

# **MONEY AND MONETARY POLICY IN CANADA**

## **MODULE 7: IT'S A MATTER OF INTEREST**

**“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**

|  |    |
|--|----|
| Objective of the Bank of Canada—A Reminder _____           | 1  |
| 7.1 Interest Rates: A Powerful Influence on Spending _____ | 2  |
| 7.2 Why Interest Is Paid _____                             | 4  |
| 7.3 The Policy Interest Rate and the Bank Rate _____       | 8  |
| 7.4 The Prime Rate and Other Administered Rates _____      | 10 |

## OBJECTIVE OF THE BANK OF CANADA—A REMINDER

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**Economic  
Insight:**  
*Influencing  
interest rates is  
the prime means  
by which the Bank  
of Canada  
implements  
monetary policy*

The major objective of the Bank of *Canada* is to achieve and maintain price stability in the economy in order to promote stable growth and employment. It does this through monetary policy.

Depending on where the economy is operating in terms of its current capacity—and where it is headed—changes to monetary policy that boost spending might be considered necessary—and might push up the rate of inflation beyond its acceptable limit. The Bank primarily affects spending in the economy through its influence on interest rates, which in turn affect the exchange rate.

Because interest rates are very important, we'll begin there.

## 7.1 INTEREST RATES: A POWERFUL INFLUENCE ON SPENDING

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Interest rates affect many of the economic decisions that spenders, borrowers, savers, consumers and investors make.

**Economic Insight:** Interest rates affect decisions by consumers, savers, borrowers, and investors

Higher interest rates usually cause consumer spending to decline, especially for items that may need to be financed with a loan, such as cars, houses, appliances, boats and furniture. Consumers may also be more inclined to save than to spend when interest rates are higher because the opportunity cost of not saving rises as interest rates rise. That is, by not saving, an individual gives up more in terms of the higher interest returns (profits) that can come from saving. Similarly, when businesses contemplate major investments, they frequently need to borrow funds. Whether they borrow funds to finance an investment depends on various factors. The most important of these is the expected rate of return. For example, if you thought an investment would give you a 4% return, would you borrow funds at a 6% rate of interest? Would you borrow at 4%? or 2%? In general, the higher interest rates are, the less business investment there will be.

### Interest Rates Can Affect the Exchange Rate—and Our Export Sales and Import Purchases

Higher interest rates can also attract foreign investors, and their purchases of Canadian dollars for investment purposes can lead to a rise in the value of our dollar in foreign exchange markets (other things being equal). As the value of our dollar climbs, people in other countries must spend more of their currency to buy our dollars to pay for the goods and services we sell them. After all, Canadian producers want to be paid in Canadian dollars—not Japanese yen, British pounds or Mexican pesos.

**Economic Insight:** A higher valued Canadian dollar tends to reduce export sales

The higher the value of the Canadian dollar in their currency, the more of their money foreign buyers will have to use to buy Canadian dollars. And that makes Canadian goods and services more expensive for foreign buyers—which will likely lead to a decline in our export sales.

So, higher interest rates in Canada are often accompanied by a higher-valued dollar and a decline in spending by other countries on our exports.

What about here in Canada? Canadian consumers will likely find that imports are relatively less expensive because of the higher value of the Canadian dollar. This may lead Canadians to shift some of their spending from some Canadian-produced goods and services to foreign goods and services.

That's why a stronger, higher-valued Canadian dollar is often more popular with Canadian consumers than with Canadian producers. Not only is it more challenging to sell their more expensive goods and services abroad, Canadian producers may also lose some sales in Canada to cheaper imports.

### **Changing Interest Rates Affect Total Spending in the Economy**

To summarize, as interest rates rise, consumption usually falls, investment falls, export sales decline, and more spending by Canadian consumers may shift to imported goods and services. So, the impact of higher interest rates is a drop in total spending on Canadian goods and services. We can easily flip this statement around and see how falling interest rates can boost consumption, investment and exports and will likely have a negative effect on purchases of imports.

It is clear that interest rates can have a powerful influence. That explains why interest rate movements are the primary mechanism the Bank of Canada uses to affect the level of spending in the economy.

Since interest rates play such a key role in monetary policy, it is important to understand the concept of interest, why interest is paid, and the types of interest rates. Let's look now at why interest is paid.

## 7.2 WHY INTEREST IS PAID

Suppose you need to rent a car for three days. After the three days, you will return the car to the rental company and pay a price for having used it.

What is included in the car rental price? It covers such things as the depreciation (loss of value) in the car that occurred over the rental period. Also included is a profit—a real rate of return to the company that owns the car. After all, if the car rental company can't earn some profit from renting out a car, why get into the car rental business?

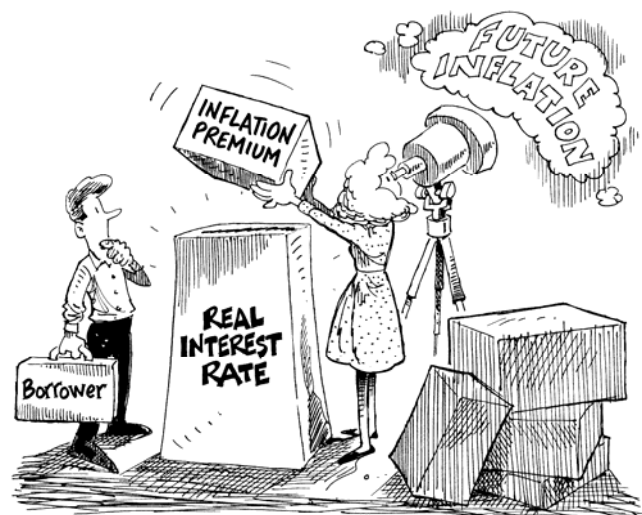
Similarly, if you borrow funds from a financial institution, you are using someone else's savings—someone else's postponed consumption. The saver is saving money as deposits in the financial institution based on its function as a store of value—holding the money for future use while also hoping to protect, or increase, its value (purchasing power).

### Expectations of Inflation Find Their Way into Interest Rates

You, the borrower, want to use the saver's or lender's funds now for spending. The lender, like the car company, is concerned about any depreciation in the value of those funds over the time you are using them. If inflation occurs during that time, there will be a decline in the value of the funds. The lender will therefore charge you a price to protect that value. That price is part of the interest you will pay.

That is another reason why controlling expectations of inflation is of such concern to the Bank of Canada. If you are looking to borrow funds for five years, the lender will include the expected rate of inflation as part of the interest rate you will pay.

For example, if the lender expects the rate of inflation to be an average of 4% a year, then right off the top, you will pay 4% in interest to cover the inflation expected—and the



*Lenders will look into the future and make assumptions about the future rate of inflation when determining the inflation premium they will add to the real rate of interest they will charge to borrowers.*

**Economic  
Insight:**  
*Expectations for  
inflation get built  
into interest rates*

decline in the value of the lender's money over the period of the loan. If expected inflation is 2%, rather than 4%, you will probably pay less interest and save more money on borrowing costs.

Other factors will also affect the interest rate you pay, but be aware that expectations of future inflation is a big one. Therefore, borrowers should welcome the efforts of the Bank of Canada to restrain expected inflation. The lower inflation expectations are, the lower the interest rates borrowers will have to pay.

Having confidence in a stable rate of inflation also makes lenders more confident in making loans—and that helps the economy.

So, protecting the value of money from inflation is one reason borrowers have to pay interest to lenders. But, beyond this, who is going to lend money if all you get back is the same value of the money that was borrowed?

## Real Rate of Return

In addition to protecting the purchasing power of their funds from the effects of inflation, lenders also seek a real rate of return—one that is above the rate of inflation. In the same way that the car rental company seeks a profit, so will savers and lenders. If not, there is little incentive to save money or to lend it out.

So, the level of real return sought by the lender also affects the interest rate you may pay to borrow money. What other factors besides expectations for inflation and the lender's desire for a real rate of return can affect the interest rate charged on borrowed money?

Other factors include the following:

- Your credit rating. Whenever you borrow money, your record of making payments, making them on time and paying back all that you borrowed will be part of your credit rating. There are two main credit-rating companies in Canada: Equifax and TransUnion. They keep track of your credit record and issue you a credit score, which any company or institution that is considering lending money to you can access.  
  
It is important to maintain a good credit rating. The worse your credit rating, the greater the risk lenders will believe they face in getting repaid on time—and the higher the interest rate they will likely charge you.
- Your past business record with a company or organization. If you purchased something from a company in the past—a car, for example—and borrowed money to buy or lease it, then how you handled the loan is important. If you had a good record of making payments and paying back the loan on time, your record with the company may help you negotiate a lower rate.

**Economic Insight:** The “real” rate of interest factors out the return covering inflation

**Economic Insight:** A variety of factors can influence the rate of interest you may pay

- Competition. Speaking of negotiation, financial institutions do compete with each other, and you may find that talking with different institutions can result in a lower rate.
- Time. The interest rate you pay may be affected by the length of time for which you want to borrow money. The longer the time period for the loan, the greater uncertainty there may be from the lender's point of view. If the future looks riskier and more uncertain, that can be reflected in a higher rate of interest.

These and other factors can affect the interest rate that you pay on funds you borrow. But the amount arising from any of these factors will be in addition to a base rate of interest, where all lending starts. Before we look at that rate, let's clarify the distinction between nominal rates of interest and real rates of interest.

**Economic Insight:** Every interest rate will have an “inflation premium” built in

Nominal and Real Rates of Interest

Every interest rate has two basic components. The portion of the interest rate that covers expected inflation is referred to as the inflation premium. With expected inflation of 2%, for example, savers and lenders would expect an inflation premium of 2%.

**Economic Insight:** Every interest rate will have a “real” return component

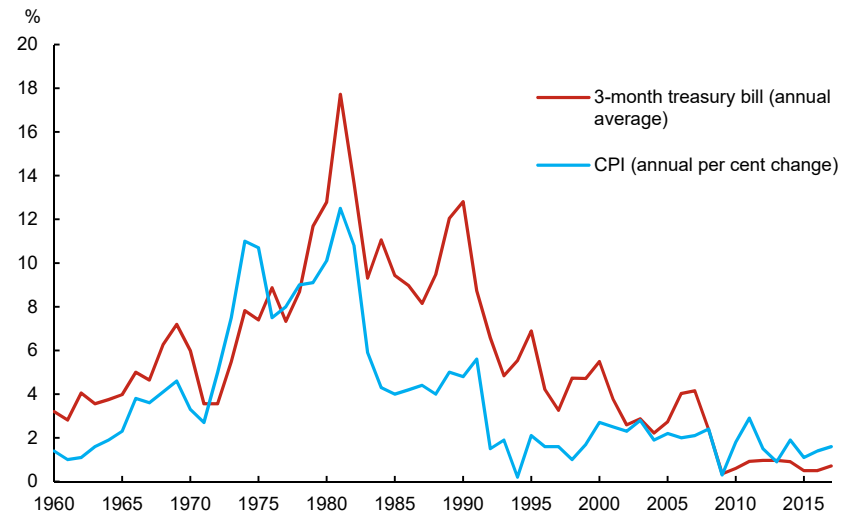
The other portion of the interest rate represents some real rate of return—one that is above the rate of inflation. Consider an example where there is an expectation of 2% inflation and the interest rate is 4%. What is the breakdown? It's pretty simply really. The first 2% charged will be to cover expected inflation. The other 2% will be the expected real return (or profit).

The total interest rate of 4% in our example is called the nominal rate of interest. The real rate of interest (2%) is the component of the interest rate that provides a real rate of return.

A diagram might help to visualize the relationship:

|                             |   |                               |   |                                 |
|-----------------------------|---|-------------------------------|---|---------------------------------|
| Nominal rate<br>of interest | = | Expected rate<br>of inflation | + | Expected real<br>rate of return |
| 4%                          |   | 2%                            |   | 2%                              |



**Chart 7-1: Inflation and interest rates, 1960-2017**

Sources: Statistics Canada, Tables 10-10-0122-01 and 18-10-0004-01

Last observation: 2017

## 7.3 THE POLICY INTEREST RATE AND THE BANK RATE

### **Economic**

**Insight: Bank Rate:** rate of interest charged by the Bank of Canada to financial institutions

### **Economic**

**Insight: The Overnight Rate of Interest:** the rate of interest at which one bank lends money to another

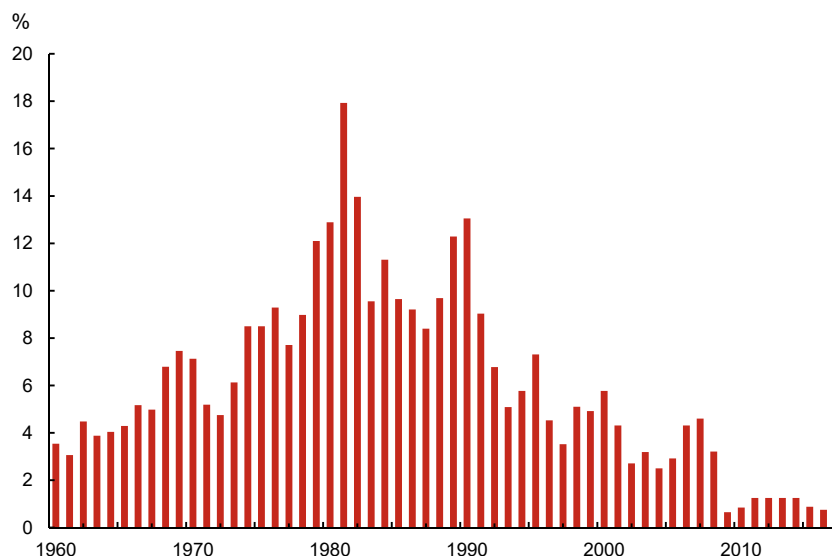
### **Economic**

**Insight: Policy Interest Rate:** the target rate set by the Bank of Canada for the overnight rate of interest

The policy interest rate (PIR), is the interest rate at which major financial institutions borrow and lend funds for one day or overnight among themselves. It is also the key interest rate for implementing monetary policy.

The bank rate is the rate of interest charged by the Bank of Canada to financial institutions that need to borrow funds from the Bank. It used to play a more significant role in monetary policy, but that role has been taken over by the policy interest rate.

**Chart 7-2: Annual average bank rate, 1960-2017**



Source: Bank of Canada

Last observation: 2017

Recall the example from Module 3 where we had cheques being written on accounts at the Royal Bank and the Bank of Montreal. When all the financial transactions at both banks based on these cheques are added up at the end of the day, one bank will probably owe money to the other. The transfer will happen within a short period of time, but until it does, the money will still be owed and interest will have to be paid on it. The rate of interest at which one bank lends money to another for this short period of time is the overnight rate. The Bank of Canada sets a target for the overnight rate of interest, and that target rate is the policy interest rate mentioned above.

It is this rate—the target overnight rate, or the policy interest rate—that the Bank of Canada changes as it considers necessary to implement monetary policy.

Let's look now at other interest rates you may have heard of—or paid.

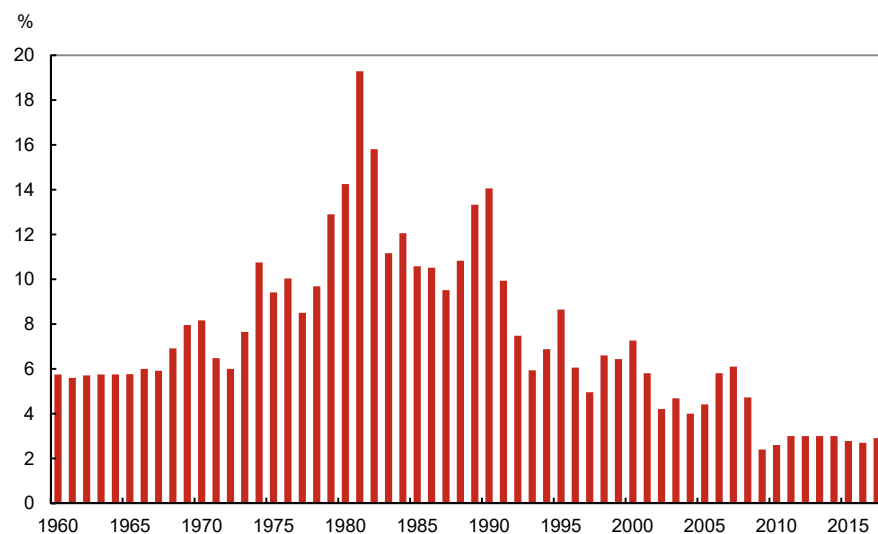
## 7.4 THE PRIME RATE AND OTHER ADMINISTERED RATES

**Economic Insight:** The Prime Rate of Interest: the rate charged by financial institutions on loans to their best, lowest risk customers

**Economic Insight:** Changes in monetary policy do not impact the economy right away. There is lag period

Another well-known interest rate is the prime rate. This is the rate charged by financial institutions on loans to their best, lowest-risk customers, such as large corporations. If you are one of a bank's best customers with a long-standing good credit rating, it may be possible to secure a loan at or near the prime rate of interest.

**Chart 7-3: Annual average prime rate, 1956-2017**



Source: Bank of Canada

Last observation: 2017

The prime rate is one of the interest rates influenced by changes the Bank of Canada makes to the policy interest rate. Changes to the prime rate can generate changes in other interest rates, such as mortgage rates. Be aware, however, that changes to these other interest rates may be independent of changes to the prime rate.

Some interest rates are referred to as administered rates. These rates are set by each financial institution, not set in financial markets. This means the institution has some discretion over the interest rates charged or paid and can decide the rate of interest based on a number of factors. One of these factors is the perceived risk of the borrower. That is why your credit rating is so important. Another factor an institution may consider is what types of loans are available from its competitors and the rates they charge for them.

**The Level of Perceived Risk Will Affect Interest Rates**

Depending on the level of risk the bank feels a borrower represents, it will offer loans at points above the prime rate, with each point representing one percentage point. If you are a very good borrower, considered a low risk, you might be offered a rate of prime plus 1. That is, if the prime rate is 3%, you could be offered a loan at 4%. The greater the perceived risk of a borrower, the higher the rate of interest likely to be offered. And the higher the prime rate, the higher these “prime plus” interest rates offered by the financial institutions will be.

**The Impact of Changes to the Policy Interest Rate**

It is important to remember that changes to the Bank of Canada’s policy interest rate do not automatically lead to changes in the prime rate and other rates. Various factors and market forces may exert a significant influence in a particular market for funds. For example, developments in the housing market and the longer-term market for funds will influence mortgage rates.

Note also that changes in monetary policy—in the policy interest rate—do not affect the economy right away. It can take six to eight quarters (that is, 18 to 24 months) for a policy action to have its full impact. That is why the focus of the Bank of Canada is always forward-looking. It has to focus on where the economy is heading, what might happen and what impact the Bank hopes the policy action will have 18 to 24 months in the future.

**Interest Rates Can Be Affected by Developments in Specific Financial Markets**

There are financial markets and interest rates that apply to a variety of purposes: commercial loans, mortgage loans, car loans, etc. The rates for these loans may be influenced by movements in the policy interest rate, the prime rate and longer-term rates, but they will also be affected by developments in specific markets. For example, if there is a boom in the housing market, a high demand for mortgage loans may cause a rise in mortgage rates, depending on the supply of funds institutions have available to lend out for mortgage purposes.

**Quick Summary**

This completes our look into the world of interest rates. The key point to remember is that the Bank of Canada influences demand and spending in the economy primarily by setting the policy interest rate, which then influences other interest rates and the exchange rate. For monetary policy-makers, the key decision is whether any change in the policy interest rate is warranted.

Before we consider how the Bank of Canada makes that judgment call, and at the process for implementing monetary policy, let's look at the next module, which will explain another important rate that can affect spending—the exchange rate.