



BANK OF CANADA
BANQUE DU CANADA

Remarks by Sharon Kozicki
Deputy Governor
Norges Bank Monetary Policy
Mandate Conference
March 2, 2026
Oslo, Norway

Canada's monetary policy framework in a world of supply-driven trade-offs

Introduction

Thank you for the kind introduction. It's a pleasure to be here in Oslo to discuss monetary policy frameworks.

The Bank of Canada's framework is a joint agreement with the federal government that is renewed every five years. The next renewal is coming up later this year. So I am delighted to participate in this event on central bank mandates at a time when ours is top of mind.

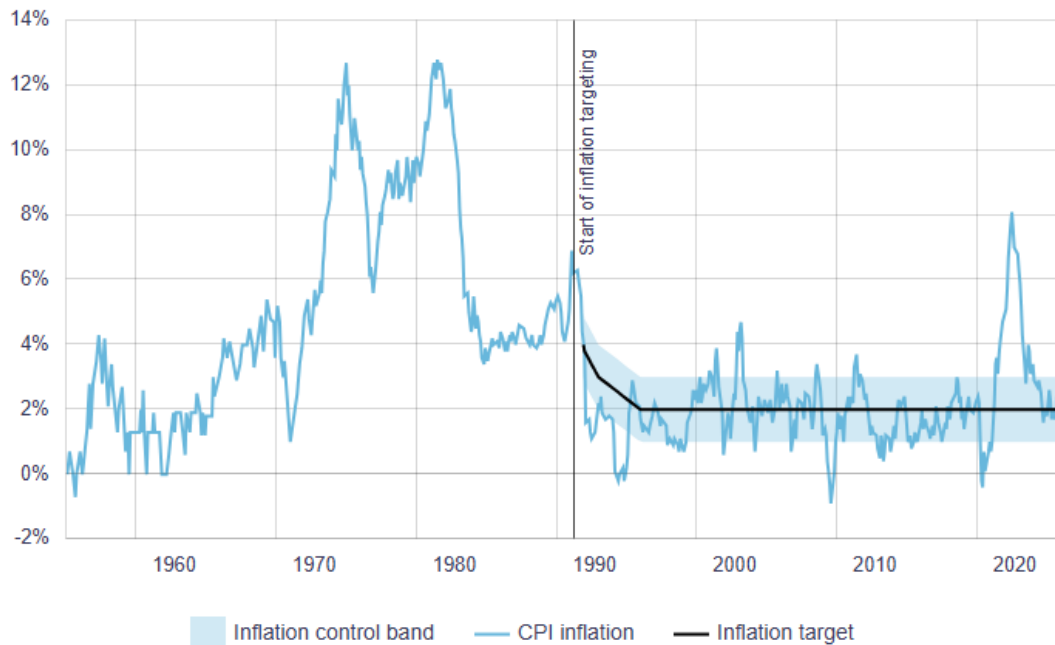
Our framework focuses on delivering low and stable inflation for Canadians. It sets an inflation target of 2%, at the midpoint of a 1% to 3% band. The objective is clear: return inflation to the target over time. The framework provides some flexibility for how long it could take to return inflation to target, especially when it has stayed well within the band.

This kind of flexible inflation targeting has been very successful. In the 25 years before the COVID-19 pandemic, inflation in Canada averaged very close to 2%. And it was inside the band more than 80% of the time (**Chart 1**).

I would like to thank Stephen Murchison, Matteo Cacciatore and Stefano Gnocchi for their help in preparing this speech.

Not for publication before March 2, 2026
9 am Eastern Time

Chart 1: Inflation targeting has helped keep inflation in Canada low and stable



Sources: Statistics Canada and Bank of Canada calculations
Last observation: January 2026

This track record is important. The pandemic and its aftermath tested our framework like nothing had before. But the credibility our target had earned over the previous 25 years meant that we never lost our anchor. Even after inflation reached its highest level in 40 years—topping 8% in mid-2022—surveys showed that Canadians still expected we would bring it back down to the 2% target. And we did.

Given this success, it may not surprise you that the level of our target isn't on the table this time. We're confident 2% is still the best target for Canada.

But the world has changed a lot over the past five years. We know that many Canadians feel they've been hit by one shock after another, with no time to find their footing. The pandemic was disorienting, and the high inflation and interest rates that followed were painful. We were able to bring inflation down, although some people were struggling with a higher cost of living. Then US tariffs hit. And workers in the most-affected sectors started to worry about losing their jobs.

It's the Bank's responsibility to ensure low and stable inflation in any circumstance. Revisiting our framework gives us a chance to assess whether we are well equipped for the challenges of the future. And since our last renewal, supply-side developments have become more important for inflation.

Let me explain what I mean when I say supply-side developments.

During the pandemic, we saw major disruptions in supply chains, which caused delayed deliveries and shortages of many goods. Now, big forces like artificial intelligence (AI) and the reconfiguration of global trade are reshaping the global

economy. Population aging is also an important force in Canada, as it is in many countries. The risks from geopolitical tensions are rising, and so are the risks from more frequent extreme weather events.

These forces mostly affect the supply side of the economy—factors that affect production costs, the efficient use of capital and labour and, ultimately, the availability of goods and services.

Supply-side developments can lead to trade-offs for monetary policy. And sometimes, these developments can result in a combination of a weak economy and high inflation. In such cases, raising the policy rate to restrain inflation tends to weaken the economy further. Lowering rates could support the economy but won't help bring inflation back down to target. Understandably, Canadians don't particularly like either of these options.

That's the background. Here's what I'm going to talk about today. First, I'll expand on trade-offs and explain when we might use the flexibility in our framework, and when we wouldn't. Then, I'll discuss the factors we need to consider as we make our decisions, and the challenges we face when doing so. I'll finish by explaining how we are approaching these issues at the Bank.

A shift in the factors driving inflation

Let's start by looking at some economic history for Canada (**Chart 2**).

Chart 2: In recent years, excess supply with inflation above target has become more common

Inflation (deviation from 2%, in percentage points) and output gap (in percent)



Note: This chart presents historical estimates of the output gap in real time (without revisions). For each quarter, the value plotted is the estimate published when the national accounts data for that quarter first became available. Estimates from 2011Q3 onward are taken from the Bank of Canada's Monetary Policy Report for each quarter; earlier estimates come from Bank staff economic projections. CPI-trim is a measure of core inflation that excludes CPI components whose rates of change in a given month are located in the tails of the distribution of price changes. It also excludes the effect of indirect taxes. The values plotted reflect the data available at the time of publication of the January 2026 Report.

Sources: Statistics Canada and Bank of Canada calculations

Last observations: Real-time estimates, 1995–2019: 2019Q4; real-time estimates, 2020–25: 2025Q3

This chart shows our real-time views of the state of the economy and the level of core inflation relative to 2%. The data start in 1995, when the 2% target was established for consumer price index (CPI) inflation. I'm using a measure of core inflation in the chart because it's less volatile than CPI inflation.

Before the pandemic, the Canadian economy was typically in either excess supply with inflation below target or excess demand with inflation above target.

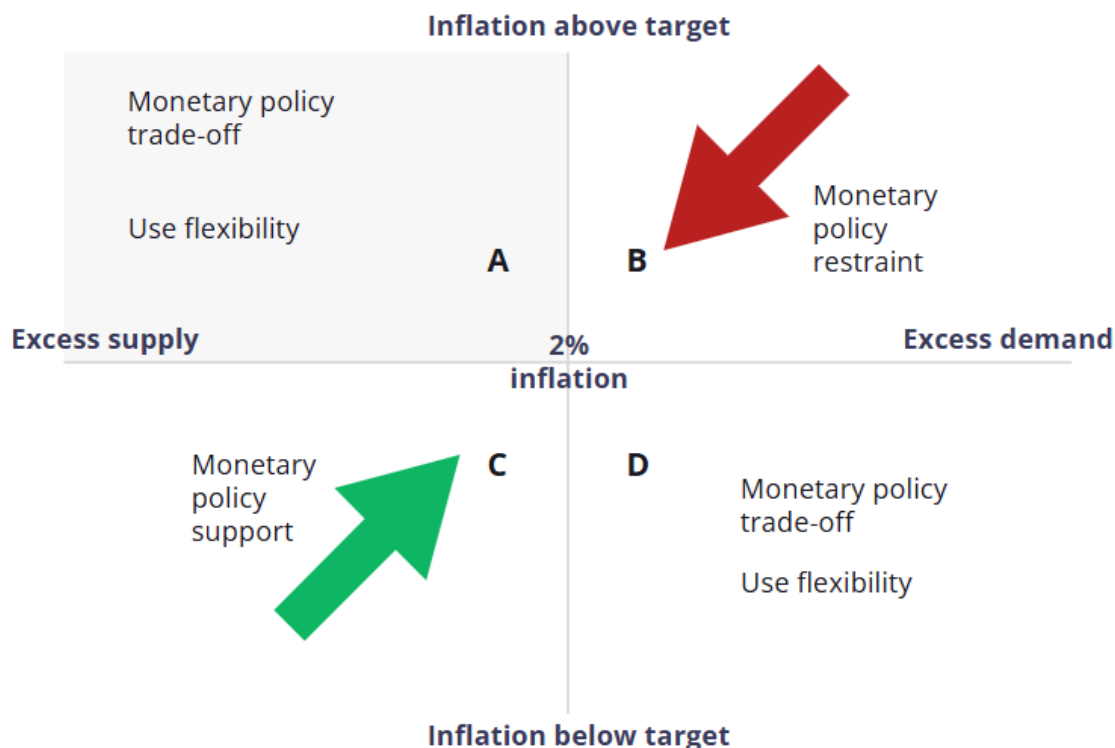
But since 2020, the story has changed: we have more frequently had excess supply—or economic weakness—with inflation above target.

The reason for this is that the factors driving inflation have shifted. As I mentioned, supply-side developments have become more important.¹

This matters for monetary policy.

¹ K. Kang, R. Sekkel, T. Taskin and J. Yang, "Decomposing Canadian inflation into its supply and demand driven components," Bank of Canada Staff Analytical Paper (forthcoming).

Figure 1: The state of the economy and inflation affects the stance of monetary policy



Put simply, the conduct of monetary policy depends on whether the economy is in excess demand or excess supply, and whether inflation is above or below target (**Figure 1**).

Take a look at quadrant B in this diagram. When demand is too strong and inflation is too high, we can see that policy restraint—or higher interest rates—cools the economy and helps bring inflation back down to our 2% target.

And quadrant C shows that when the economy is weak and inflation falls below target, policy stimulus—lower interest rates—boosts the economy and brings inflation back up.

These situations generally do not involve trade-offs between inflation and economic activity. However, that's not the case in the other quadrants: A and D.

We can think about supply shocks as being “good” or “bad.”

Good supply shocks boost the economy and put downward pressure on inflation, pushing the economy in the direction of quadrant D.

In quadrant D, inflation is below the target, and the economy is strong.² There is a policy trade-off: for instance, easing monetary policy will increase inflation by further strengthening the economy, but doing so risks increasing financial

² For a discussion about conducting policy in what I am referring to as quadrant D, where “good disinflation” can result from things like rising competition and higher productivity growth, see T. Macklem, [“Flexible inflation targeting and ‘good’ and ‘bad’ disinflation”](#) (speech to the John Molson School of Business at Concordia University, Montréal, Quebec, February 7, 2014).

imbalances, such as excessive household indebtedness.³

Then there is the opposite situation. Bad supply shocks push the economy in the direction of quadrant A. There, tightening monetary policy to bring down inflation will further weaken the economy. An easing of policy could support the economy, but it risks pushing inflation further from the target. This is an uncomfortable trade-off. And it's the situation we've been in more frequently in recent years.

From temporary supply shocks to structural change

Let's talk a bit more about what can lead to policy trade-offs.

As I mentioned, bad supply shocks push economic activity and prices in opposite directions.

One specific example from several years ago was the global shortage of computer chips. It weighed on the production of goods that use the chips as inputs, and it added to costs for a wide variety of products.

Extreme weather events are another example of bad supply shocks. Major droughts, floods and wildfires hurt economic activity even as they temporarily cause higher prices—especially for food and energy.⁴

Typically, the effects that supply shocks have on the economy and inflation are temporary, but they may persist for a while. And, at the same time, some prices may be affected permanently.

But sometimes supply-side developments involve structural change. Structural change is a transformation that can permanently alter the level of potential output—that's the amount an economy can produce without generating inflation. It can also change the overall makeup of the economy.

I'm not going to say much about structural change today because Governor Macklem gave a speech on it last month.⁵ But we are currently living through a period of structural change in Canada. The dramatic shift in US trade policy is rewiring global trade, including our trading relationships with the United States and other major partners. And the adoption of AI is beginning to transform how we work and live. These drivers of structural change could affect the types of goods and services we produce, the efficiency of production, the types of skills workers need and the productivity of workers.

When structural change is gradual, it is less likely to be a major topic of monetary policy discussions. But when structural change leads to large and rapid economic adjustments, it can have important consequences for inflation.

The bottom line is this: to prepare for the future, we need to understand the

³ See S. S. Poloz, "[Integrating financial stability into monetary policy](#)" (speech to the National Association for Business Economics, Washington, D.C., October 12, 2015).

⁴ T. Dahlhaus, "Climate change and monetary policy: Navigating physical risks and the low-carbon transition," Bank of Canada Staff Analytical Paper (forthcoming).

⁵ See T. Macklem, "[Structural change—Canada at a crossroads](#)" (speech to the Empire Club of Canada, Toronto, Ontario, February 5, 2026).

implications of a wide variety of supply-side developments.

Considerations when facing a trade-off

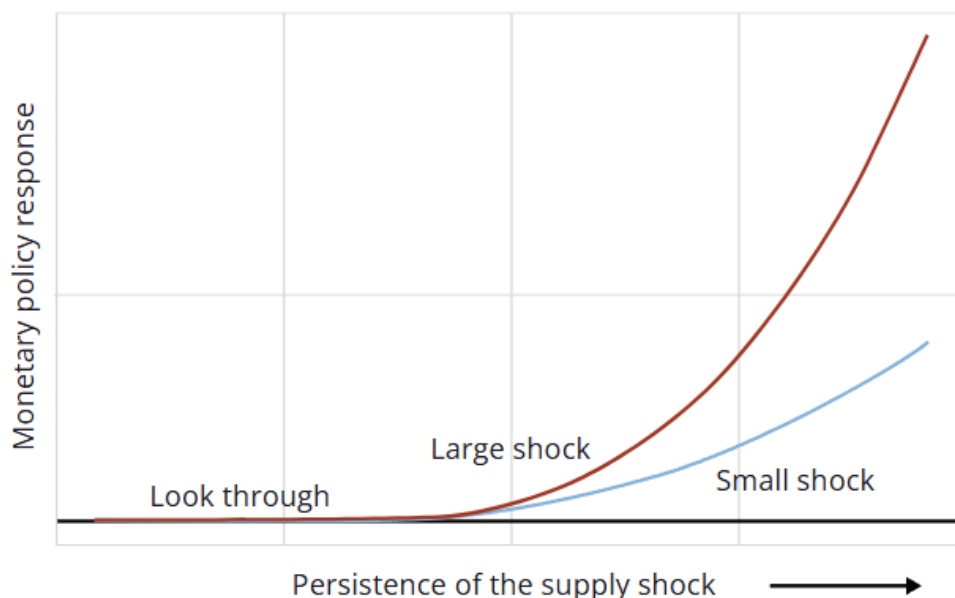
Let's go over some key considerations when taking monetary policy decisions in a world where supply-side developments dominate. I'll focus on the conduct of monetary policy when we are in quadrant A.

To be clear, I'll be talking generally about some results of the research we've been doing as part of our framework review. None of what I'm talking about today is related to our current policy deliberations.

How large and persistent are the likely impacts on inflation?

First, I'm going to talk about the size and persistence of the impacts of a supply shock on inflation (**Figure 2**).

Figure 2: Larger and more persistent supply shocks require a policy response



When a supply shock has small or short-lived effects on inflation, central banks tend to look through the impacts as they set monetary policy. When the economy is weak, they may be able to wait for inflation to return to target on its own.

But a look-through strategy has limits. Central banks generally *should* respond when the impacts of a shock on inflation are larger and more persistent.⁶

That means we need guardrails in place to help us choose the right path. We need the best analysis and intelligence so that we can effectively diagnose when we need to pivot and respond to an increase in inflation.

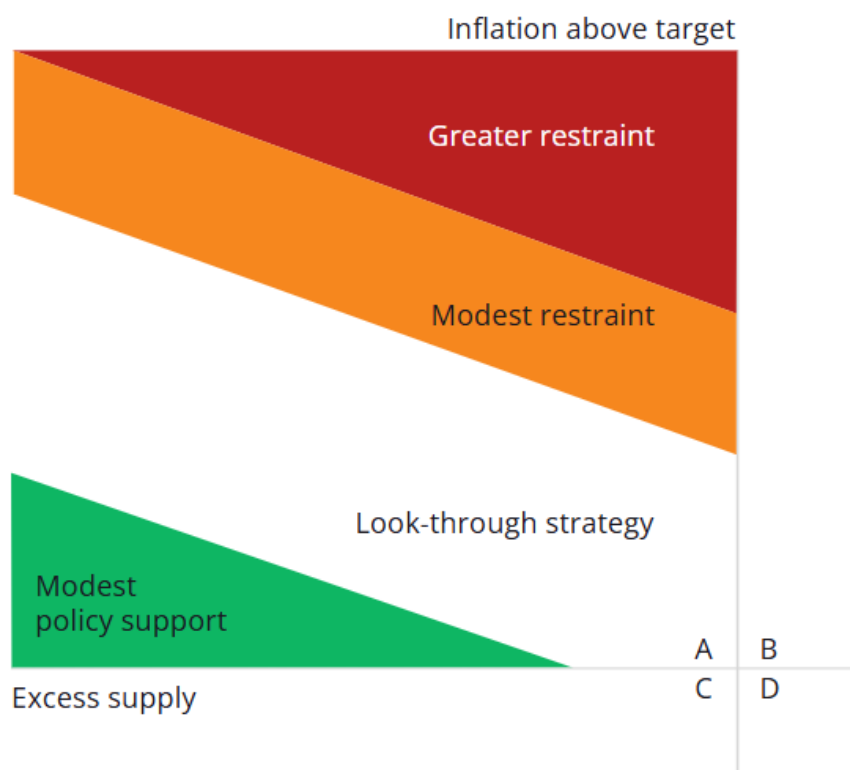
Many people may find it surprising or counterintuitive that, at times, monetary

⁶ In "Optimal policy with supply shocks of unknown persistence," a forthcoming Bank of Canada Staff Analytical Paper, S. Murchison shows that it is preferable to respond to supply shocks that have a larger and more persistent impact on inflation.

policy needs to be tightened even when the economy is weak. Yet that is exactly the difficult trade-off we sometimes face.

For a given level of above-target inflation, the required tightening may be more modest when the economy is weak than when it is in excess demand. But generally, when a supply shock is expected to have large or persistent impacts on inflation, some degree of policy restraint will be needed to bring inflation back to target (**Figure 3**).

Figure 3: Policy responses in quadrant A depend on the degree of excess supply and the strength of inflationary pressures



The policy response will depend on how much excess supply there is in the economy and how strong the inflationary pressures are. Sometimes, more forceful responses may be needed, such as in situations where inflation is more sensitive to the state of the economy. You can think of this as when the inflationary impacts of a shock are amplified. This could include times when the Phillips curve—which tracks the relationship between inflation and economic activity—is steeper, or when inflation expectations are unanchored.⁷ If policy

⁷ See P. Karadi, A. Nakov, G. Nuño Barrau, E. Pasten and D. Thaler, “Strike while the iron is hot: Optimal monetary policy with a nonlinear Phillips curve,” Bank for International Settlements Working Paper No. 1203 (August 2024). Also, in a forthcoming Bank of Canada Staff Analytical Paper, “Recent evidence on the resilience of flexible inflation targeting,” E. Briganti, W. Dong, O. Kostyshyna, S. Lee, F. Samson and R. Sekkel use a structural macroeconomic model to look at

doesn't respond when there is a meaningful risk of expectations becoming unanchored from the inflation target, an even greater response will be needed later. And this could lead to an even weaker economy.^{8, 9}

What is the nature of the supply shock and the inflation-output trade-off?

Another consideration is the nature of both the supply shock and the trade-off between inflation and output.

For example, when a supply shock raises costs sharply but has little negative impact on economic activity, we are more likely to tighten monetary policy. However, when a shock has less of an impact on inflation but weighs heavily on economic activity, we are less likely to tighten policy and might actually ease it.

Policy-makers should also assess whether the impact of the shock is broad-based, meaning it affects numerous sectors, or limited to a smaller share of the economy. This is especially relevant for supply shocks because they tend to affect fewer CPI components than demand shocks do. Monetary policy can't target one sector or product—food, energy, rent or anything else. With a blunt tool, bringing inflation down means tightening policy and slowing demand to reduce inflationary pressures across *all* CPI components.

All these considerations can affect the time frame and policy path for bringing inflation back to target.

The key challenge for monetary policy

So far, I've been talking about supply-side developments as if we know everything there is to know about what we're facing. Unfortunately, this isn't the case in practice.

The reality is we can face challenges in estimating whether we are in a state of excess supply or a state of excess demand. And we may be facing demand and supply shocks at the same time.

Moreover, getting a good read in real time on the ultimate size, persistence and nature of a shock is often extremely difficult—yet such assessments are especially important when facing a policy trade-off.

Consider the chart I showed you earlier with the dots.

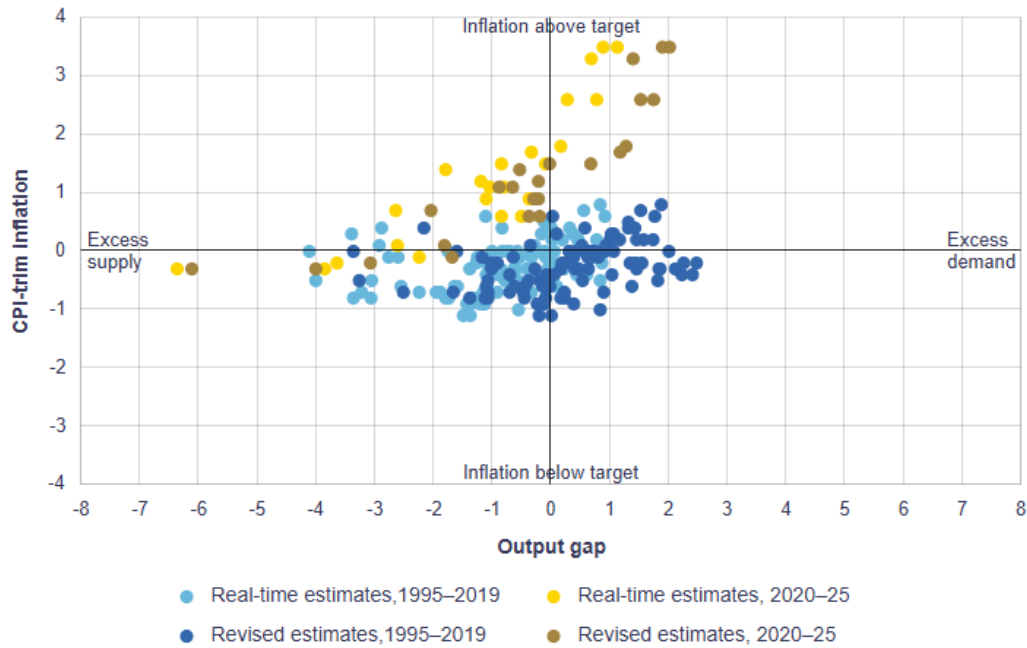
cases when larger shocks trigger mechanisms to make inflation more responsive to shocks. In general, there is less room for tolerating inflation fluctuations in these cases.

⁸ M. Cacciatore and S. Gnocchi, "A monetary policy framework for a volatile world," Bank of Canada Staff Analytical Paper (forthcoming).

⁹ The focus of my speech is quadrant A, characterized by excess supply. However, if a bad supply shock hits when the economy is in excess demand, the pass-through to consumer prices from higher costs may be larger and therefore require a larger policy response. See S. Murchison, "[Non-homothetic Preferences and the Demand Channel of Inflation](#)," Bank of Canada Staff Working Paper No. 2025-30 (November 2025) and M. Harding, J. Lindé and M. Trabandt, "Understanding post-COVID inflation dynamics," *Journal of Monetary Economics* 140, Supplement (2023): S101–S118.

Chart 3: Our views on the economy evolve as we receive more information

Inflation (deviation from 2%, in percentage points) and output gap (in percent)



Note: This chart presents historical estimates of the output gap (both in real time and with revisions). For each quarter, the value plotted is the estimate published when the national accounts data for that quarter first became available. Estimates from 2011Q3 onward are taken from the Bank of Canada's Monetary Policy Report for each quarter; earlier estimates come from Bank staff economic projections. CPI-trim is a measure of core inflation that excludes CPI components whose rates of change in a given month are located in the tails of the distribution of price changes. It also excludes the effect of indirect taxes. The values plotted reflect the data available at the time of publication of the January 2026 Report.

Sources: Statistics Canada and Bank of Canada calculations

Last observations: Real-time and revised estimates, 1995–2019: 2019Q4; real-time and revised estimates, 2020–25: 2025Q3

Here it is again, with an additional set of observations: our latest estimates of what the state of the economy was in each quarter (**Chart 3**). The point of this chart is to show that there is always uncertainty about the state of the economy and that our assessments of it evolve as we receive more information.

Similarly, we often can't know at the outset how big or long-lasting the inflationary impact of a supply shock will be. And unless we're sure the effects will be short-lived, the policy response should be larger than when we can be sure.¹⁰

Another challenge is determining how much of a change in economic conditions is being driven by temporary shocks versus structural change.

The ongoing shifts in the trade environment are an example. A consequence of US tariffs is that Canadian exports are roughly 5% lower than before President Trump was re-elected in 2024. This decline in exports has weakened the economy. Meanwhile, uncertainty about the future of our trade arrangements is making it hard for Canadian businesses to plan, so some investment is being delayed. The challenge for central bankers is determining how much of the

¹⁰ S. Murchison, "Optimal policy with supply shocks of unknown persistence," Bank of Canada Staff Analytical Paper (forthcoming).

weakness in activity reflects lost efficiency associated with structural change, and how much points to a shock with persistent but ultimately transitory impacts. The policy response should depend on this breakdown.

What we're doing at the Bank

I've laid out some considerations and challenges we face when supply-side developments are important for inflation. Now I'll talk about three ways we are working to better understand and diagnose supply-side developments and to manage the risks inherent in trade-offs.

Model development and scenario analysis

First, we have been developing multi-sector models that enhance our lens into the supply side of the economy.

These new models allow us to explore how shocks are transmitted through supply chains and to assess how they could affect the economy and inflation. The models also place added emphasis on how businesses set prices, including when the inflationary effects of a large shock are amplified.

In addition, we've been using scenario analysis to help us think through how policy could, and should, respond to different shocks. As I've mentioned, the response will depend on the size of a shock and how long its effects might last, among other things.

Scenarios also help us analyze the policy implications of different mixes of shocks, and of situations where the impact on inflation is amplified. And they can help us see in the “dark corners”—situations where outcomes could be particularly dire and that we might overlook if we're too focused on our base case projection.

In 2025, we assessed the impacts of different tariff scenarios on the Canadian economy, and we published them in our Monetary Policy Reports to help the public understand our thinking.¹¹

Overall, using scenarios helps us assess and balance risks in setting policy. As former Governor Poloz said, we need to identify the most important risks and uncertainties, think about the consequences of a policy error, and then choose a policy course that balances those risks and uncertainties.¹²

¹¹ For details on trade scenarios the Bank has considered, see the [April 2025 Monetary Policy Report](#) and the [July 2025 Monetary Policy Report](#). Also, in recent research, Bank staff have analyzed empirically grounded scenarios involving trade shocks and weather-related disruptions. They find that, in such cases, we could keep inflation inside the 1% to 3% band while supporting economic activity. See M. Cacciatore, D. Hauser, S. Gnocchi and Y. Imura, “Deglobalization and trade fragmentation: Implications for the inflation-output trade-off,” Bank of Canada Staff Analytical Paper (forthcoming) and T. Dahlhaus, “Climate change and monetary policy: Navigating physical risks and the low-carbon transition,” Bank of Canada Staff Analytical Paper (forthcoming).

¹² See S. S. Poloz, “[Monetary policy in unknowable times](#)” (Eric J. Hanson Memorial Lecture at the University of Alberta, Edmonton, Alberta, May 25, 2020).

Intelligence gathering

Second, intelligence gathering is crucial. Determining when to pivot—from looking through an increase in inflation to tightening policy—requires more than just macroeconomic data and aggregate models that use those data.

We have increased our outreach—we meet with business leaders, civil society groups and students where they live, work and study. We listen. We ask questions. We learn. And we exchange views. This helps us better understand how households and businesses are experiencing developments in the economy.

A greater use of non-traditional data can help us see what is happening under the surface, and in a timelier way. Some examples are credit and debit card transactions, retail payments, and passenger and freight traffic at the Canada–United States border.

And our business surveys can help us determine when businesses are facing supply shocks. They can also help us assess how persistent the impacts of the shocks may be. The Business Leaders’ Pulse has been an invaluable survey for tracking shifts in expectations about how long trade tensions could last and how those shifts affect firms’ willingness to pass higher costs on to their customers.

Overall, intelligence gathering helps us spot trends before they show up in the data, and it can give us more detailed insights. This is particularly helpful in uncertain and rapidly changing situations.¹³

Communication that is transparent and also clear

Last but certainly not least, I want to talk about the importance of transparency and clear communication. These are critical for building public trust and confidence in the work that we do. This is even more important in a world where we face trade-offs for monetary policy more frequently.

As I’ve outlined, in quadrant A, we might tighten policy, we might ease policy, or we might do nothing. Whatever we do, Canadians will want to understand why.

We’ve known for years that monetary policy works best when people understand our actions and our thinking. Recent research bears this out, underscoring the important role that communication plays in keeping inflation expectations well anchored.¹⁴ In particular, making sure our communication is clear, by using broadly accessible language, improves people’s understanding of our message—whether or not they have related technical backgrounds.¹⁵ Research also suggests that effective communication is even more valuable when inflation

¹³ See S. Kozicki, “[Talking to Canadians: How real-world insights shape monetary policy](#)” (speech to the C.D. Howe Institute, Toronto, Ontario, June 5, 2025).

¹⁴ See O. Kostyshyna, L. Petersen and J. Yang, “History-Dependent Monetary Policy—Less Is More,” Bank of Canada Staff Working Paper (forthcoming), and O. Kryvtsov and L. Petersen, “Central bank communication that works: Lessons from lab experiments,” *Journal of Monetary Economics* 117: 760–780 (January 2021).

¹⁵ See, for example, M. McMahon and M. Naylor, “Getting through: Communicating complex information,” Bank of England Staff Working Paper No. 1,047 (October 2023).

is elevated, or uncertainty about the policy outlook is high.¹⁶

So, given that we may need to use the flexibility in our framework more often, we must commit to communicating what we know, what we don't know and how we are interpreting developments. We must clearly outline the areas of uncertainty we are watching closely and explain why and how we are watching them. And we must clearly describe for Canadians what our latest analysis could mean for the economic outlook and, when possible, for the near-term path of monetary policy.

Conclusion

It's time for me to conclude.

I hope I've given you a good sense of some of what the Bank of Canada is thinking about as we prepare to renew our monetary policy framework.

Flexible inflation targeting has served Canada well in good times and bad. Even over the past year, in the face of disruptions from global trade tensions and increased geopolitical risks, inflation has stayed near the 2% target. This has allowed the Bank to provide some support to the economy as it adapts to a changing trade environment.

Now we're looking to the future. Going forward, when we find ourselves facing supply-driven trade-offs, sometimes it will make sense to use our flexibility to manage them, and other times it will not. The right choice won't always be evident. But that's why we're working to establish the right guardrails and to improve our diagnostic tools. Maintaining transparency and clarity in our communication will also be critical.

With every monetary policy decision we take, Canadians count on us to be equipped to identify and manage risks. And they count on us to deliver low and stable inflation despite the challenges that supply-side developments present.

Thank you.

¹⁶ See O. Coibion, Y. Gorodnichenko, S. Kumar and M. Pedemonte, "Inflation expectations as a policy tool?" *Journal of International Economics* 124 (2020): 103297, and O. Coibion and Y. Gorodnichenko, "Inflation, expectations and monetary policy: What have we learned and to what end?" National Bureau of Economic Research Working Paper No. 33858 (2025).