth in output and employment.

The second point is that we operate in a symmetric way, and we make it clear to Canadians that we do so. We are just as concerned about inflation coming in <u>below</u> or <u>above</u> target. So our framework helps us to avoid both deflation and high inflation. When a shock—positive or negative—hits the economy, the Bank of Canada will respond accordingly. Paying close attention to signs that inflation is moving away from the target promotes timely action in response to shocks.

The third point I want to stress is that having an inflation target as an anchor is very helpful in terms of the Bank's accountability. If inflation persistently

deviates from the target, we are committed to explaining the reasons, what we will do to return it to target, and how long we expect the process to take.

Finally, inflation targeting has helped the Bank in its efforts to make its monetary policy more transparent. This is important, as we have found that monetary policy is more effective when people and markets understand what we are doing and why. We have also learned that effective communication is a crucial part of a successful monetary policy framework.

Our Experience

Now let me quickly turn to our record with inflation targeting. As we look at inflation and economic growth in Canada since 1991, it is quite clear that the benefits we had hoped would come from inflation targeting have, in fact, materialized. We expected inflation to become more stable under a targeting framework—and it did so, sooner than we had anticipated. We expected our credibility to increase and inflation expectations to become well anchored under targeting—and this has also happened. Indeed, short-term expectations quickly became anchored to our target, although longer-term expectations took a bit more time to fall in line.

Since we settled on a 2 per cent target for inflation at the end of 1995, actual inflation has averaged very close to 2 per cent. And it has remained within the 1 to 3 per cent target range, with only rare exceptions. Our experience has been that, with a clear inflation target and with well-anchored expectations, large relative price movements have only a one-time effect on the general price level and do not feed into ongoing inflation.

We also thought that inflation targeting would help the economy to avoid the exaggerated "boom-bust" cycles of previous decades—and it has. The business cycle is still with us, but output volatility has diminished. By maintaining inflation close to the target, monetary policy helps to keep the economy operating near its potential. In this way, inflation targeting has also been successful as a macroeconomic stabilizer.

Finally, and very importantly, our transparent framework has allowed markets and analysts to better predict how we will react to different economic outcomes. I would add that within the Bank, too, focusing on inflation brought increased discipline and clarity to our monetary policy deliberations.

The Future of Inflation Targeting

Let me now turn to the future of inflation targeting in Canada and some of the issues we are currently looking at. As I said at the beginning, our agreement with the federal government is up for renewal in 2006. So it is a good time to think about those elements of our framework that we would not want to change and other areas where changes might be considered.

First of all, I can tell you that we are unlikely to change the choice of the total consumer price index (CPI) as our target. The CPI may not be a perfect measure of

inflation, but it is widely understood, and it is the measure of inflation most familiar to Canadians. Choosing a well-known indicator as a target makes it easier to explain our actions and to be accountable. However, as you know, short-run movements in the total CPI are often caused by fluctuations in the prices of particularly volatile components of the index. Since the effects of monetary policy actions on inflation are spread over longer periods of time, it makes no sense to respond to very short-run fluctuations in the CPI that will have disappeared by the time those actions take effect.

This is why we are likely to continue to operate with a point target within a range. While we emphasize the 2 per cent point target, we also have a target band of 1 to 3 per cent, partly to take into account the inherent volatility in the prices of some of the components of the CPI basket, and partly because monetary policy operates with long and variable lags. Trying to move too quickly back to target could lead to instability in our operational instrument, which would then lead to greater output instability. Furthermore, measured inflation can itself be volatile as specific prices adjust. And so the range provides a measure of the normal variation in inflation that Canadians can expect to see. But, to be clear, the range does <u>not</u> represent a zone of indifference—we <u>do</u>, in fact, aim at the 2 per cent target.

There are, however, questions about our framework that we continue to explore. We examined many of these at a conference hosted by the Bank of Canada earlier this year. Let me go into some of them in a bit more detail.

First of all, is 2 per cent the right target? When we last renewed the inflation agreement in 2001, we looked closely at this issue. At the time, our research could not convincingly demonstrate that the benefits of moving to a lower target would outweigh the costs. More recent research, while still inconclusive, provided a little more support for a lower target. Of course, we continue to look at this question, but the evidence will have to be quite compelling before we would change our target.

Another issue that we continue to examine is whether we should target the price level rather than the inflation rate. While, in theory, there are benefits to having greater certainty about the price level over the longer term, analytically and empirically it has not been possible to provide a conclusive assessment of the costs and benefits of switching from targeting inflation to targeting the price level. While there are concerns that if we target the price level over too short a period of time there could be increased output volatility, recent research suggests that a price-level target could, in fact, help to stabilize output. We are still working at building better methods to examine these questions, and we will continue to look at new evidence as it becomes available.

As I mentioned earlier, Canada's inflation rate has averaged very close to our target. Had the inflation rate been consistently and exactly 2 per cent over the 10 years since we settled on that figure as our target, the total CPI level would have grown from 102.8 in December 1994 to 127.4 in September of this year. The actual price level for that month was 129.1—a minimal difference. But it is conceivable that at the

time of a subsequent renewal of our inflation-targeting agreement, the price level might have diverged quite significantly from where it would have been had we always hit the 2 per cent target exactly. So it might be worthwhile to explore an idea that is a variation on price-level targeting. Such an idea would involve a pre-announced policy whereby the inflation target would be adjusted to redress any previous drift in the price level relative to the 2 per cent target. This is a theoretical question that needs further study, and my discussion today barely scratches the surface. But the goal of such a system would be to bring the CPI to a level that would represent 2 per cent inflation, on average, over a very long period.

We are also looking at other issues related to the way the Bank should react to various kinds of shocks, and whether we should adjust the existing 18- to 24-month time frame for bringing inflation back to the target. After 15 years of experience, it is worth considering whether this time frame is still appropriate for reacting to every type of shock.

One type of shock that we have to consider is a major movement in asset prices. There is little evidence in the literature that central banks should respond directly to asset prices. For example, research presented at a recent Bank of Canada conference suggests that the gains—in terms of reduced output and inflation volatility—that come from reacting directly to equity prices are, at best, very small.

Several open questions remain concerning asset-price movements and monetary policy, and research here is a priority for the Bank. In particular, we are looking for answers to these questions: Are there ways in which asset prices can give central banks reliable information about price pressures beyond the policy horizon? If so, what should be done about it? Would it ever be appropriate to <u>lengthen</u> the time horizon for returning inflation to the target in the face of certain asset-price shocks?

Similar questions about lengthening the time horizon for monetary policy may apply to exchange rate shocks. Globalization appears to have changed the way in which economies adjust to movements in exchange rates. Here, I am referring both to the adjustment of real economic activity, as well as to the slower direct pass-through of exchange rate movements to prices.

But there are also reasons to consider <u>shortening</u> our time horizon. For example, we have seen evidence that inflation has become less persistent under inflation targeting, because we have successfully established a clear anchor for inflation expectations. So, a shorter time horizon may be appropriate when dealing with demand shocks.

Given the success we have had to date in dealing with various shocks within an 18- to 24-month horizon, we should not change that horizon lightly. But as inflation targeting evolves, it is clear that we need to think hard about the appropriate time horizon, as well as about some of the other issues I discussed today.

Conclusion

I want to conclude by emphasizing a few key points. Despite a successful track record, I am not claiming that we have reached the end of monetary policy history. There is always room for improvements in our inflation-targeting regime. But despite the issues I've raised, there is no doubt in my mind that, fundamentally, inflation targeting is the right monetary policy framework for Canada. Through our symmetric approach of keeping inflation low, stable, and predictable, we have laid the groundwork for solid, sustainable growth in output and employment. With inflation targeting, our policy is more focused, our communications are clearer, and inflation expectations are more solidly anchored.

It is particularly important at this time, when we are facing large movements in relative prices and in the terms of trade, that central banks have an anchor to keep monetary policy focused. From my perspective, inflation targeting is the best anchor we've seen.