



MONEY AND MONETARY POLICY IN CANADA

MODULE 6:

PRICE STABILITY: THE CHALLENGE FOR MONETARY POLICY

"Money and Monetary Policy In Canada" by Gary Rabbior

A publication of the Canadian Foundation for Economic Education

Supported by the Bank of Canada

Contents

Let's Begin With a Summary	1
6.1 Why Is the Bank of Canada So Concerned with Inflation?	2
6.2 Measuring Inflation—The CPI	5

LET'S BEGIN WITH A SUMMARY

Let's begin with a summary of what we have learned so far:

- 1. The Bank of Canada's primary objective is to maintain price stability.
- 2. To maintain price stability, the Bank aims for a 2% rate of inflation, the mid-point of a target range of 1% to 3%.
- 3. The Bank of Canada uses monetary policy to influence interest rates and through them, spending, saving, borrowing and investing.
- 4. The decisions the Bank makes about interest rates depend on the outlook for the economy and whether the Bank sees inflationary pressures becoming a concern.
- Concerns about inflation arise as spending levels rise and the economy approaches its capacity to produce goods and services in the short term (its short-run capacity).
 Reaching this point puts upward pressure on prices and increases the risks of higher inflation.
- 6. The Bank closely monitors how the economy is currently operating; its short-run capacity; the <u>output gap</u> between the two; whether spending is rising or falling; and what the outlook is for any significant changes, shocks or trends.
- 7. The Bank's view is always forward-looking. It takes time for monetary policy measures, and changes in interest rates, to work their way through the economy and have an effect.

We will look more closely in Module 7 at how the Bank of Canada implements monetary policy to influence interest rates, spending and the rate of inflation. The important thing is to understand that the Bank's primary objective is to maintain price stability by aiming for a 2% rate of inflation, the midpoint of a 1% to 3% range.

With that understanding, there are a number of questions to explore:

- 1. Why is price stability so important and why is the Bank so concerned about inflation?
- 2. If the Bank is so concerned about inflation and wants to maintain an average rate of inflation, how is inflation measured?
- 3. If the Bank has to make decisions that are forward-looking—that have to take into account where the economy is headed—what does it look at to make those decisions?

Let's see if we can answer each of these questions in turn.

Key Question: Why is price stability so important?

6.1 WHY IS THE BANK OF CANADA SO CONCERNED WITH INFLATION?

Economic
Insight: Inflation,
and inflation
expectations,
impact decisionmaking by
consumers,
savers, and
investors

Economic Insight: Inflation erodes the value of money One concern with inflation is clear. If inflation is not kept under control, future prices are less predictable. People often find it more difficult to make decisions and pursue courses of action the further into the future they have to look. People may also have trouble planning for future spending because they don't know where prices, and the value (purchasing power) of their money, are heading. For example, is it better to buy a major item like a car or home now or to wait? Uncertainty about future prices and inflation make such decisions more difficult.

Investors have trouble planning investments for the same reason. Uncertainty about future prices makes investment decisions more difficult because the future value of possible investments is harder to foresee.

The very nature of inflation, and the uncertainty it brings, tends to affect decision-making and, in turn, the economy. It can also mean that businesses and households will need to spend a considerable amount of time—and possibly money—coping with inflation.

In short, inflation erodes the value of our money. The higher prices are, the more dollars and cents we need for each transaction and, hence, the lower the value—and purchasing power—of our money. Now, if your income rises as fast as or faster than prices do, you might not be as concerned about inflation. You might be as well off, or even better off. But what about people whose incomes often don't keep pace with rising prices? Many seniors, for example, live on relatively fixed incomes that don't change as prices do. They can be particularly hard hit by inflation.

Expecting Inflation Can Lead to More Inflation—Managing Inflation Expectations Is Important

There is another problem with not keeping prices stable and predictable and letting inflation loose. If inflation sets in, and people *expect* it to continue, their actions and behaviour may cause this to happen. Inflationary expectations, and an inflation mentality, can upset the economy significantly as prices are pushed to levels even beyond people's expectations. If many people think this way, then their decisions to spend now will put pressure on prices to rise. That is why, when it is not kept under control, inflation is said to "feed on itself." Expectations of inflation help lead to inflation.



Inflation can lead to further inflation. If people expect inflation, their subsequent actions can contribute toward inflation. So inflation can feed on itself.

Economic
Insight:
Managing
expectations is an
important part of
the Bank of
Canada's job

Think about your own actions. If you expect the price of something to rise in the future, what are you likely to do? If you can afford it, you will likely buy it now rather than later, when you expect the price to be higher.

That is a key reason the Bank of Canada aims to keep inflation under control—and to keep people's expectations of future inflation at a reasonable level, such as 2%. Managing expectations is an important part of the Bank's job. By maintaining a stable inflation environment, the Bank can help to keep inflationary expectations in check.

High or Unstable Inflation Can Affect Our Social Fabric

There's another reason why unstable and unpredictable inflation is a concern. Inflation can also have an impact on the social fabric of the country. As prices rise, people have to struggle and compete for more income to keep pace. Labour-management relations tend to become tense as contracts have to be negotiated in unstable economic conditions. Unions and employers may differ on where they think prices and inflation are headed. This can make it

Economic
Insight: High
levels of inflation
can impact the
"social fabric" of a
nation

harder to reach an agreement—and may lead to worsening relations. The destabilizing effect of inflation can produce an undesirable atmosphere of tension and anxiety in our economy—and society.

Inflation also makes life difficult for producers and sellers. As inflation occurs, sellers have to adjust their prices upward to maintain their profit. The constant adjustment of prices takes time— and money. And, prices among the sellers do not rise at the same time or to the same level. They may start to vary from one seller to another. As a result, consumers are forced to spend more time shopping around to find the lowest price.

One Cost of High Inflation—Getting the Inflation Rate Down

Finally, one cost that inflation can impose on an economy is the cost of getting inflation down. If strong actions must be taken to reduce the rate of inflation, the economy may experience some difficult times. A good example of this is the period of high inflation that occurred in the 1970s. Tough policy actions were necessary in the early 1980s to bring inflation expectations down and reduce spending. This difficult period of adjustment was followed by the highest unemployment levels Canadians had experienced in years.

For these reasons, policy-makers try to keep inflation under control. By building confidence that the rate of inflation will stay around 2%, and in the 1% to 3% control range, the Bank of Canada is able to better manage people's inflation expectations. Consumers, borrowers, investors, savers and businesses will make their decisions on factors other than the future uncertainty of prices. That tends to lead to better decisions—and is better for the long-term health of the economy.

Now let's consider the second question: how does the Bank of Canada get its information on price changes so that it can measure the rate of inflation?

Economic
Insight: One cost
of letting inflation
loose is the what
may be needed to
get it back down

6.2 Measuring Inflation—The CPI

Economic
Insight: The most common measure for the rate of inflation is the Consumer Price Index

The most common measure of inflation is the consumer price index, or CPI, which measures the changes, over time, in the prices of a selected "basket" of goods and services. The goods and services in the basket are intended to be representative of what Canadians consume, on average. So, the items in the basket can periodically change. By monitoring the basket, the CPI is able to report how, on average, the prices of the selected goods and services change.

The CPI can be affected by many different things. Weather that affects crop yields can influence food prices. Global developments may push up the price of oil and energy sources. These events can cause a change in the CPI.

While the impact of weather and global developments is of keen interest to the Bank of Canada, the Bank is most focused on inflationary pressures that are likely to be sustained. Among these, the Bank is most interested in whether prices are rising because of a narrowing of the output gap in the Canadian economy. A global price shock, such as rapidly rising oil costs, that pushes up the CPI isn't reflecting the state of Canada's economy. The shock puts upward pressure on prices as a result of global economic events in energy markets, and its effects on Canadian inflation are likely to be transitory, or short-lived. Similarly, weather that affects crop yields and food prices is not an indication that production levels are creating inflationary pressures in the Canadian economy. The price impact on the CPI is due to the effect of the weather on food prices—not a narrowing of the output gap.

To gauge whether the output gap is shrinking or growing, the Bank focuses on overall spending in the economy—where it is and where it is heading. While it is important to monitor and consider factors such as global price shocks or weather-related price increases, these factors shouldn't guide monetary policy decisions. Those decisions should be most influenced by what is happening in general to prices in the economy—not just prices in particular industries.

Economic
Insight: The
"core" rate of
inflation is key
information for the
Bank of Canada

The Core Rate of Inflation

The statisticians who gather data and calculate the CPI focus on the "core" rate of inflation. This rate excludes some of the price fluctuations of the more volatile items in the basket, such as food. The core rate tries to identify price changes that result from general changes in the overall economy.

For that reason, the Bank of Canada focuses on the core rate of inflation to guide its policy decisions. And it looks for the best available information on price changes in the economy.

Economic
Insight: The Bank
of Canada uses a
combination of 3
measures of the
core rate of
inflation

The Bank Uses a Combination of Three Measurements of the Core Rate

The Bank of Canada has used different methods to measure inflation. From 2001 to 2016, it monitored CPIX. This index of prices excludes eight of the most volatile items in the CPI, including fruit, oil, natural gas, mortgage interest, intercity transportation and tobacco products. In recent years, however, the Bank found that CPIX was not providing the best information on price changes and underlying inflationary pressures to guide monetary policy decisions. So, the Bank selected three different measures of core inflation to help it gauge these pressures. The three measurements are CPI-trim, CPI-median and CPI-common.

Each measure has its own limitations but, used together, they provide high-quality price information to the Bank. Including elements of each of these measures provides the Bank with what it believes is the most reliable information on price changes in the economy. But how did the Bank decide on these measures? Officials at the Bank assessed each one on four main criteria:

- 1. It closely tracks long-run changes in the CPI.
- 2. It is less volatile than the total CPI and gives better insight into persistent price changes.
- 3. It provides insight into the underlying factors affecting inflation.
- 4. It is easy to understand and explain to the public.

Now, this last point is perhaps a little debatable—at least for folks who are not statisticians. If you are interested in the details of each of these measurements, a quick search on the Internet will give you a description. But here we will simply say that they provide the Bank of Canada with insight into inflationary pressures, their underlying factors and which factors are likely to persist beyond the short term.

Thus, over the years and with experience, the Bank has been able to refine the information that it gets on inflation—and the factors that lead to changes in prices. This helps make for more informed monetary policy.

The Bank of Canada—Always Forward-Looking

We have looked at why price stability, and keeping inflation under control, is important. We have learned how the Bank of Canada gets its information on inflation and price changes to help it make monetary policy decisions. Now, let's turn to the third question: If the Bank has to make forward-looking decisions, what guides its policy?

The key focus for the Bank's decisions is the output gap and various factors that affect spending and the capacity of the economy. The Bank uses the best sources of data available

and the forecasts generated by several economic models to make a forecast of spending and capacity. The Bank's forecast includes its judgment on where the output gap is headed and what policy actions might be required to maintain inflation at the target level—or to return it to the target level.

If the output gap is forecast to shrink, and the economy is nearing its short-run capacity, any policy actions that would lead to more spending will put upward pressure on prices and inflation.

But if the output gap shows the economy is some distance from its short-run capacity, then it can likely handle more spending without raising prices. There is also likely opportunity to create more output, jobs, income and opportunity without pushing inflation outside of the Bank of Canada's target and range.

So, the challenge for policy-makers, including those at the Bank of Canada, is to determine when the levels of spending, output and employment are at or close to the economy's current capacity. Using the three measures of inflation and information on the output gap, the Bank monitors inflation and signs of growing inflationary pressures. If the rate of inflation is beginning to accelerate and is at risk of moving outside the Bank's target range, it is a sign that spending levels are trying to push the economy beyond its current output capacity.

Economic
Insight: The Bank
of Canada is
equally concerned
with inflation
rising above its
target and falling
below

Declining Inflation and Deflation Are a Concern Too

If the rate of inflation is declining, it is a sign that the economy is weakening. To this point we have mainly focused on rising prices and the problems that can arise if we don't keep inflation under control. We know the Bank of Canada aims to keep the rate of inflation from going beyond 3%—and aims for a target of 2%. But the Bank is also concerned if it falls too low, below 1%.

As we said earlier, falling prices can start to worsen the problem of a weakening economy. If people think prices will move lower in the future, they will likely hold off on spending. And if many do this, a weakened economy can become weaker. Things can start to snowball, and the economy could head into difficult times. This is known as deflation.

So the Bank of Canada keeps its eye on price changes in both directions—when prices are potentially moving above the upper limit of 3% or below the lower limit of 1% because, ideally, inflation should average 2%.

A Challenge for Policy-Makers—Changes in Prices Tend to Lag Behind Changes in Spending

Monitoring changes in the average price level and the rate of inflation is an important source of information for policy-makers. But there are some complications to consider. Changes in prices in the economy tend to be slower than changes in spending. Even though policy-makers are watching for changes in how fast the rate of inflation is rising or falling, they may only become aware of them after the change in economic conditions occurs. Spending levels that put upward pressure on prices may already be happening in the economy—but only become apparent later, as prices start to rise. This lag in prices behind spending makes policy-making even more challenging—and shows why it is important to monitor spending and prices in the economy.

Quick Summary

An important challenge for the Bank of Canada is determining the current state of the economy, where it is at any given time and where it might be heading. The Bank wants to know the answers to questions such as: Has the economy reached its current capacity? Is there an output gap and, if so, how large is it? To what extent is there still room for more production, more spending and more employment without accelerating the rate of inflation? The answers to these questions provide the information the Bank needs to make decisions about monetary policy and interest rates—even whether any policy changes are needed at all.



As the economy moves through periods of expansion and contraction, price changes tend to lag behind changes in output.

The hope is that the economy can move along a stable growth path with prices being stable at the same time. But you can never tell when something might go wrong—and global shocks and developments can always have an impact.

In fact, it wasn't that long ago—2008 to be exact—when there was a global financial crisis and several countries experienced very difficult times. The global economy certainly suffered overall, and there were challenges for Canada's economy too, including many job losses and a need to stabilize financial markets. In general, though, Canada fared better than most and many around the world envied Canada for its relatively stable financial situation among all the turmoil.

So, maintaining price stability and a sound financial system are the priorities for the Bank of Canada. And the performance of Canada during earlier, difficult years is evidence of why those goals are so important.