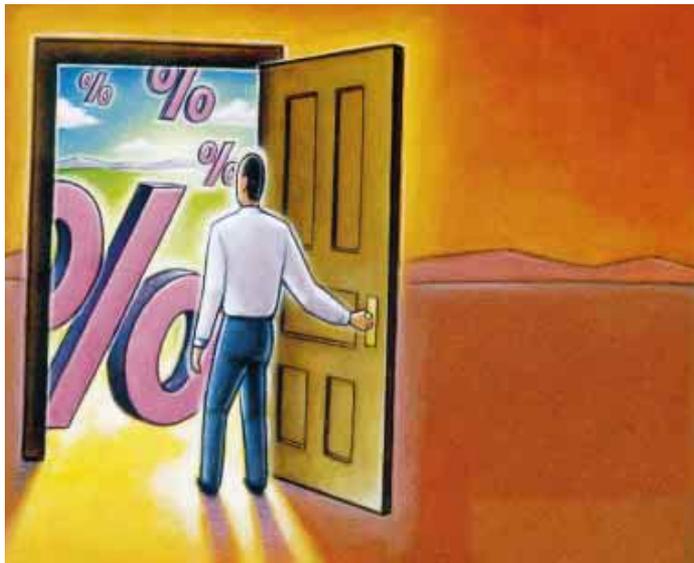


The Interest in your Life



How Interest Rates Impact Your Life



CANADIAN BANKERS ASSOCIATION

Building a Better Understanding

On behalf of the banking industry, the Canadian Bankers Association has embarked on a program called Building a Better Understanding. This is our commitment to try and communicate better and to provide useful financial information to Canadians.

As part of the program, we are offering a free series of publications, ranging from money management and interest rates to mortgages, starting a small business and saving for your children's education. To obtain copies, call toll-free 1-800-263 0231 or visit our web site at www.cba.ca. You can also order by writing to Building a Better Understanding, c/o Canadian Bankers Association, Box 348, Commerce Court West, 199 Bay St., 30th floor, Toronto, Ontario M5L 1G2.

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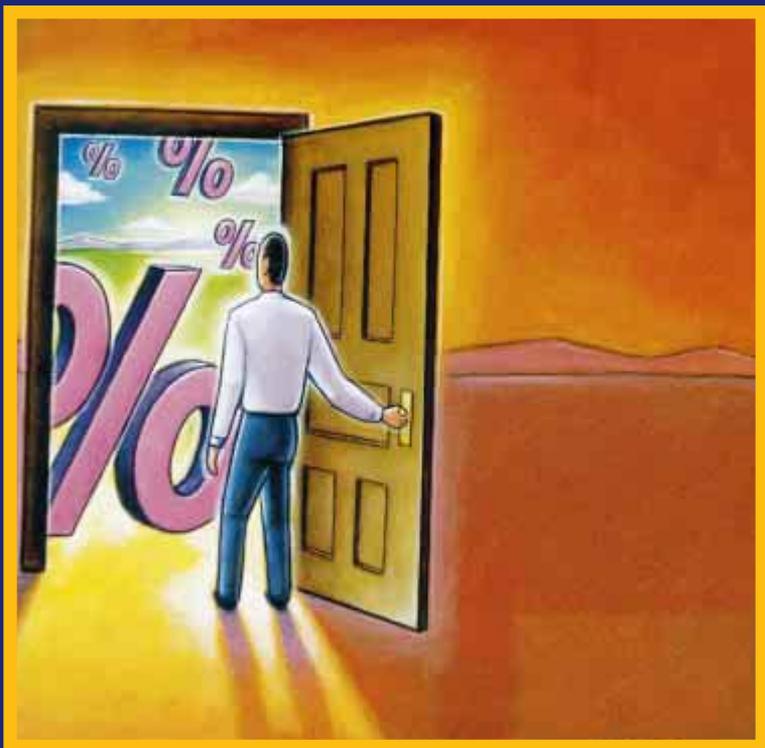
These publications are also available in alternative formats for people who are partially sighted or have limited vision.

La version française de cette brochure est disponible sur demande.

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The Canadian Bankers Association would like to thank Gary Rabbior, President of the Canadian Foundation for Economic Education, for his valuable input and suggestions and the Bank of Canada for assistance with the section "Interest Rates and the Economy".



Introduction

Interest rates are a mystery to many Canadians. How are they set? What makes them go up and down? Why are there so many different rates? What effect do they have on our dollar? What impact do they have on our lifestyle? What's going to happen to interest rates in the future? How do they affect Canada's economy?

When you think about it, many activities in our lives are affected by interest rates. They have an impact on our standard of living, our mortgages, the type of car we can afford, our savings and investments, how we'll live in our retirement years and our tax situation. You get the picture.

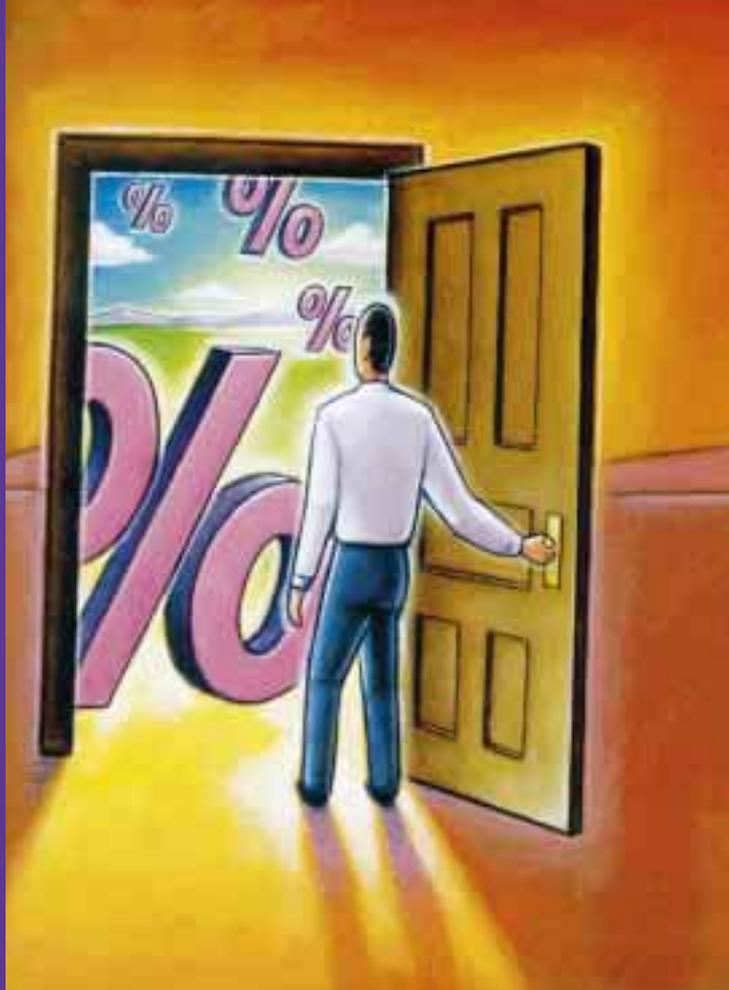
Like other economic forces such as inflation, the fluctuating dollar, government spending and international trade, interest rates have a major influence on all of our lives. But understanding their day-to-day implications is not always easy.

In fact, the Canadian Bankers Association undertook a survey in 1997 and the results were clear – Canadians felt that if they had a better grasp of economic and financial information, they could make more informed decisions about their personal finances.

This booklet is one in a series of free publications on financial and economic topics from the Canadian Bankers Association. We hope it will provide you with some helpful information on topics related to financial management and planning and the broader workings of the economy.

The world of interest rates is a complex one. This booklet is not designed to be the last word on interest rates, but a basic overview. We've tried to simplify some of the more detailed points to create a more user-friendly booklet. We hope you'll use this as a starting point to building a better understanding.

Under- standing Interest Rates



I N T E R E S T R A T E S A R E A P O T E N T F O R C E I N O U R L I V E S .

They affect decisions made by borrowers, lenders, savers, consumers and investors.

Individuals pay interest

on mortgages, consumer loans and unpaid credit card balances. Consumers are paid interest by financial institutions for their savings, guaranteed investment certificates (GICs), bonds, etc.

Businesses that require capital have the choice of borrowing money (debt) or allowing another party to buy into it, i.e. issuing stocks or establishing partnerships.

When it comes to interest rates, Canadians are pulled in two directions – as savers we expect a healthy return on our savings. We're also borrowers, looking for money for our homes, cars, businesses and investments – at the lowest possible interest rates.

There's clearly a contradiction in what we want from interest rates. We want to earn a good return on our savings and we want to pay as little as possible to borrow. In other words, we want the best of both worlds.

WHAT IS INTEREST?

Quite simply, interest is the cost of money. Interest rates are expressed as a percentage of the amount borrowed or saved.

WHY DO I PAY INTEREST ON MONEY THAT I BORROW?

The rate of interest is the cost of using someone else's money. Like renting a car, for example, you pay a fee for the time during which you wish to use it. Similarly, financial institutions charge a fee – interest – for providing you with a loan over a period of time. The amount you actually borrow is called the principal. You then pay interest on the principal, which covers the cost of using someone else's money for a set period of time. When a payment is made, it is applied toward the principal and the interest. The interest the financial institution receives helps cover the interest costs it pays, the cost of administering the loan and generating a profit.

WHY AM I ABLE TO EARN INTEREST ON MONEY THAT I SAVE?

As a saver, you are effectively renting out your money. Your return for giving up the use of your money for a set period is the interest you earn. For instance, savers are paid interest on their money by financial institutions who, in turn, lend that money to borrowers. The interest paid by borrowers helps financial institutions earn the money to pay the saver and cover such costs as loan administration, wages, rent, utilities etc. Financial institutions play a role in society by serving as intermediaries and linking those who have money to save and those who need to borrow money.



What Borrowers Want to Know



Interest rates affect borrowers and savers very differently. Here are some of the top questions asked by both:

I'M SHOPPING FOR A LOAN. WHAT MIGHT AFFECT THE INTEREST RATE I PAY?

There are many factors that affect your interest rate when you borrow money. Some are related to your personal situation, while others reflect broader economic forces:

- The term of the loan (rates are different for short and long-term loans)
- The amount you are borrowing and reason for the loan (Buy a car? Take a vacation?)
- Risk factors for the lender, i.e., the risk that the money may not be repaid
- The prevailing interest rates in the economy and marketplace
- Expected inflation

LET'S LOOK AT SOME OF THESE IN GREATER DETAIL:

Term of the loan: This can have an important bearing on the interest rate you'll pay. First of all, rates vary for short and long-term loans. Short-term loans – overnight or up to one year – normally carry a lower interest rate because it's easier for the lender to gauge future market conditions such as the direction of interest rates, inflation and growth in the economy. Lenders tend to charge higher interest rates on long-term loans because they are taking a risk on future economic conditions. If they aren't protected against rising interest rates, they would lose money on the loan over the long-term.

Risk: The more risk the lender feels there is (that is, the likelihood that the loan will not be repaid), the higher the rate of interest the lender will want to receive to compensate for the risk. Do you fit the profile of other clients who have paid off their loans on time? What is your credit rating? What is your past record of borrowing and repayment? Do you have a history of making your payments on time – including credit cards?

Another risk factor is security. What do you have to offer as security or collateral? For instance, do you have a secured loan (a mortgage where you offer your home as a tangible asset to back up the loan) or an unsecured loan (credit card)? One of the reasons you'll pay a lower interest rate on your mortgage than on your credit card is that the risk factor isn't as high for the lender. After all, a house is excellent collateral for a loan. So, why are credit card rates higher than on many other loans?



Credit cards offer little or no security for the lender – so the lender must charge a higher interest rate to protect against risk. As well, credit cards are prone to significant fraud, further increasing the risk factor.

Inflation: This relates to the lender’s concern with the change in the level of prices that may lie ahead. When prices rise in the economy this is called inflation. This means that the same amount of money will be able to buy less. In other words, the purchasing power of money is reduced. For example, if a financial institution loans you \$2,000 today and over the next year prices increase by 5%, when you repay the \$2,000 a year from now, its purchasing power will be less. In essence, you’ll be repaying cheaper dollars than the ones you borrowed. Lenders, therefore, build an assumed inflation rate into the interest rate you will pay.

You can’t influence some of the above factors. But you can have an influence on factors such as risk by your experiences with borrowing.

HOW CAN I GET THE LOWEST RATE OF INTEREST?

Shop around to find the best rate for your borrowing needs. Don’t be afraid to ask for a lower rate than is quoted. Remember that the posted loan rates are only guidelines. Your mortgage may provide your best opportunity for bargaining because it’s a secured loan and very few people default on their mortgages.

If you’re not happy with the rate your financial institution quoted, check around to see what other lenders are offering. Your alternatives include banks, trust companies, credit unions, caisses populaires, mortgage loan companies and government lending institutions. Just as important, maintain a good credit rating – pay back your debts and pay them on time. This could give you additional leverage when negotiating a loan.

HOW CAN I REDUCE THE TOTAL AMOUNT OF INTEREST I PAY?

There are ways to cut down on the interest you pay. For instance, if you have a mortgage, try to double up on payments, make a lump sum payment every year or make weekly or biweekly payments to shorten your amortization period. The shorter the length of your mortgage (the amortization period), the less total interest you will pay. When buying a home, save the largest downpayment possible. For consumer



loans (cars, appliances) signing up for a shorter term will decrease your interest costs. The idea is to pay off the principal as quickly as possible. Pay credit card balances in full every month to avoid interest charges. (55 per cent of Canadians pay off their credit card balances in full each month.)

WHAT IF I'M HAVING TROUBLE MAKING MY PAYMENTS?

If you find that you're over-extended, meet with your lender to discuss the problem. Be open about your situation and try to work out a mutually acceptable solution. The earlier you bring your problem to the attention of the lender, the better the chance the lender will be able to help. Depending on your situation, a temporary solution could be negotiated. This could include postponing a payment or re-amortizing a loan to reduce payments.

If you have a number of loans you are having difficulty paying, the solution could be debt consolidation. This is where you would work with your financial institution and arrange for one large loan to pay off the smaller ones. The advantage here is that you have one single manageable payment and the interest rate may be lower than on some of the individual loans.

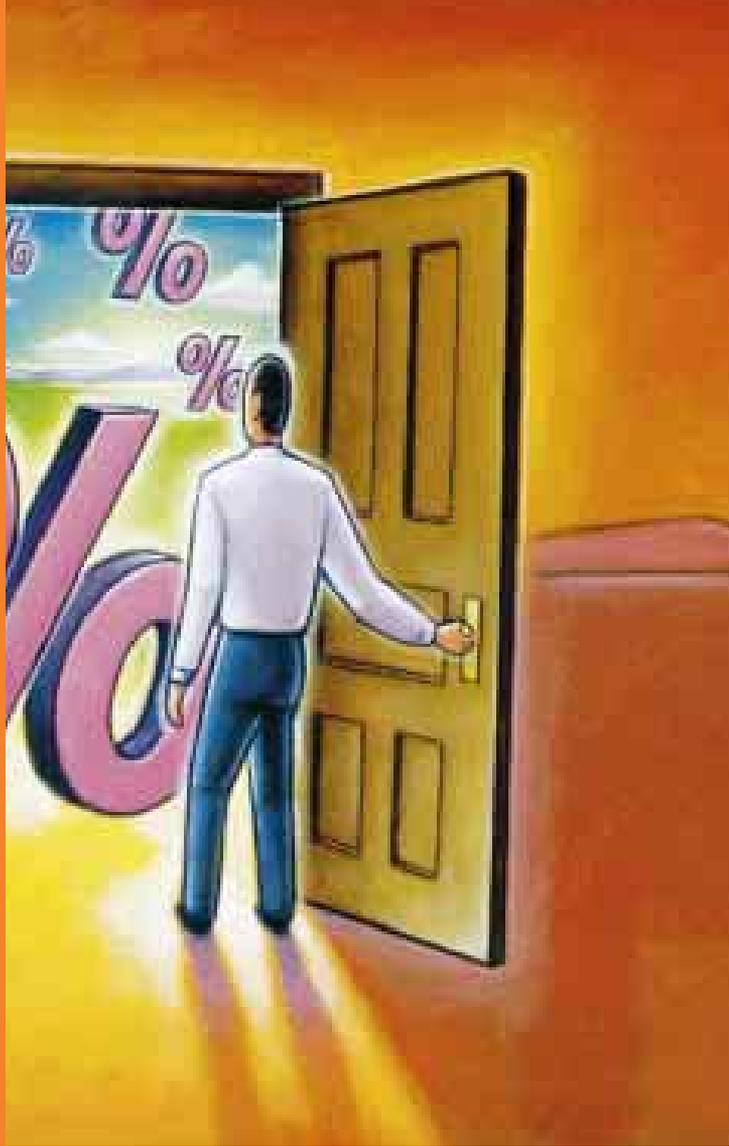
Credit counselling is another option, especially if the cause of your difficulty stems from a job loss, a lay-off, illness or poor money practices. The counsellor will begin by analyzing your budget, income and expenses, as well as your spending pattern. The counsellor will make recommendations to get you back on track financially. A debt repayment program may be worked out where the debtor is committed to a schedule of monthly payments and the counselling agency acts as trustee and distributes the funds to the creditor(s). There are several non-profit credit counselling agencies across Canada.

WHEN ARE INTEREST PAYMENTS TAX DEDUCTIBLE?

Generally, interest paid on money to earn business or investment income is tax deductible. This applies even if the business or investment does not immediately generate a profit. Unlike the United States, interest payments on your mortgage are not tax-deductible. But if you have a mortgage on a house that is a rental property, the interest payments are tax deductible. The rental income, however, is taxable. For more information on tax treatment, you may want to consult a financial planner or a tax expert.



What
Savers
Want to
Know



**WHAT TYPES OF
SAVINGS/INVESTMENTS
CAN I EARN INTEREST ON?**

There are different ways in which you can save/invest your money – Guaranteed Investment Certificates (GICs), mutual funds, stocks etc. Some of these, like GICs, pay interest. They are known as debt-related investments because you

are loaning your money out to a financial institution or a bond issuer. The other broad category of investments is known as “equities”. These do not pay interest, but pay dividends (a share of profits). Equity is another name for ownership. For our purposes, we will focus only on those savings/investments that are debt-related (i.e. on which you earn interest). Here are some examples: GICs, T-bills, bonds, provincial and municipal bonds, corporate bonds, Canada savings bonds, bank accounts, term deposits.

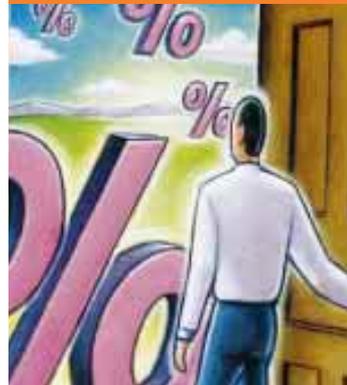
WHAT MIGHT AFFECT THE INTEREST RATE I GET ON MY SAVINGS/INVESTMENTS?

Rates on savings/investment vehicles that pay interest vary substantially. Factors that influence rates include:

- The savings vehicle you have chosen (GICs, bonds, T-bills, savings accounts, money markets)
- The risk of the investment (the higher the risk, the more interest you need to earn)
- The term of the savings vehicle (eg. 30 days, 60 days, 1 year, 5 year etc.)
- The amount available for saving
- The prevailing interest rates in the economy and marketplace

WHAT OTHER FACTORS MIGHT INFLUENCE THE RETURN OR AMOUNT OF INTEREST I WILL RECEIVE?

- The effects of compounding
- The inflation rate
- Tax treatment



LET'S CONSIDER THESE:

The Effects of Compounding: Compound interest is interest that is calculated not only on the starting principal, but on any previous interest accumulated. Here's an example: An investor places \$5,000 into a term deposit for five years at 6 per cent compounded annually.

What
Savers
Want to
Know

	Beginning Balance	Interest	Ending Balance
Year 1	\$5,000	\$300	\$5,300
Year 2	\$5,300	\$318	\$5,618
Year 3	\$5,618	\$337.08	\$5,955.08
Year 4	\$5,955.08	\$357.30	\$6,312.38
Year 5	\$6,312.38	\$378.75	\$6,691.13

Note that in the second year, the \$300 of interest earned in the first year is added to the \$5,000 principal. In the second year, the investor is earning interest on \$5,300 rather than just \$5,000. The compounding carries on, so that by the start of the fifth year, the investor is earning interest on both the principal, plus the interest from all of the previous years.

Now using the same \$5,000, let's see what happens when interest is compounded monthly for a period of five years. To keep it simple, we will only show figures in six-month increments.

	Beginning Balance	Interest	End Balance
Month 1	\$5,000	\$25	\$5,025
Month 6	\$5,126.26	\$25.63	\$5,151.89
Month 12	\$5,281.98	\$26.41	\$5,308.39
Month 18	\$5,442.43	\$27.21	\$5,469.64
Month 24	\$5,607.76	\$28.04	\$5,635.80
Month 30	\$5,778.11	\$28.89	\$5,807.00
Month 36	\$5,953.63	\$29.77	\$5,983.40
Month 42	\$6,134.49	\$30.67	\$6,165.16
Month 48	\$6,320.84	\$31.60	\$6,352.45
Month 54	\$6,512.85	\$32.56	\$6,545.42
Month 60	\$6,710.70	\$33.55	\$6,744.25

Note that the investor earns \$53.12 more in interest when the interest rate is compounded monthly rather than annually.

All other things being equal, the more frequently the interest is paid, the stronger the effect of compounding and the higher the effective rate of return. It makes sense to find out whether your interest is paid annually, semi-annually, quarterly or daily. Keep in mind that with semi-annual payments, you have the opportunity to compound the interest paid during the first half of the year. With quarterly payments, the interest paid during the earlier quarters of the year is compounded. Monthly compounding is even more effective. Over the long term, the effects of compounding can be substantial. That's why you often hear financial experts say that even saving a little as early as possible can reap huge rewards in the end because your money is working for you by "compounding".

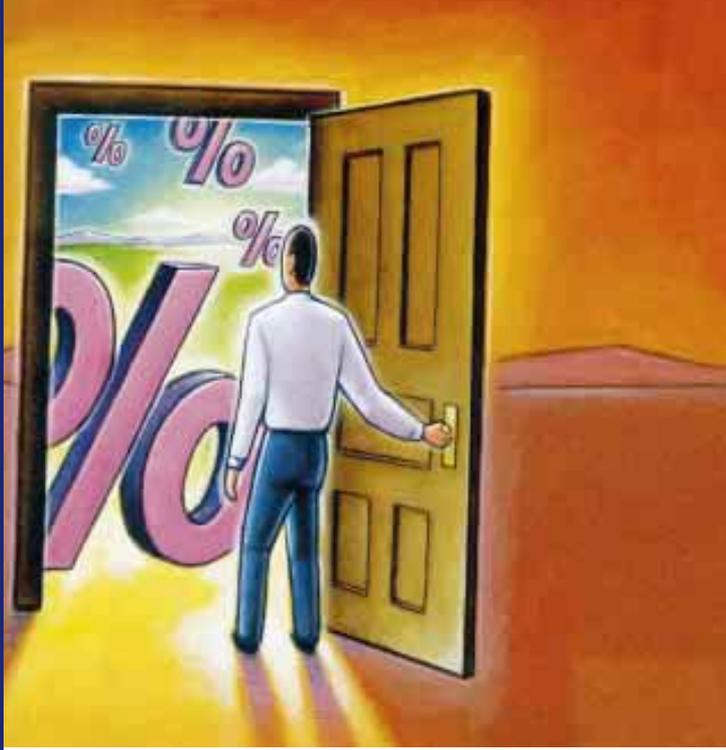
WHAT ARE SOME OF THE KEY THINGS TO CONSIDER WHEN MAKING EFFECTIVE SAVINGS/INVESTMENT DECISIONS?

- Your goals, needs and expectations: Will you need your money (and the return) sooner or later? Do you want the comfort of guaranteed earnings? Will you need your money to be accessible? Is it worth borrowing for investment purposes? Do you need a flow of income?
- Your tolerance for risk: What level of risk are you willing to take with your money? There are different levels of risk, depending on the vehicle you choose. You may have some money available for higher risk investments and you may have other money that you do not want to put at any risk. If you want low risk, you may consider GICs or Treasury bills.
- The length of time you want to save/invest: Consider term deposits, T-bills or other money market securities if you don't need to use your money every month, but still want it easily accessible. For longer term "debt-related" investments, think about GICS, corporate bonds, Canada or provincial savings bonds. For example, if you have a term deposit or a GIC that will remain untouched for a longer period, you will usually get a higher interest rate than for short-term investments. Just make sure you read the fine print. In some cases, if you take the money out before the term is up, you could face a penalty that could cancel some, if not all, of your interest gains. You may also incur a capital loss if you have to sell a long bond before its maturity and if interest rates have risen since you bought it.

AS A SAVER/INVESTOR AM I BETTER OFF WHEN INTEREST RATES ARE HIGH?

Before you can answer this, you need to figure out what you're really earning after inflation and taxes. It's not the total interest rate (the one you're receiving) that is most important – it's the real rate that matters. When you earn high interest rates while inflation is high, you could be worse off than when interest rates and inflation are low. For example, if interest rates were 18 per cent and inflation was 15 per cent, you are really only earning 3 per cent (before taxes). But if interest rates are 6 per cent and inflation is 1 per cent, you are earning 5 per cent (before taxes). Don't forget your tax situation will also affect how much you can effectively earn.

Planning for the Future



HOW CAN INTEREST RATES AND POSSIBLE CHANGES TO INTEREST RATES AFFECT MY LONGER TERM FUTURE PLANNING?

If you depend on investments that earn interest, lower interest rates will reduce your future income. Inflation also has a bearing on what your investments will earn.

That's why you should also consider other forms of investment that may offer better returns when interest rates drop. For instance, lower interest rates often result in a rising stock market and the price of bonds always moves in the opposite direction to interest rates. As interest rates rise, bond prices fall. If you are holding bonds with long maturities, and interest rates go up, you could be in for a rude awakening. Real estate is

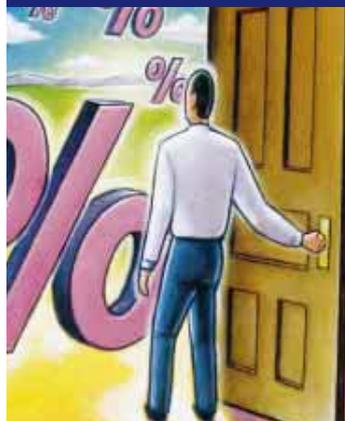
also impacted by interest rate fluctuations, but the effect is not usually as immediate as with bonds. Mutual funds are another investment option which many people have begun exploring over the past few years.

No matter which investment vehicles you choose when planning for retirement, don't over-estimate how much you will earn. It's better to expect less and be pleasantly surprised rather than come up short. For example, a 40-year-old saving \$5,500 per year (at the start of the year) in an RRSP could have expected to accumulate \$821,337 by age 65 when interest rates were 12 per cent. If rates are 6 per cent, that value would be only \$319,860 – a difference of \$501,477.

IF INTEREST RATES REMAIN LOW, WHAT WILL BE THE IMPACT ON MY RETIREMENT INCOME?

If you depend on investment income to live, you will see lower returns. An individual investing only in Treasury Bills will have seen their income cut by over 60 per cent as rates of return declined dramatically from their recent peak in 1990 when returns were in the 13 to 14 per cent range. In particular, senior citizens relying on investment income are hit hard by falling rates. They have a low tolerance for risk and rely on the security of a guaranteed rate of return.

When looking at other investments like stocks, make sure you assess your risk tolerance. If you have not invested in stocks before, you should talk to a financial expert for some guidance.



Interest Rates and the Economy



WHAT AFFECTS THE GENERAL LEVEL OF INTEREST RATES IN THE ECONOMY?

There are several factors: global market forces, the supply and demand for money, the current and expected rates of inflation, the length of time the funds are lent or borrowed and monetary policy.

I ALWAYS HEAR ABOUT THE BANK OF CANADA. WHAT IS ITS ROLE?

The Bank of Canada is not your average bank. It is Canada's central bank. It conducts monetary policy, acts as banker to financial institutions and

the federal government and issues bank notes. The Bank of Canada is responsible for protecting the value of money in Canada from being eroded by inflation. Its actions have considerable influence on interest rates, the value of the Canadian dollar on foreign exchange markets and economic activity in general.

The Bank of Canada's involvement is quite complex, so for our purposes, we'll focus on one aspect – its role in setting the bank rate. The **bank rate** is the rate of interest the Bank of Canada charges major financial institutions when they want to borrow money (for short term). The bank rate serves as an indicator of what will happen to interest rates in general, but usually on a short-term basis.

When the Bank of Canada increases the borrowing rates it charges major financial institutions, this often signals a rise in other interest rates. These include the **prime rate** which financial institutions charge their preferred customers (those representing the least amount of risk), as well as the rates paid by other borrowers. The prime rate is the rate used by financial institutions as their own reference marker for loans of all kinds to businesses and individuals. When the prime goes up, the rates charged on other bank loans often go up.

Because they act as broad indicators, many people in the media and business world pay attention to the bank rate and the prime rate.

WHAT IS THE RELATIONSHIP BETWEEN INTEREST RATES AND OUR DOLLAR?

Higher interest rates tend to boost the external value of our dollar by attracting investments in Canadian dollars. Higher interest rates tend to curtail domestic borrowing and spending, while a higher dollar tends to shift demand away from Canadian goods by making exports cheaper and Canadian goods comparatively more expensive. Thus, the Bank of Canada sometimes uses its bank rate to counter movements in the exchange rate or their effect on the demand for Canadian goods and services.



As an example, in late January 1998, the Canadian dollar was at a record low of 68.25 cents (U.S.). The Bank of Canada stepped in to counter the effect of the depreciation of the Canadian dollar and to provide some support to the currency by increasing the bank rate half a percentage point to 5 per cent. Canada's major banks followed suit and raised their prime lending rates by 0.50 of a point to 6.5 per cent. Ultimately, the dollar bounced back to 69.86 cents (U.S.) on February 6, 1998.

WHAT IMPACTS THE STRENGTH OF OUR DOLLAR?

The value of our dollar is affected by many factors and events – within Canada and worldwide. The policies of the federal government, the unemployment rate, the rate at which our productivity is growing and our inflation rate are among the domestic factors.

A major factor affecting the strength of our dollar is which currencies and countries are attracting investors. For instance, recently there has been increased competition from the buoyant U.S. economy. Uncertainty created by difficulties in Asia has also bolstered the demand for U.S. government securities which are regarded as the safest securities around. The result is a Canadian dollar which has fallen in value against the U.S. dollar, although it has increased in value against many other world currencies.

In short, there is no magic number for our dollar. It will continue to fluctuate as conditions change in Canada and around the world.

WHY HAVE INTEREST RATES DROPPED SO MUCH OVER THE PAST FEW YEARS?

There are two main reasons: low inflation and improved public finances.

- Inflation (the cost of living) has fallen dramatically. Lower inflation means investors do not need compensa-

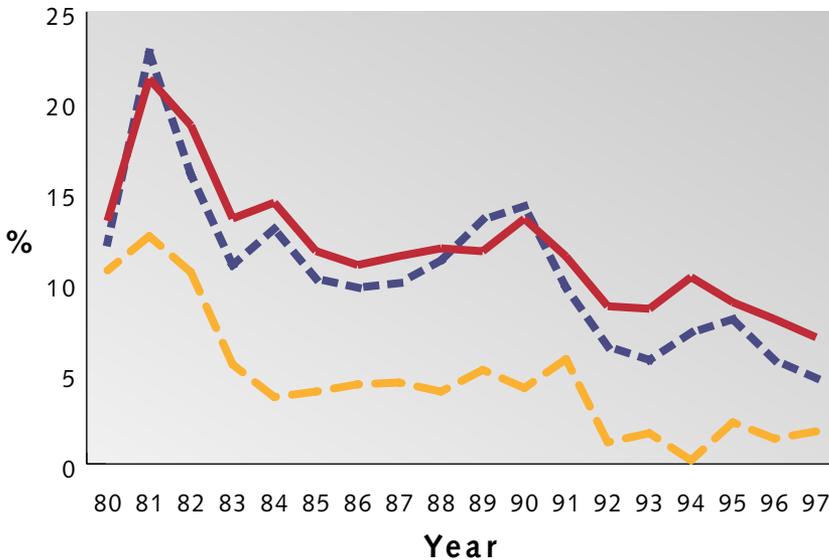


tion for the erosion of their money by inflation. (If we look at the chart on page 21, we see that inflation today is at its lowest level in many years.)

- Today improved public finances means that the federal government does not have to borrow any additional money to finance its spending activities. More importantly, an improved fiscal situation has reassured investors that Canada will not resort to inflation or currency depreciation to deal with budgetary problems. Other reasons for the low interest rate environment we have been experiencing include: greater stability in the global economy and declining world interest rates; and monetary stimulus from the Bank of Canada to counter cyclical weakness in demand.

COMPARING INTEREST AND INFLATION

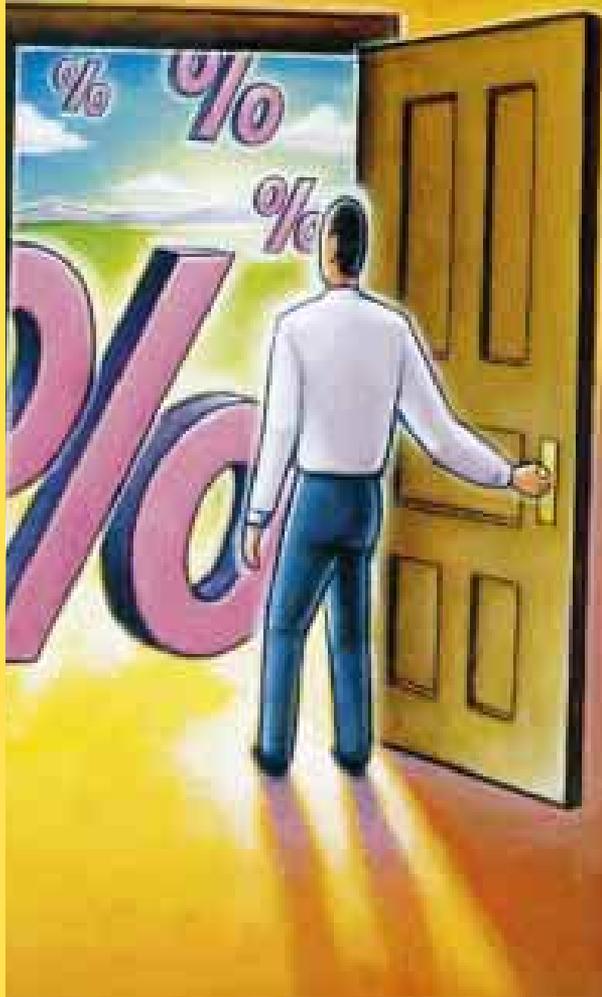
- Average residential mortgage lending rate - 5 year
- - - Chartered bank administered interest rates - prime interest rate
- - - Rate of inflation - annual (12 month) percentage change



Source: Statistics Canada and Bank of Canada.



What
Happens
When
Interest
Rates Go
Up and
Down



**SO WHAT HAPPENS TO THE
BORROWER AND THE SAVER/
INVESTOR WHEN INTEREST
RATES GO UP AND DOWN?**

We have simplified the following examples. There are differences when interest rates rise and fall due to inflation and due to an increase in real interest rates.

WHEN INTEREST RATES GO UP

Borrowers

- The cost of loans and mortgages rise
- Credit card rates may go up
- We may defer personal borrowing
- Borrowing decisions become more complicated because we are unsure whether this is a long-term trend i.e. which mortgage term to acquire
- Businesses may postpone projects because borrowing costs are higher
- Demand for housing could slow down

Savers

- The interest we earn on our savings and investments goes up. But if inflation is the cause of higher interest rates, the cost of things we buy becomes more expensive
- Bond prices fall
- There is more incentive to save and put off spending
- Investors may prefer interest-bearing investments over stocks which tend to fall when interest rates rise

WHEN INTEREST RATES GO DOWN

Borrowers

- It's cheaper to borrow, so it may encourage personal borrowing
- We spend more. Since loans cost less, consumers are more willing to borrow and spend
- We buy more big ticket items, like houses
- There is a possible higher demand for business loans
- Potential improvement in the export market, if a fall in interest rates leads to a drop in our dollar.

Savers/Investors

- Less return on investments. However, you may do better if inflation is low because your "real" return (what you earn minus inflation rate) will be higher
- Less incentive to save through interest-bearing vehicles
- More spending
- Bond prices rise



For More Information on Interest Rates ...

You can get a daily update on key interest rates from most newspapers. Just look in the business section, usually for a small table called Money Markets or Money Rates. The table will always contain two key interest rates – the bank rate (set by the Bank of Canada) and the prime rate. The Internet is also a good source. Check out some of the web sites of financial institutions – many show up-to-date lending and saving rates. Read business magazines or visit your library or favourite book store. For more information on the role and functions of the Bank of Canada, contact their Public Information Office, tel:1-800-303-1282 or fax 613-782-7713.

Perhaps the best source is your financial institution. Go in and talk to a representative and find out the best rate available. Then visit other financial institutions and comparison shop. You'll be surprised at the difference in rates.

As part of the program Building a Better Understanding, we are offering a free series of publications, ranging from money management and interest rates to mortgages, starting a small business and saving for your children's education. To obtain copies, call toll-free 1-800-263-0231 or visit our web site at www.cba.ca.

The Canadian Bankers Association, established in 1891, is a professional industry association that provides its members – the chartered banks of Canada – with information, research and operational support, and contributes to the development of public policy on issues that affect financial services. The CBA also provides information to the public on industry and financial issues.



CANADIAN BANKERS ASSOCIATION

Building a Better Understanding