Box 3

CENTRAL BANK COMMUNICATIONS IN RESPONSE TO CHANGES IN THE VALUE ADDED TAX: THE CASES OF AUSTRALIA, NEW ZEALAND, NORWAY, THE UNITED KINGDOM AND CANADA

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The recent tax reform in Colombia, which was passed in December 2016 and took effective as of January 2017, with the maximum deadline for adoption being February of the same year, implies an upward shock to the prices of most products marketed in the country. As mentioned in other sections of this report, a bullish impact on the consumer price index (CPI) is anticipated, either because items that make up the index are subject directly to the reform or because they respond, in some way, to other taxed items (via costs or indexing).

In principle, the increase in inflation should be largely transitory, because the shock of the reform on the level of prices occurs only once. However, it can have more permanent effects, if it significantly influences inflation expectations and generates higher indexing.

Therefore, the way the country's monetary authority communicates and acts in these circumstances is particularly relevant. To the extent that its action fosters certainty and lends credibility to the inflation target, it can contribute to a situation where medium- and long-term expectations are not altered.

With this in mind, the following is a summary of several similar international experiences. Communication from the central banks of Australia, New Zealand, Norway, the United Kingdom and Canada[1] in response to value-added-tax reform episodes similar to the current one in Colombia is reviewed specifically for this purpose. In that respect, the information published by these central banks is considered to be of two types: their press releases on policy decision and their inflation reports.

1. Communication from Central Banks

As will be outlined in detail, the documents reviewed highlight the central banks' initial intention not to react, in terms of policy, to purely transitory shocks to inflation, which in this case refer to changes in the value-added tax. However, the central banks do mention some concern about the uncertainty surrounding the second-round effects these changes might have on wage and price-makers. For this reason, they conclude this event will have to be monitored closely and their attention will be focused on the mid-term determinants of inflation, specifically those that would motivate their policy decisions and could be affected in some way by the transitory shock (through expectations).

As might be expected, the tax hike in these countries affected inflation[2] and its short-term expectations. However, the banks reported the impact was transitory and on a scale consistent with what analysts had anticipated. This reinforced the transitory effect of the shock and the decision not to intervene.

The graphs at the end of the box show how inflation, its expectations and the monetary-policy rate[3] evolved in each of the five economies under study, contextualized with the inflation target, the date in which the change in the value-added tax took effect, and the periods when the tax change was mentioned in the press releases on policy decisions and in the inflation reports.

These graphs are clearly illustrative. So, the full dynamics of the variables cannot be attributed to the change in the tax burden in each country, since there were different factors that contributed to the behavior of inflation, its expectations and to policy decisions (which are difficult to isolate adequately). However, the graphs do suggest movement compatible with the tax shock in each economy.

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1 Countries with an inflation targeting scheme at the time of the respective change in the generalized tax burden.

2 The tax rate declined in Canada, so the effect was the opposite of that experienced by the other four countries.

3 The measurements available for each economy are presented. Two inflation measurements are included in the case of Australia and Norway. As for the series of inflation expectations in the short-and long-term, it was impossible to unify them due to a lack of available data for the periods under study.

2. Press Releases on Policy Decisions

The press releases related to the policy decision made little mention of the change in the value-added tax and its effects. More attention was given to the behavior of the fundamentals of the medium-term trend in inflation, which is what actually determined the decision on policy.

In general, the five countries in question opted to include, in their press releases, a brief note about the date when the tax change was scheduled to take effect. They did warn of transitory noise in inflation, which made it difficult to interpret its medium- term trend.

It was indicated they would make an effort to analyze inflation without the distortion generated by taxes, so as to do all possible to ensure inflation returns to somewhere near its target, once the transitory effects have passed.

3. Periodic Inflation Reports

The periodic inflation reports analyze the effects of the tax change in greater and simpler detail. Generally, these effects begin to be mentioned once the new tax rate has been approved (which is different from period when it takes effect). This is done to warn about the possible impact the reform might have. The potential consequences continue to be monitored in these reports, and the analysis focuses on the impact the change would have on inflation, short- and long-term inflation expectations, domestic demand and on certain major sectors of the national economy that would be acutely affected. Emphasis is given to the concern expressed by central banks about the uncertainty surrounding the possible second-round effects that could be generated. The reports offer different analyzes during and after the direct impact of the change in the tax burden. Nevertheless, in no case were alarming consequences of this type reported.

In the case of Norway, mention was made of past instances where the country also experienced generalized increases in the tax burden. This was done to support the analysis. Both Canada and Norway resorted to accompanying reports to analyze how the change in tax might affect inflation, policy decisions and certain sectors of the national economy.

On the other hand, it is appropriate to mention that Australia and Norway have an additional measure of inflation that excludes the effect of taxes.[4] In order to focus on the medium-term trend in inflation, that index becomes the center of analysis during the period when the impact on inflation of the change in the tax rate becomes apparent.

As a supplement to the foregoing, Table B3.1 contains an individual summary of what was found in terms of each central bank's communications, as well as the date and magnitude of each change in the tax burden.

4. Conclusion and Comments

The consensus among the five economies in question is not to react via the policy interest rate, when faced with changes in the value-added tax, which basically is just a transitory shock to inflation. However, it is clear the second-round effects that could occur must be monitored closely. The communication strategy of these countries was to briefly mention the policy decision, in the respective press releases, on the date the tax change took effect (highlighting the fundamentals of the medium-term trend in inflation). In contrast, a more detailed analysis of the effects of the change was provided in each inflation report for several months before and after it occurred.

On the other hand, the graphs show the tax change coincides with deviations in the behavior of inflation, which last between one and two years after the shock. In the case of Australia and New Zealand, it is easy to see the behavior of short-term expectations is affected before the change in taxes was adopted, possibly a signal of anticipation on the part of the market. Once the shock occurs, these expectations begin to return to levels similar to those witnessed prior to knowledge the tax change. As for long-term expectations, it is not easy to identify any sort of widespread behavior, which could mean there was no impact on these expectations, ruling out second-round effects.

Finally, it is important to point out that characteristics different from those in the cases analyzed here have been identified in the current Colombian situation. While the tax shock in the countries in question occurred at a time when inflation was near the target (favorable conditions), Colombia has been adjusting to new macroeconomic conditions in which

4 In the case of Australia, this measure also excludes changes in interest rates and is produced by the country's central bank. Norway, for its part, has an inflation measurement adjusted for taxes and energy products (which are particularly volatile), calculated by its national bureau of statistics.

consumer inflation was seriously affected. In fact, it was above the ceiling of the target range for twenty-four months in a row. Inflation is now returning towards the target; so, the shock caused by the tax reform comes at a difficult time and must be monitored closely by the country's monetary authority. In addition, vis-à-vis Colombia, the economies being analyzed have met their target more times throughout their history of inflation targeting. This has positive consequences for the credibility of the central bank and facilitates the effectiveness of its communications.

Table B3.1
Communication by the Central Bank and Reforms in the Value-added-Tax

Country	Tax reforms	Communication		Others to highlight
		Mention in the press release on the policy decisions	Mention in the inflation report	
Australia	July 2000: Introduction of the GST [a/, b/] Equal to 10%.	Introduction of the GST is mentioned only in September 2000. There is a simple warning about transitory noise in inflation due to the change in the tax burden. It is noted that efforts will be made to try to analyze inflation without the noise generated by taxes. More attention to the behavior of the fundamentals of the medium-term trend in inflation is reported.	The effect of introduction of the GST is analyzed in detail. Mention is made on more than one occasion between April 1999 (when the GST was approved by law) and January 2002 (18 months after it took effect). The possible consequences of the GST are tracked and the impact analysis is focused on Inflation, inflation expectations, domestic demand and several important sectors of the national economy that are affected (housing, automotive vehicles). The concern about possible second-round effects is emphasized, and various analyzes to that effect are conducted during and after the direct effect of the change in the tax burden (surveys and analytical exercises). However, no significant second-round effects were reported.	There is analysis of the inflation measurement excluding the impact of changes in taxes and interest rates (so as to focus on the medium-term trend in inflation).
New Zealand	October 2010: Increase in the GST [a/, c/] from 12.5% to 15%.	The increase is mentioned only in the December 2010 press release. The possible effects on annual inflation and short- and medium-term expectations are explained only in a very brief way. There is talk of transitory effects and, for that reason, their analysis is not focused directly on this shock.	There is specific analysis regarding the effect of the increase in the GST on inflation (and the contribution from external effects). Mention is made on more than on occasion between June 2010 (four months before the change in the GST took effect) and December 2011 (14 months after it entered into force).	
The United Kingdom	January 2010: Increase in VAT d/ from 15% to 17.5%. January 2011: Increase in VAT from 17.5% to 20%.	The increases are mentioned in the press releases for November 2009, February 2010, October 2011 and February 2012. It is noted there will be approximately two years during which inflation would be volatile.	The consequences of changes in VAT are analyzed, particularly the impact on inflation, expectations, households, the private sector and the real sector.	

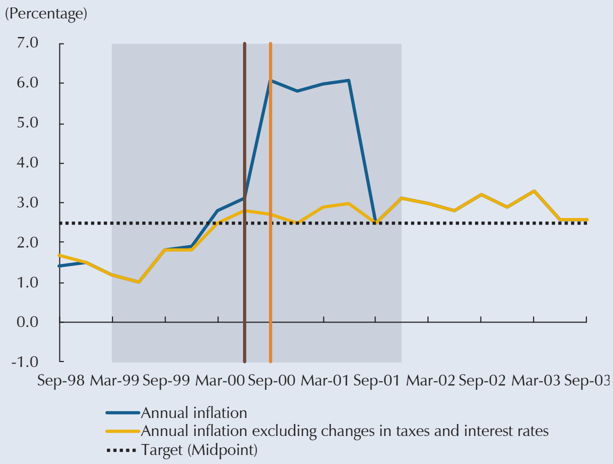
Table B3.1 (Continuation)
Communication by the Central Bank and Reforms in the Value-added-Tax

Country	Tax reforms	Communication		Others to highlight
		Mention in the press release on the policy decisions	Mention in the inflation report	
Norway	January 2005: Increase in VAT from 24% to 25%.	The March 2005 press release only mentioned that the change in VAT made it more difficult than usual to interpret the behavior of inflation.	The report for the final quarter of 2004 showed the increase in VAT would raise inflation by 0.5 percentage points in the early months of 2005, and this was repeated in the first quarter of 2006. In subsequent reports, it was insisted that the change in VAT had made it difficult to interpret inflation.	Mention is made of the measure of inflation that is adjusted for changes in taxes and energy products (CPI-AT) in order analyze developments in inflation during the medium term.
Canada	July 2006: Reduction in the GST [a/] 7% to 6%.	The reform is mentioned three times: once prior to the GST reduction in April 2006, once during the period when it took effect and, for the last time, three months later. According to the communiques on policy, intervention was not necessary because inflation excluding the effect of indirect taxes and other items remained consistent with expectations.	Mention is made one quarter before the reform and two quarters afterwards. In the previous report, the scenarios were presented without taking the reform into account, in addition a box referring to its possible consequences. The other two reports showed other pressures that would affect inflation, in addition to reform.	Boxes are used in the inflation report.
	January 2008: Reduction in the GST [a/] from 6% to 5%	The second GST shock was mentioned twice: once simultaneous to the reform and another time three months later. The pressure the reform constitutes was mentioned on those occasions, but it was not cited as the fundamental reason for the changes in inflation.	In terms of the second change in the GST, it is mentioned that the reform contributed somewhat to the downward revision in inflation, but that there were other causes for this as well.	

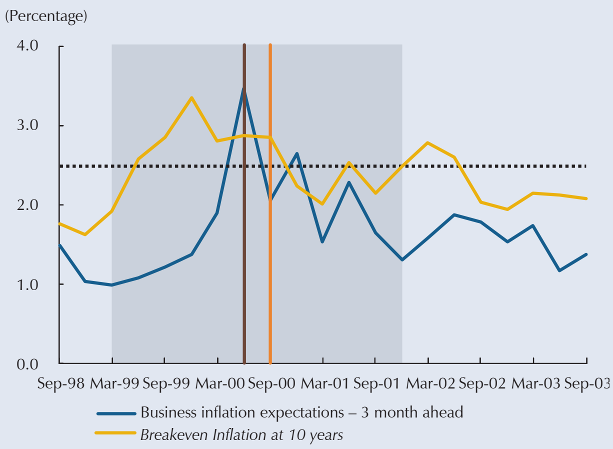
a/ GST (Goods and service tax) is a VAT (value added tax) in Australia, New Zealand and Canada.
b/ Restructuring of the tax system included introduction of the GST, which is a 10% tax on consumer goods, excluding basic foodstuffs, personal care items, health, education, goods related to children and exports. Ten (10) taxes considered inefficient (on wholesale transactions and rent, among others) were eliminated.
c/ In addition to the increase in the GST, a higher tax burden on tobacco consumption was implemented and the energy sector was included in the tax base.
d/ Value added tax
Sources: Central banks of Australia, New Zealand, the United Kingdom, Norway and Canada; compiled by the authors.

Graph B3.1
Australia: Annual Inflation, Inflation Expectations and the Policy Rate

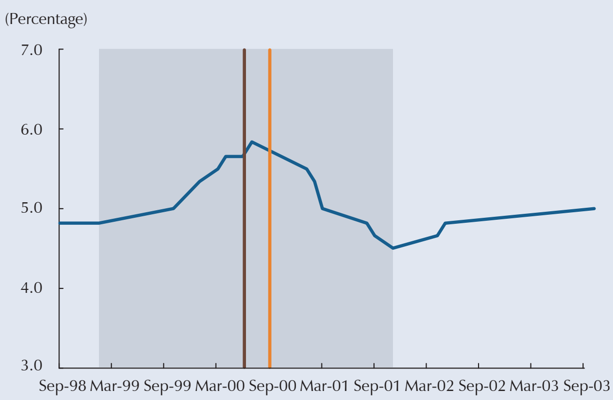
A. Annual Inflation



B. Inflation Expectations



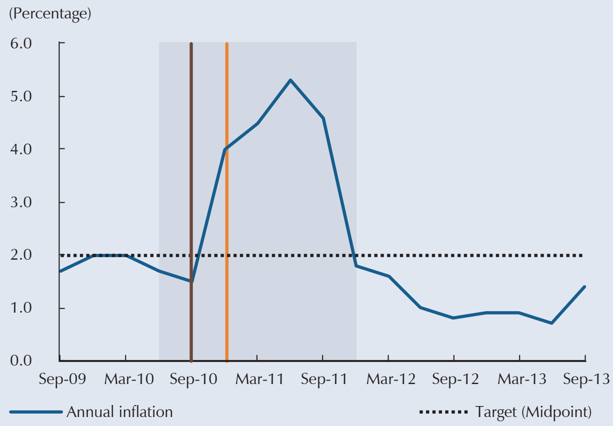
C. Policy Rate



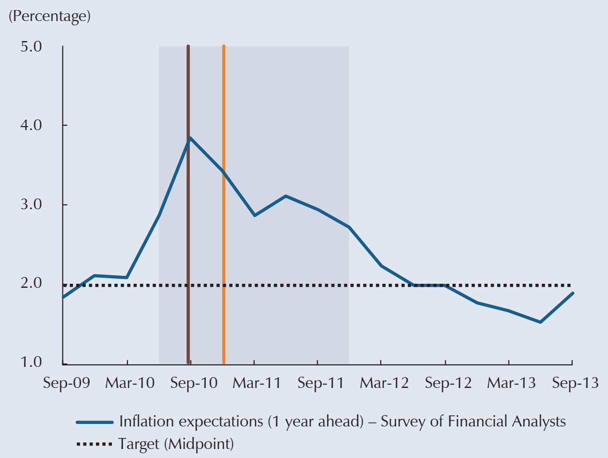
Note: The brown line represents the deadline for adoption of the change in the value added tax. The orange line is the date of the press release on the policy decision that mentions the change in the value added tax. The gray shading denotes the period in which the inflation reports refer to the change in the value added tax.
Sources: Central Bank of Australia and Bloomberg; authors' calculations.

Graph B3.2
New Zealand: Annual Inflation, Inflation Expectations and the Policy Rate

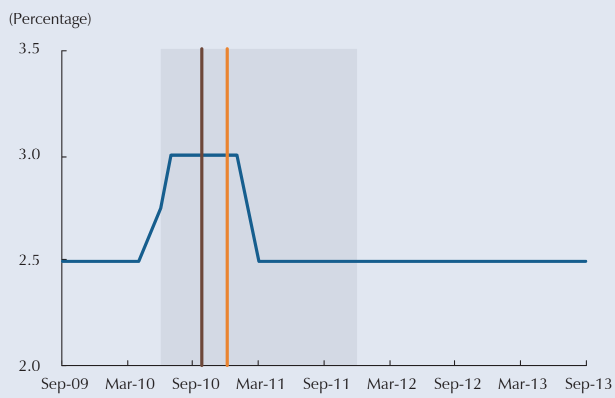
A. Annual Inflation



B. Inflation Expectations



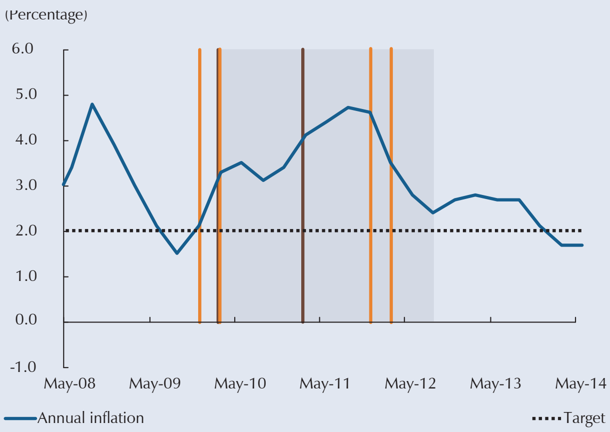
C. Policy Rate



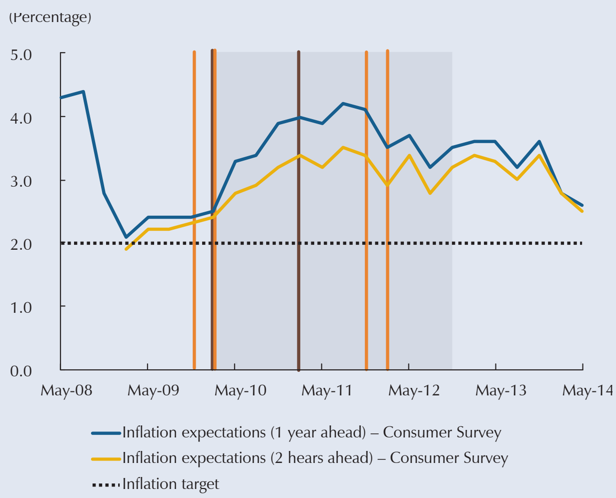
Note: The brown line represents the deadline for adoption of the change in the value added tax. The orange line is the date of the press release on the policy decision that mentions the change in the value added tax. The gray shading denotes the period in which the inflation reports refer to the change in the value added tax.
Sources: Central Bank of New Zealand and Bloomberg; authors' calculations.

Graph B3.3
United Kingdom: Annual Inflation, Inflation Expectations and the Policy Rate

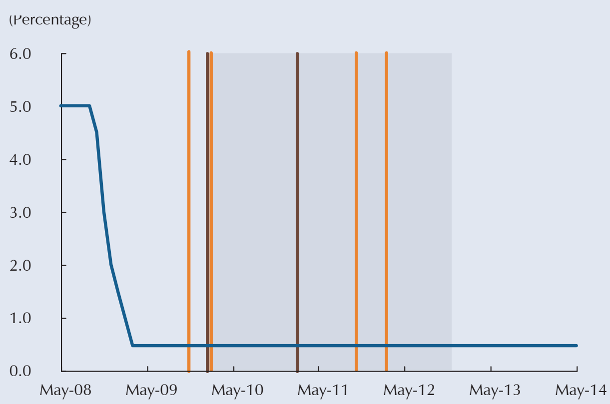
A. Annual Inflation



B. Inflation Expectations



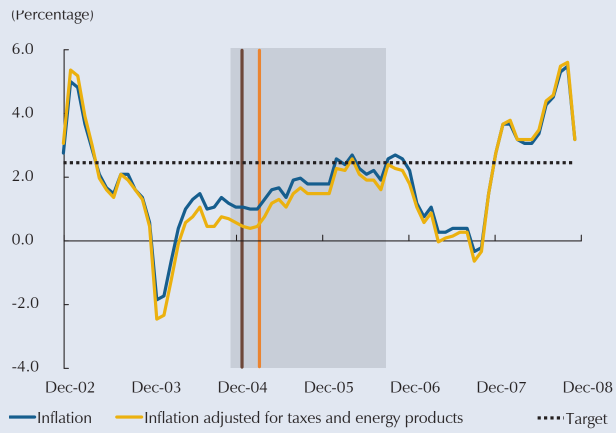
C. Policy Rate



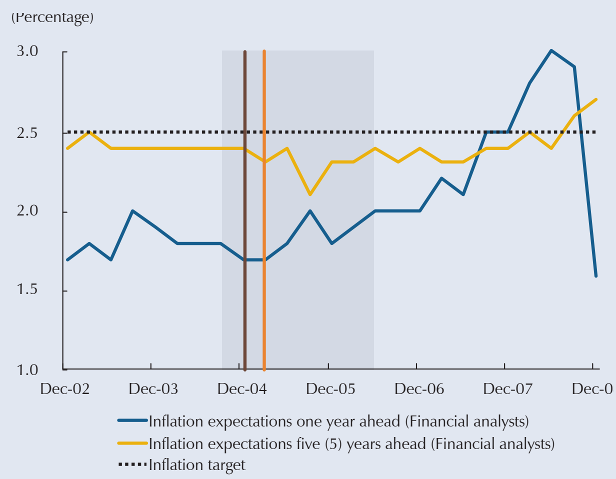
Note: The brown line represents the deadline for adoption of the change in the value added tax. The orange line is the date of the press release on the policy decision that mentions the change in the value added tax. The gray shading denotes the period in which the inflation reports refer to the change in the value added tax.
Sources: Central Bank of England and Bloomberg; authors' calculations.

Graph B3.4
Norway: Annual Inflation, Inflation Expectations and the Policy Rate

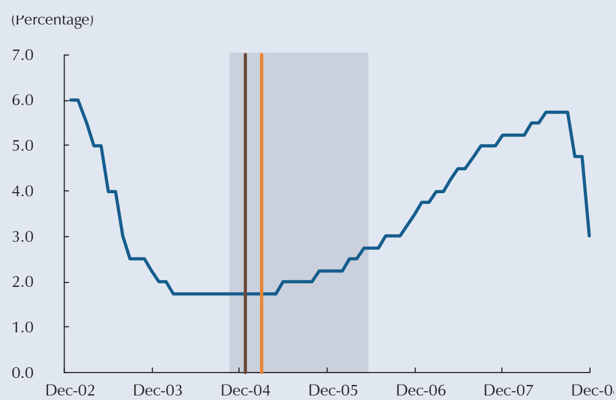
A. Annual Inflation



B. Inflation Expectations



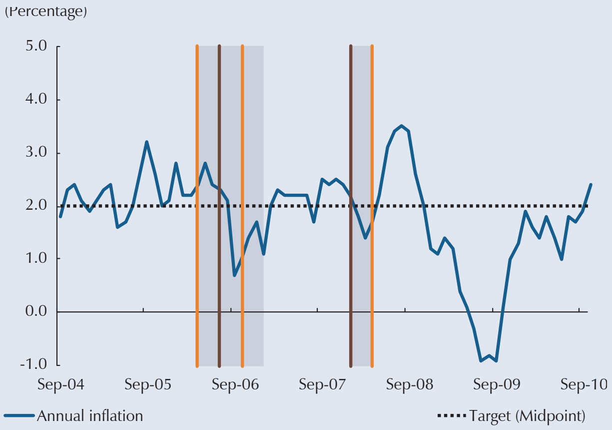
C. Policy Rate



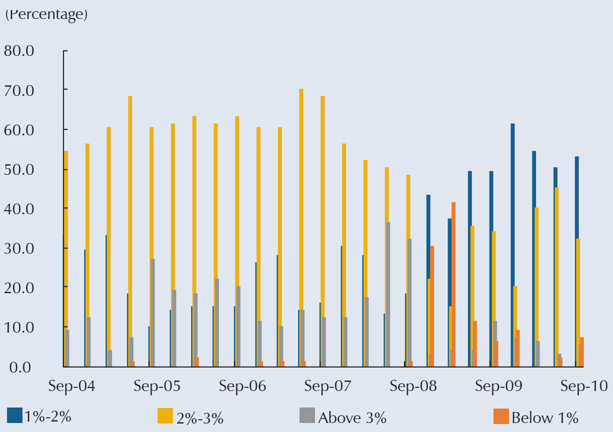
Note: The brown line represents the deadline for adoption of the change in the value added tax. The orange line is the date of the press release on the policy decision that mentions the change in the value added tax. The gray shading denotes the period in which the inflation reports refer to the change in the value added tax.
Sources: Central Bank of Norway and Bloomberg; authors' calculations.

Graph B3.5
Canada: Annual Inflation, Inflation Expectations and the Policy Rate

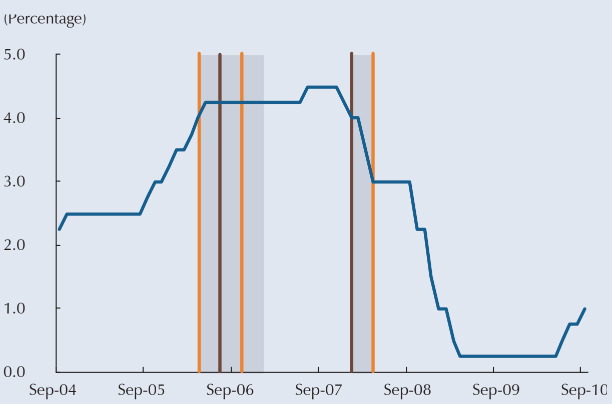
A. Annual Inflation



B. Inflation Expectations Two Years Ahead



C. Policy Rate



Note: The brown line represents the deadline for adoption of the change in the value added tax. The orange line is the date of the press release on the policy decision that mentions the change in the value added tax. The gray shading denotes the period in which the inflation reports refer to the change in the value added tax.
Sources: Central Bank of Canada and Bloomberg; authors' calculations