Chapter 30: Monetary Policy

Origins: In 1934, the Parliament passed the Bank of Canada Act, and the Bank of Canada started operations in 1935.

Monetary Policy Objectives

The objective of monetary policy as set out in the preamble to the Bank of Canada Act of 1935 is essentially to

- is to control the quantity of money and interest rates in order to avoid inflation and,
 ...
- when possible, prevent excessive swings in real GDP growth and unemployment.

The emphasis on inflation has been made concrete by an agreement between the Bank and the government.

Joint Statement of the Government of Canada and the Bank of Canada

The agreement of 2011:

- 1. The target is the 12-month rate of change in the CPI.
- The inflation target is the 2 percent midpoint of the 1 to 3 percent inflation-control range.
- The agreement will run until December 31, 2016.

Such a monetary policy strategy is called <u>inflation rate targeting</u>.

But the Bank pays close attention to core inflation, which it calls its *operational guide*.

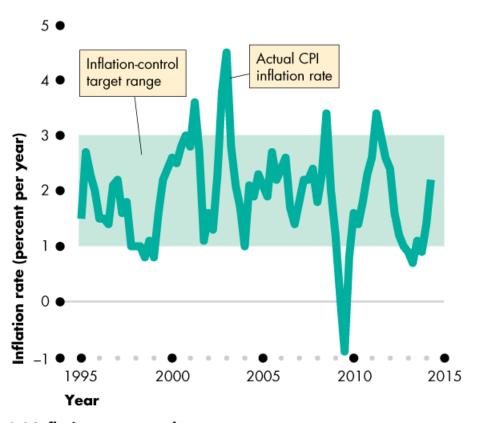
The Bank believes that core inflation is a better measure of the underlying inflation trend and better predicts future CPI inflation.

Actual Inflation

The figure shows the Bank's inflation target.

The actual CPI inflation rate has only rarely gone outside the target range.

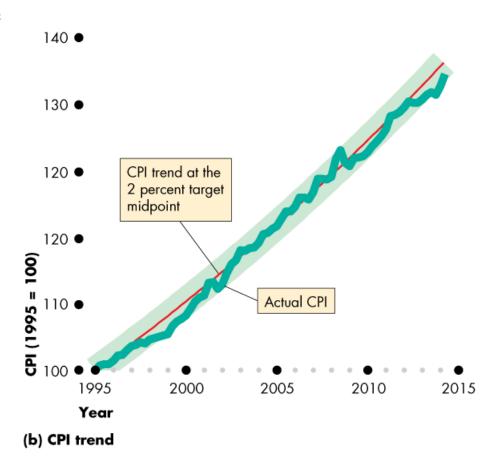
It shows no bias.



(a) Inflation target and outcome

The figure shows the trend inflation rate of 2 percent a year, at the midpoint of the target range.

The Bank has done a good job of holding CPI inflation to its target, with only small and temporary deviations.



Rationale for an Inflation-Control Target

Two main benefits from adopting an inflation-control target:

- 1. Fewer surprises and mistakes on the part of savers and investors.
- 2. Anchors expectations about future inflation.

Controversy About the Inflation-Control Target

Critics of inflation targeting fear that

- 1. By focusing on inflation, the Bank might permit the unemployment rate to rise or real GDP growth to slow.
- 2. The Bank might permit the value of the dollar rise on the foreign exchange market and make exports suffer.

Supporters of inflation targeting respond:

- 1. Keeping inflation low and stable is the best way to achieve full employment and sustained economic growth.
- 2. The Bank's record is good. The last time the Bank created a recession was at the beginning of the 1990s when it was faced with double-digit inflation.

Responsibility for Monetary Policy

The Bank of Canada's Governing Council is responsible for the conduct of monetary policy.

The Governor and the Minister of Finance must consult regularly.

If the Governor and the Minister disagree in a profound way, the Minister may direct the Bank in writing to follow a specified course and the Bank would be obliged to accept the directive.

The Conduct of Monetary Policy

How does the Bank of Canada conduct monetary policy?

- 1. What is the Bank of Canada's monetary policy instrument?
- 2. How does the Bank of Canada make its policy decision?

The Monetary Policy Instrument

 The monetary policy instrument is a variable that the Bank of Canada can directly control or closely target.

The Bank of Canada has three possible instruments:

- The quantity of money (the monetary base)
- 2. The price of Canadian money on the foreign exchange market (the exchange rate)
- 3. The opportunity cost of holding money (the short-term interest rate)

- The Bank of Canada can set any one of these three variables, but it cannot set all three.
- The values of two of them are the consequence of the value at which the third one is set.
- If the Bank decreased the quantity of money, both the interest rate and the exchange rate would rise.
- If the Bank raised the interest rate, the quantity of money would decrease and the exchange rate would rise.
- <u>If the Bank lowered the exchange rate</u>, the quantity of money would increase and the interest rate would fall.

The Overnight Loans Rate

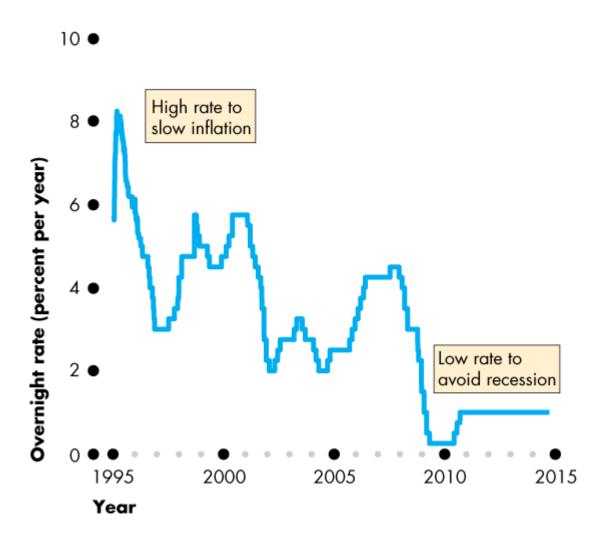
The Bank of Canada's choice of policy instrument (which is the same choice as that made by most other major central banks) is a short-term interest rate.

Given this choice, the Bank permits the exchange rate and the quantity of money to find their own equilibrium values.

The specific interest rate that the Bank of Canada targets is the **overnight loans rate**, which is the interest rate on overnight loans that chartered banks make to each other.

The overnight loans rate

- When the Bank wants to slow inflation, it raises the overnight loans rate.
- When inflation is low and the Bank wants to avoid recession, it lowers the overnight loans rate.



Although the Bank of Canada can change the overnight loans rate by any (reasonable) amount that it chooses, it normally changes the rate by only a quarter of a percentage point.

Having decided the appropriate level for the overnight loans rate, how does the Bank get the overnight loans rate to move to the target level?

The answer is by using open market operations to adjust the quantity of monetary base.

The Bank's Interest Rate Decision

To make its interest rate decision, the Bank of Canada gathers a large amount of data about the economy, the way it responds to shocks, and the way it responds to policy.

The Bank must then process all this data and come to a judgement about the best level for the policy instrument.

After announcing an interest rate decision, the Bank engages in a public communication to explain the reasons for its decision.

Hitting the Overnight Loans Rate Target

Once an interest rate decision is made, the Bank of Canada achieves its target by using two tools:

- Operating band
- Open market operations

Operating Band

The **operating band** is the target overnight loans rate plus or minus 0.25 percentage points. So the operating band is 0.5 percentage points wide.

The Bank creates the operating band by setting:

- 1. **Bank rate**, the interest rate that the Bank charges big banks on loans, is set at the target overnight loans rate <u>plus</u> 0.25 percentage points.
- 2. **Settlement balances rate**, the interest rate the Bank pays on reserves, is set at the target overnight loans rate <u>minus</u> 0.25 percentage point.

Monetary Policy Transmission

The Bank of Canada's goal is to keep the inflation rate as close as possible to 2 percent a year.

When the Bank uses its policy tools to move the overnight loans rate closer to its desired level, a series of events occur.

We're now going to trace the events that follow a change in the overnight loans rate and see how those events lead to the ultimate policy goal — keeping inflation on target.

Quick Overview

When the Bank of Canada <u>lowers</u> the overnight loans rate:

- 1. The Bank buys securities in an open market operation.
- 2. Other short-term interest rates and the exchange rate fall.
- 3. The quantity of money and the supply of loanable funds increase.
- 4. The long-term real interest rate falls.
- 5. Consumption expenditure, investment, and net exports increase.
- 6. Aggregate demand increases.
- 7. Real GDP growth and the inflation rate increase.

When the Bank of Canada raises the overnight loans rate, the ripple effects go in the opposite direction.

Figure 30.4 provides a schematic summary of these ripple effects, which stretch out over a period of between one and two years.

The Bank of Canada lowers the overnight loans rate The Bank of Canada raises the overnight loans rate

The Bank buys securities in an open market operation

The Bank sells securities in an open market operation

Other short-term interest rates fall and the exchange rate falls

Other short-term interest rates rise and the exchange rate rises

The quantity of money and supply of loanable funds increase

The quantity of money and supply of loanable funds decrease

The long-term real interest rate falls

The long-term real interest rate rises

Consumption expenditure, investment, and net exports increase Consumption expenditure, investment, and net exports decrease

Aggregate demand increases Aggregate demand decreases

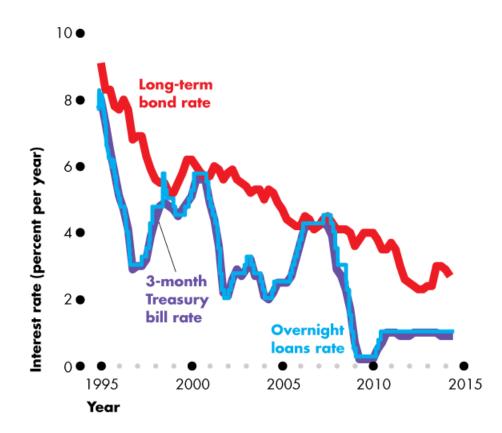
Real GDP growth and the inflation rate increase

Real GDP growth and the inflation rate decrease

Interest Rate Changes

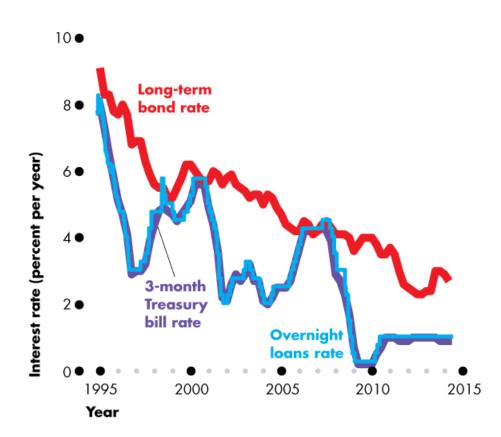
Figure 30.5 shows the fluctuations in three interest rates:

- The short-term bill rate
- The long-term bond rate
- The overnight loans rate



Short-term rates move closely together and follow the overnight loans rate.

Long-term rates move in the same direction as the overnight loans rate but are only loosely connected to the overnight loans rate.



Exchange Rate Fluctuations

The exchange rate responds to changes in the interest rate in Canada relative to the interest rates in other countries—the *Canadian interest rate differential*.

But other factors are also at work, which make the exchange rate hard to predict.

Money and Bank Loans

When the Bank lowers the overnight loans rate, the quantity of money and the quantity of bank loans increase.

Consumption and investment plans change.

Long-Term Real Interest Rate

Equilibrium in the market for loanable funds determines the long-term real interest rate, which equals the nominal interest rate minus the expected inflation rate.

The long-term real interest rate influences expenditure plans.

Expenditure Plans

The ripple effects that follow a change in the overnight rate change three components of aggregate expenditure:

- Consumption expenditure
- Investment
- Net exports

A change in the overnight loans rate changes in aggregate expenditure plans, which in turn changes aggregate demand, real GDP, and the price level.

So the Bank influences the inflation rate and output gap.

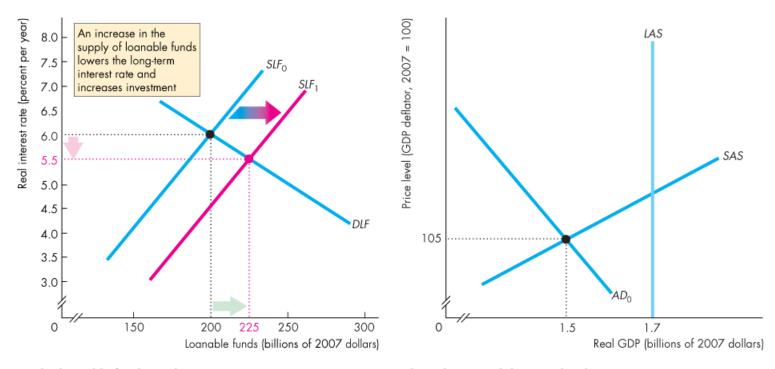
The Bank of Canada Fights Recession

If inflation is low and the output gap is negative, the Bank lowers the overnight rate target. An increase in the monetary base increases the supply of money.

The short-term interest rate falls.

The increase in the supply of money increases the supply of loanable funds.

The long-term real interest rate falls. Investment increases.

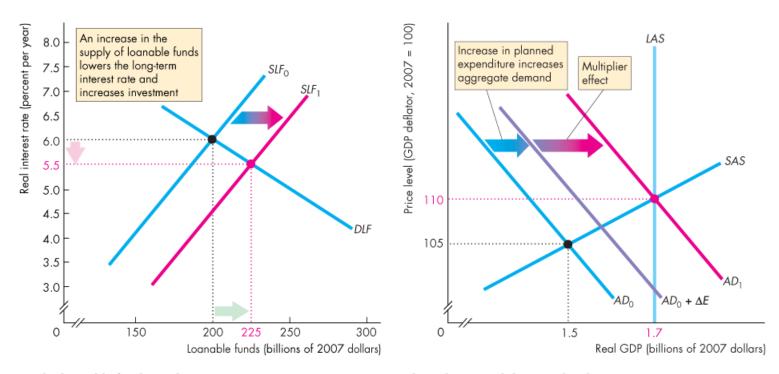


(c) The loanable funds market

(d) Real GDP and the price level

The fall in the real interest rate increases aggregate planned expenditure. The multiplier increases aggregate demand.

Real GDP increases and closes the recessionary gap.



(c) The loanable funds market

(d) Real GDP and the price level

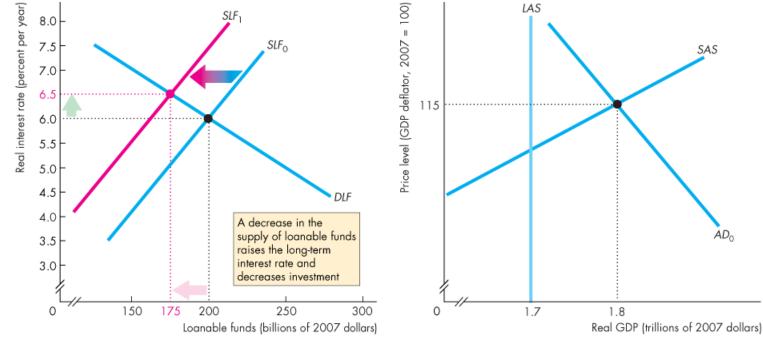
The Bank of Canada Fights Inflation

If inflation is too high and the output gap is positive, the Bank of Canada raises the overnight loans rate target. A decrease in the monetary base decreases the supply of money.

The short-term interest rate rises.

The decrease in the supply of money decreases the supply of loanable funds.

The long-term real interest rate rises. Investment decreases.

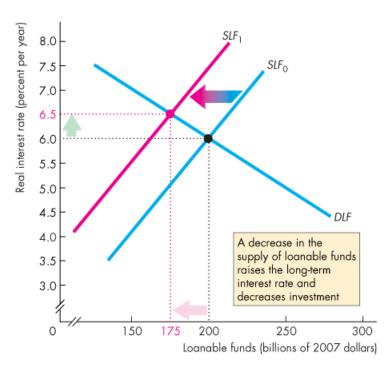


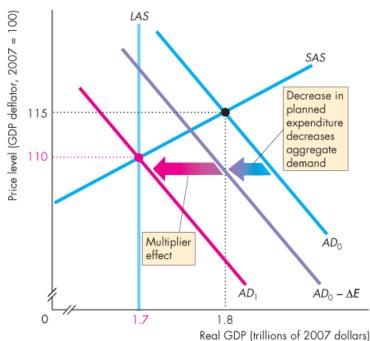
(c) The loanable funds market

(d) Real GDP and the price level

The rise in real interest rate decreases aggregate planned expenditure. The multiplier decreases aggregate demand.

Real GDP decreases and closes the inflationary gap.





(c) The loanable funds market

(d) Real GDP and the price level