## Inter est Rates

BANK OF GANADA

## BACKGROUNDER

Interest represents the cost of borrowing money over a period of time-the price that lenders charge borrowers for the use of the lenders' money.

Interest is paid in several ways. Simple interest is expressed as a percentage of the principal over a year. A loan at 6 per cent means $\$ 6$ in annual interest for every $\$ 100$ borrowed or invested.
Compound interest occurs when calculations of interest are made on the principal plus accumulated interest. For instance, a 4.25 per cent annual interest rate compounded monthly becomes, in effect, a 4.33 per cent annual interest rate.

## Nominal and real interest rates

Interest rates have two components: a portion that covers expected inflation, called the inflation premium, and a portion that represents the real rate of return. The expected real rate of interest is the difference between the nominal rate of interest and the expected rate of inflation. For example, with a nominal interest rate of 6 per cent and an expected rate of inflation of 2 per cent, the expected real rate of interest is 4 per cent.

Contrary to what many people believe, banks and other financial institutions do not fundamentally determine the general level of interest rates. As intermediaries between lenders and borrowers, they merely reflect the relative intensity or balance between the supply of and demand for loanable funds.

Interest rates in Canada are broadly determined by the level of interest rates in the United States, the relative inflation rates in both countries, and
the relative stances of their monetary policies. A risk factor is also factored in. The result is that Canadian interest rates can be either higher or lower than U.S. rates but are never fully independent.

On a practical level, investors comparing interest rates in Canada and the United States take account of the inflation rate differential by factoring in its effect on the exchange rate. If inflation is lower in Canada, the Canadian dollar would be expected to increase relative to the U.S. dollar, all other things being equal, and this would translate into lower interest rates in Canada.

## Short-term and longer-term rates

Time has an important influence on the level of interest rates. Short-term interest rates usually apply to money lent for a period of under one year. As the time period or term of the loan increases, long-term interest rates can be either higher or lower than short-term rates.

Long-term rates reflect the expected level of short-term interest rates in the future plus a premium to compensate for uncertainty. This premium tends to increase with time because there is more uncertainty the farther you go into the future. The premium can vary a lot, and economists do not have a good explanation for the precise causes.

## The Bank of Canada's role

The Bank of Canada has an influence on very short-term interest rates through changes in the Bank Rate. But the direct influence of the Bank's actions diminish as the term lengthens.

