

## Bank of Canada's mandate renewed Why the option to raise the inflation target was not retained

Since 1991, the Bank of Canada (BoC) has set its monetary policy decisions based on an inflation target, which is measured by the annual change in the total consumer price index (CPI). In the early 1990s, inflation was higher than it is today and cutting inflation was the primary objective. As of 1995, the objective was to keep inflation at between 1 and 3% with a median target of 2%. The Canadian government together with the BoC renewed this target in 1998, 2001, 2006 and in 2011. A decision to renew this target was made on October 24.

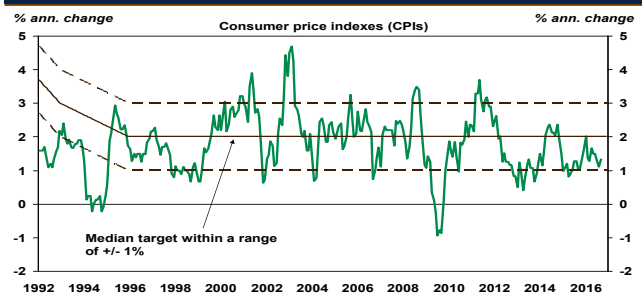
Before this decision was made, the BoC had suggested that the target might be raised, mostly to offset the impact of the neutral interest rate cut. It had said, however, that the bar was set high for such a change. This Economic Viewpoint looks at the factors that led the BoC to consider this change and the elements that were behind maintaining the status quo. Among other things, the decision made on October 24 could be viewed as a sign of confidence in non-conventional monetary policy tools.

### A PROVEN RECIPE

A monetary policy that is based on an inflation target brings a fair share of economic benefits. Inflation that is low, stable and predictable allows Canadians to better make out price differences for different products, which helps them make more insightful consumption and investment decisions. It also helps protect the purchasing power of those whose incomes do not rise in step with price increases. On a financial level, interest rates over the medium and long term are generally lower in an inflation-targeting regime, as this means fewer concerns about future price movements. Lastly, a low, stable and predictable inflation rate is self-reinforcing, since it influences inflation expectations. When businesses and individuals are confident that the inflation target will be maintained over the medium and long term, they are less likely to react to short-term price fluctuations.

In analyzing Canadian inflation data since the 1990s, we can see that the BoC has clearly fulfilled its mandate. Rarely has inflation exceeded 3%, and rarely has it fallen below 1%. On average, inflation has remained close to its median target of 2% (graph 1).

Graph 1 Targeting inflation in Canada



Sources: Statistics Canada and Desjardins, Economic Studies

### THE REASONS FOR A 2% TARGET

In view of the benefits of low, stable and predictable inflation, we could think that a 0% inflation target would be optimal. Several arguments could be made in favour of keeping inflation at a slightly positive level. Among such arguments is the difficulty in measuring inflation accurately, downward wage rigidity and the issue of the lower bound of interest rates.

Several studies have shown an estimation bias in the consumer price index. The last update published by the BoC about this dates from 2012 and showed a CPI overestimation

of about 0.5% per year for the period of 2005-2011.<sup>1</sup> This bias would be attributable to poorly captured changes in consumption habits, changes in traffic at different retail outlets and a poor accounting of product quality. Considering this bias, targeting a 2% rate of inflation would be more like targeting a rate of 1.5%. That the methodology used to calculate the CPI has changed since 2012 is of note. For example, the benchmark consumption basket is updated more often, which could have trimmed the bias tied to changes in consumption habits, including the introduction of new products.

With regard to downward wage rigidity, targeting an inflation rate that is too low could hinder the adjustments that would spur job creation and boost the economy. Real salary decreases may be required when the unemployment rate is high and the economy is not running at full capacity. This does not mean that nominal salaries, which include the effect of inflation, should fall. It is generally recognized that workers have little inclination to see their wages cut. However, they seem to be more open to accepting salary growth that runs below expected inflation, which equates to a reduced salary in real terms. With an annual inflation rate converging closer to 2%, real salaries fall as soon as nominal salaries rise by less than 2%.

The most restrictive element in lowering the inflation target is the issue of the lower bound of interest rates. The central banks' inability to reduce their key interest rates below a certain level may prevent them from providing enough economic stimulus. Some flexibility can be achieved by analyzing the problem from the viewpoint of real interest rates, or the nominal interest rates minus expected inflation. Higher inflation expectations weaken real interest rates, which can even push them deep into negative territory. In an inflation-targeting regime, inflation expectations tend to converge toward the target if the central bank is credible. Selecting a higher target would therefore increase the monetary authorities' wiggle room to cut real interest rates and kick-start the economy if need be.

## A NEW PROBLEM WITH THE DROP OF THE NEUTRAL INTEREST RATE

The various arguments in favour of an inflation rate above 0% have prompted the BoC to maintain a 2% median target since 1995. Several other central banks have adopted a similar target (table 1). However, a new issue has been raised with the drop of the neutral interest rate: it increases the likelihood of reaching the lower bound of interest rates.

**Table 1 – Inflation targets in advanced countries**

Countries and monetary zones	Inflation targets
Canada	2% +/- 1%
United States	2%
Euro zone	< 2%
United Kingdom	2%
Sweden	2%
Norway	2.5%
Switzerland	< 2%
Iceland	2.5% +/- 1.5%
Japan	2%
South Korea	2%
Australia	2-3%
New Zealand	1-3%

Sources: Several central banks and Desjardins, Economic Studies

The neutral interest rate is the overnight rate we should see when economic activity is humming at full potential and inflation is at its target, once all the cyclical shocks have settled. The BoC estimates that the real neutral interest is now between 0.75 and 1.75%, meaning between 2.75 and 3.75% with target inflation added.<sup>2</sup> The previous estimate was about 3% in real terms and close to 5% with target inflation added. The decrease in average economic growth is cited as one the reasons for the neutral rate cut. The increase in the global savings rate is also singled out.

Based on the estimates conducted by BoC researchers, the probability that the overnight rate will be reduced to 0% has jumped from near 5% to close to 15% due to the neutral rate cut.<sup>3</sup> Increasing the inflation target would slash this probability.

<sup>1</sup> Patrick Sabourin, "Measurement Bias in the Canadian Consumer Price Index: An Update," Bank of Canada Review, Summer 2012.

<sup>2</sup> Bank of Canada, *Monetary Policy Report*, April 2016, page 16. Rhys R. Mendes, *The Neutral Rate of Interest in Canada*, Discussion Paper 2014-5, Bank of Canada, September 2014.

<sup>3</sup> Oleksiy Kryvtsov and Rhys R. Mendes, *The Optimal Level of the Inflation Target: A Selective Review of the Literature and Outstanding Issues*, Discussion Paper 2015-8, Bank of Canada, October 2015.

## THE INTERVENTION LIMIT HAS BEEN PUSHED LOWER

An overnight rate between 0% and 0.25% has long been considered as the bottom intervention limit. However, given that many central banks reached that limit after the financial crisis of 2008-2009, new tools have been adopted to keep easing monetary conditions. Such tools include forward guidance, massive asset purchases and the adoption of negative interest rates.

Forward guidance is information that central banks provide about the future path of key interest rates. Guidance can be formulated in various ways. For example, the horizon of time during which interest rates are expected to remain low can be clearly defined, or not, and conditions or thresholds based on certain variables can be added to the wording. This tool is generally effective for changing expectations about key interest rates and, through a ricochet effect, for influencing longer-term interest rates. It would also help improve the predictability of short-term yields over the near term, as well as affect the sensitivity of financial variables to economic news.<sup>4</sup>

Massive purchases of assets, also referred to as quantitative easing (QE), are another way of taking action on interest rates over the longer term. The term premium tends to decrease when this tool is used. The traditional monetary policy channels are also called into play. Asset purchases increase the quantity of lendable funds, thereby encouraging credit. They also have an influence on asset prices, and thus can have a positive effect on wealth. Lastly, the exchange rate tends to depreciate when a central bank uses QE.

Negative interest rates are a more direct way to lower the intervention limit of central banks. Experience has shown that financial markets can adapt quite easily to negative rates. The transmission to the economy takes place through the same channels as traditional rate cuts.

## STILL, THERE ARE SOME RESERVATIONS ABOUT THESE NEW TOOLS

If we could keep lowering key interest rates into negative territory indefinitely, the problem of the lower bound would simply not exist. In a speech given in December 2015, Stephen Poloz indicated that the limit for the overnight rate was around -0.5%.<sup>5</sup> More details about that threshold were provided in an article published in the *Bank of Canada Review*, in the spring of 2016.<sup>6</sup> That limit stemmed, essentially, from the risk that depositors would massively convert their assets into cash in order to avoid paying interest.

Doubts have also been raised about the effectiveness of pushing interest rates into negative territory, since it appears to fall short of that associated with similar rate cuts in positive territory.<sup>7</sup> This could be partly due to a weaker pass-through to retail interest rates. Financial institutions in particular could worry about losing customers, if they were to go too far in lowering interest rates on savings.

Other non-traditional tools are not without flaws. A paper published by the BoC expresses reservations about the use of QE.<sup>8</sup> In particular, the effect on the term premium could be weaker for a small, open economy like Canada. In general, it would also seem that the higher the amounts involved, the less effective this tool becomes. This does not take the costs into account. Applying measures that keep interest rates extremely low for a very long time can lead to problems, in particular for savers, pension funds and life insurance companies. As for the financial markets, they can face liquidity problems if too many assets of the same category are bought up by the central bank. Governments can also suffer over the long term, if the ease with which they can issue debt encourages them to become less disciplined with their budgets.

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<sup>4</sup> Karyne Charbonneau and Lori Rennison, *Forward Guidance at the Effective Lower Bound: International Experience*, Staff Discussion Paper 2015-15, Bank of Canada, November 2015.

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<sup>5</sup> Stephen Poloz, *Prudent Preparation: The Evolution of Unconventional Monetary Policies*, Address to the Empire Club of Canada, Toronto, December 8, 2015.

<sup>6</sup> Jonathan Witmer and Jing Yang, "Estimating Canada's Effective Lower Bound," *Bank of Canada Review*, spring 2016.

<sup>7</sup> Harriet Jackson, *The International Experience with Negative Policy Rates*, Staff Discussion Paper 2015-13, Bank of Canada, November 2015.

<sup>8</sup> Abeer Reza, Erice Santor and Lena Suchanek, *Quantitative Easing as a Policy Tool Under the Effective Lower Bound*, Staff Discussion Paper 2015-14, Bank of Canada, November 2015.



### **THE BAR FOR INSTITUTING A CHANGE WAS HIGH**

Negative interest rates and the other non-traditional tools certainly give the BoC more freedom of action, but they are not perfect substitutes for the traditional monetary policy framework. Yet, the BoC believes that they can make up for a good chunk of the freedom of action lost through the significant decline of the neutral rate.

Raising the inflation target also meant sacrificing the economic advantages of weaker inflation. One interesting aspect that was analyzed by the BoC is the redistribution effect of raising the inflation target. Raising the target could have resulted in a transfer of wealth that would have penalized households.<sup>9</sup> There could also be concerns about adopting a new target. How would the markets have reacted? Would long-term interest rates have adjusted to the hike to reflect higher expectations of inflation? On the contrary, expectations could have remained unchanged, forcing the BoC to further ease its monetary policy. The long-term credibility of the inflation target could also have been jeopardized.

The BoC clearly indicated that the bar for moving forward with a change was high. Despite the advantages of a higher inflation target, it was not worth it. The next renewal of the BoC's mandate is scheduled for 2021. In the meantime, more knowledge will be gained and the option of raising the target might become even more attractive. In particular, that could happen if confidence in non-traditional monetary policy tools were to wane.

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<sup>9</sup> Bank of Canada, *Renewal of the Inflation-Control Target*, Background information, October 2016, pages 15-17