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GLOBAL ECONOMICS

INFLATION REPORT

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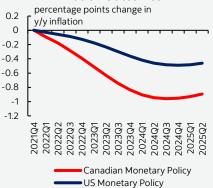
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Chart 1

Impact of Monetary Policy on Canadian Headline Inflation Outcomes



Sources: Scotiabank Economics, Statistics Canada.

How Much of an Impact is the BoC Having on Inflation?

- While central banks the world over have raised interest rates considerably in an
 attempt to slow economic activity and bring inflation back to targets, much of the
 decline in Canadian headline inflation so far is linked to factors well beyond the
 influence of Canadian policymakers. These include the decline in international oil
 prices, the normalization of global supply chains and a decline in US inflation.
- Nevertheless, the Bank of Canada's actions have had meaningful impacts on the
 inflation fight. We estimate the Bank of Canada's policies have shaved about
 0.6 percentage points from the level of inflation so far, which will rise over time
 to account for about 1 percentage point by the end of 2024 given the lags in the
 transmission of monetary policy.
- Moreover, given how US inflation and growth dynamics impact Canada, we find
 rate hikes by the Federal Reserve have so far shaved an additional 0.2 percentage
 points from Canadian inflation, which will build through 2025 to account for
 about 0.5 percentage points.

Inflation has bedevilled policymakers across the globe over the last year. Many central banks, including our own, have raised interest rates considerably in an attempt to engineer a return of inflation to target. This note examines the impact of these rate increases on Canadian inflation so far and the likely impact going forward. Not surprisingly, much of the decline so far in headline inflation is linked to factors well beyond the influence of Canadian policymakers. Nevertheless, the Bank of Canada's efforts are paying off. We estimate that BoC policies have shaved about 0.6 percentage points from the level of inflation so far. Given the lags of monetary policy, this impact will rise over time and account for about 1 percentage point of the total decline in inflation by the end of 2024. This may not seem meaningful, but it represents the difference between a 3% inflation rate in 2025 and 2%. Moreover, efforts by the Federal Reserve to tame inflation in the United States have also supported the Bank of Canada's efforts, helping to lower Canadian inflation by an additional 0.2 percentage points so far, with slightly more than a doubling of that impact expected over the coming year.

Headline Canadian inflation has fallen a lot. From a peak of 8.1% in June 2022, inflation now stands at 3.3%. This decline is attributable to a broad range of factors which we assess empirically using our macroeconomic model of the Canadian economy. Our approach to modelling inflation is rich, in that it includes the output gap, oil prices, US inflation, the exchange rate, unit labour costs, a measure of supply chain pressure and internally generated inflation expectations. Topping the list of individual factors is the decline in international oil prices over this time, but the normalization of global supply chains and a decline in US inflation have also been key drivers. The output gap, a key driver of inflation dynamics in Canada, has so far had relatively little impact in bringing inflation down given that the impact of pent-up demand, which pushes up excess demand, has partly offset the depressing impact of monetary policy on the output gap.

To estimate the impact of monetary policy on inflation to date, we simulate our model from 2021Q4 using two different paths of the monetary policy rate: the realized path of monetary policy and our expectations for that path going forward beyond today, and the policy rate path of our forecast made in 2021Q3, which did not foresee the massive rise in inflation to come and in which we assumed that the Bank of Canada would gradually raise its rate to a neutral setting through 2025. The difference in inflation performance between these two scenarios can be thought of as an estimate of the impact of the Bank of Canada's actions in response to the inflation surge.

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The results suggest that the Bank of Canada's actions have had a meaningful impact on inflation, with some qualifications. Chart 1 shows the impact to date and the impact going forward. As of 2023Q2, we estimate that Canadian monetary policy has shaved 0.6 percentage points from the level of inflation to date. While this may appear small relative to the total decline in inflation so far, this is a very large impact given the historical movements in inflation and the size of the inflation control band (of 1 to 3%). Moreover, as monetary policy operates with a lag, the impact will build going forward. At its peak, monetary policy will account for about a full percentage point of the decline in inflation. In other words, inflation in 2025 would be around 3% without the tightening we have seen so far (chart 2).

As US inflation and growth dynamics also feed into Canadian inflation and growth dynamics, US interest rate hikes have also helped reduce Canadian inflation. Using the same approach to identify the impact of monetary policy as we did for Canada, we find that rate hikes by the Federal Reserve have so far shaved an additional 0.2 percentage points from Canadian inflation and we expect that impact to build through 2025 for a maximal impact of 0.5 percentage points on the level of inflation. At peak impact, US monetary policy will have reduced Canadian inflation by about half the amount the Bank of Canada will have achieved.

Path of Canadian Headline Inflation Under Different Monetary Policy Scenarios 10 y/y inflation, % 6 4 2 0

Chart 2

In interpreting these results, it is important to keep in mind that changes in interest rates only have modest impacts on the output gap and that the output gap has only modest impacts on inflation. It takes big moves in interest rates to achieve reasonably modest impacts on inflation.

These results are obviously subject to some uncertainty. Our model is an empirical and estimated representation of the Canadian economy, but it cannot capture all of the intricacies of the situation we have experienced in the last 2 years. For instance, it could very well be that inflation expectations have responded more, or less, to the Bank of Canada communications and policy than we estimate based on historical relations. This could have a big influence on the outcome. It could also be that the Bank of Canada has lost some credibility over time given the distance of inflation from target. This would mean a weakening of the transmission mechanism, blunting the impact of monetary policy on the economy and inflation, or perhaps requiring more aggressive rate policies to achieve the same outcome.

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