

B M O N E S B I T T B U R N S

The Bond Book

BMO  Nesbitt Burns®

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THE BOND BOOK



Today, Canadian investors have a wide variety of fixed income investments to choose from.

Whether you need income now or are planning for future goals, the bond market holds many opportunities.

Fixed income investments include securities that pay interest annually, semi-annually or monthly, or where interest compounds until maturity. Types of investments include treasury bills, government and corporate bonds, savings bonds, strip bonds, foreign-currency bonds, GICs and NHA Mortgage-Backed Securities. Terms to maturity range from one month to 30 years.

The Bond Book was prepared by BMO Nesbitt Burns to introduce investors to fixed-income investments. Having a general knowledge of the types of investments available to you will help you reach your personal financial goals.

OVERVIEW

1. What is a fixed income investment?

A fixed income investment is a debt obligation. The borrower issues a bond, debenture, note or other evidence of the debt and is required to make periodic interest payments and repay the face amount of the loan at maturity. Typically, interest is paid at regular intervals at a fixed rate.

2. What is the difference between a bond and a debenture?

Both bonds and debentures are evidence of a debt. Technically speaking, a bond is backed by specific collateral, such as fixed assets or real property, and a debenture is backed by the general credit of the borrower. However, while investments that are backed by specific collateral are the exception rather than the norm, the word bond is used generically to describe many types of debt obligations.

3. How secure are fixed income investments?

The security behind a fixed income investment is the general credit of the borrower. As such, the level of financial protection to the investor varies. For example, governments (federal, provincial and municipal) are considered to be among the most credit-worthy borrowers due to their taxation

power. Other important factors that determine a government's ability to repay debt include the size of its tax base and the stability and growth potential of its economy.

For a corporate borrower, such as Bell Canada or IBM, the level of protection to investors is based on financial factors such as liquidity, cash flow, earnings, guarantees (if they exist), debt-to-equity ratios and interest coverage ratios, as well as ability of the corporation to withstand economic cycles.

In Canada, Dominion Bond Rating Service, Standard and Poor's and Moody's assess the credit worthiness of bond issuers and grant ratings from AAA, for highest quality, to C for lowest. These ratings are used by investors as a guide to the issuer's capability and willingness to make prompt interest and principal payments.

4. When is interest paid?

Typically, interest is paid every six months (semi-annually). For example, Government of Canada 5.25 per cent bonds due June 1, 2012 pay interest every June and December 1.

Exceptions include Eurobonds, which pay interest annually; NHA Mortgage-Backed Securities and Monthly-Pay Bonds, which pay monthly; and Strip Bonds, which pay only at maturity.

5. How much interest is paid?

Interest is paid on the par value at the bond's coupon rate. For example, a \$10,000 par value Government of Canada 5.25 per cent bond due June 1, 2012 pays \$262.50 every six months ($\$10,000 \times .0525/2 = \262.50).

6. What is meant by accrued interest?

When an investor disposes of a bond prior to maturity, they are entitled to the interest they have earned from the last interest payment date – up to and including the settlement date of disposal. This amount is called *accrued interest*. For example, if the owner of a \$10,000 Government of Canada 5.25 per cent bond due June 1, 2012 were to sell their bond on October 1, they would be entitled to accrued interest from June 2 to October 1, inclusive.

7. What happens on the maturity date?

The maturity date identifies the date on which the final interest payment is made and the principal amount is repaid in full.

8. What denominations are available?

The denomination of a bond is its smallest unit size. Many bonds trade in \$1,000 multiples, subject to specific minimum purchase amounts such as \$5,000 par value.

9. How is ownership recorded?

Today, ownership of a bond is recorded with the Canadian Depository for Securities (CDS) through a computerized book-based system. When interest payments are made or the principal amount is repaid, funds are deposited into the owner's account at their investment firm, or to another account at their instruction.

10. Are physical certificates available?

Today, it is unusual for bonds or money market instruments to be issued in the form of a physical certificate. Consequently, when physical delivery is required, an investor must ensure that the bond they choose is available in physical form. When a certificate is delivered to the investor, interest and principal payments are sent by cheque to the registered owner. For safety and convenience, individual investors are advised to retain their investments in CDS custody.

INVESTING IN BONDS

11. What is the bond market?

The bond market is made up of investment firms, banks and other financial institutions where individuals, called bond traders, buy and sell fixed income instruments over the phone. Bond salespeople and Investment Advisors act as liaisons between these traders and their clients.

12. Who invests in the bond market?

Investors include individuals, banks, government agencies, corporations, mutual fund companies, pension funds, etc. They buy bonds for safety of capital, a regular cash flow and a known maturity value. An investor's goals may include: (1) generating income; (2) saving for future goals, such as retirement or a child's education; and/or (3) diversifying an investment portfolio. Trading oriented investors buy and sell bonds in order to profit from short-term fluctuations in bond prices.

13. How do I purchase a bond?

Individual investors purchase bonds through Investment Advisors. They may be purchased in both the primary (i.e. new issue) and the secondary markets – the latter is by far the most active. In the secondary market, a bond's price will deviate from par as interest rates change. For example, a bond's price may be at par, below par or above par. (A bond's par value is equal to its maturity value.)

14. Why do bond prices fluctuate?

A bond's coupon rate reflects prevailing market yields at the time the bond was issued. The coupon rate is fixed for the term of the investment. Since market interest rates are constantly changing, a bond's coupon rate will be considered

current, high or low relative to prevailing rates. This has a direct impact on the bond's market value prior to maturity. For example, if market rates fall below the coupon rate, the bond's price (or value) will increase. The reverse is true if market rates rise above the coupon rate. When a bond's price is above its par value, it is said to be trading at a premium while a price below par value is called a discount.

15. What are the tax implications of bond ownership?

Coupon interest is taxable at the bond holder's marginal tax rate. If a bond is sold prior to maturity, the accrued interest received is taxed as interest income.

On interest-bearing bonds, the difference between a premium purchase price and par value at maturity is considered a capital loss. Similarly, the difference between a discounted purchase price and par value at maturity is considered a capital gain.

On discounted securities, such as treasury bills and strip bonds, the difference between the discounted purchase price and par value at maturity is considered interest income.

16. What type of bond should I buy?

As a rule of thumb, the type of bond you buy should meet your personal investment objectives, income requirements, risk tolerance and tax situation.

For example, an individual who does not require income should buy a bond with a relatively low coupon rate. An investor who wants to defer all income until some future date, such as retirement, should purchase a zero-coupon or strip bond. An individual who relies on the income from their portfolio will find higher-coupon bonds appealing.

A table outlining the types of fixed income investments, their features and suitability appears on page 7.

17. What currencies are available?

Bonds are issued all over the world in many different currencies.

Periodically, Canadian borrowers issue bonds in a foreign currency. The most common example of this is a U.S.-dollar denominated bond issued by a Canadian borrower.

BOND PRICES AND YIELDS

18. What determines a bond's price?

A bond's price and yield are determined by a number of variables, including prevailing interest rates, liquidity, term to maturity, credit rating and unique features, as described below.

Interest Rates: When a bond is issued, its price and yield reflect the return

demand by investors for its term to maturity and credit quality. Under normal conditions, investors demand a higher yield on a long-term bond than they do on a short-term bond because of the uncertainty of where interest rates are headed in the future.

As discussed in question 14, bond prices move inversely to market interest rates. When interest rates move up, bond prices move down and vice versa. The reason for this inverse relationship is that a bond's coupon rate is fixed until maturity. Consequently, a bond will become more valuable if market rates fall and less valuable if market rates rise. For example, let's assume that you pay \$1,000 for a five-year Canada bond with a five per cent coupon and a five per cent yield to maturity. If rates suddenly rise to six per cent, your bond will be worth less than \$1,000, because now it is possible to buy five-year Canada bonds with a six per cent yield to maturity. In fact, if you tried to sell your bond, it would be worth approximately \$957. Investors who intend to hold their bonds until maturity are unaffected by these interim fluctuations in market value.

Interest rates fluctuate for many reasons, the two main factors being economic growth and inflation. During periods of strong economic growth, short-term interest rates tend to rise as central bankers tighten monetary policy in order to curb inflation. Long-term bond yields also rise

because the higher the expected rate of inflation, the higher bond yields have to be to protect an investor's purchasing power.

Liquidity: Very small bond issues do not trade as actively as larger issues and therefore may command a higher yield (and lower price) to entice investors to buy them. This is an advantage for investors who want a higher yield and intend to hold the instrument to maturity.

Term to Maturity: As mentioned above, investors generally demand a higher interest rate on long-term bonds than on short-term bonds. Therefore, the remaining life of a bond will always be reflected in its price. As the time remaining to maturity decreases, the price of the bond will approach its maturity (or par) value.

Issuer's Credit Rating: The better the credit rating of the issuer, the more favourable the terms under which they can borrow money. Rating agencies provide independent credit ratings for most major bond issuers. Ratings range from AAA (or A++) for the most secure creditor to C for the least creditworthy issuer. Bonds that are rated BBB or higher are considered investment or high-grade securities.

Unique Features: Many corporate and some provincial bonds have a provision that allows the issuer to redeem

(i.e. buy back) a portion of or all of a bond's par value prior to maturity. This is known as a *call feature*. The ability to retire or refund their outstanding debt when interest rates are low is a benefit from the issuer's point of view, but may inconvenience the bondholder.

Today, call features are structured to be favourable to the investor, however they should be cautiously considered prior to purchase. The price movement of a callable bond can be quite different from that of conventional bonds of similar quality and term to maturity.

Certain investments, such as NHA Mortgage-Backed Securities (NHA MBS) are even more complex. NHA MBS permit repayment of principal prior to maturity resulting in a less predictable cash flow than conventional instruments. A separate brochure outlining the unique features and benefits of NHA MBS is available from your BMO Nesbitt Burns Investment Advisor.

YOUR INVESTMENT

19. What are my choices?

The following table lists the types of bonds and other fixed income investments available to Canadian investors and highlights their features and suitability.

SECURITY	QUALITY	LIQUIDITY	INCOME FREQUENCY	SUITABILITY	RRSP/RRIF ELIGIBILITY
T-Bills	Highest	Highest	Discount Security – no interim interest payments	Short-term/ liquidity	Yes
Savings Bonds	Highest	Moderate	Varies	Quality/liquidity	Yes
Bank/Trust GICs	Highest for amounts under \$60,000	Low to None	Annual, Semi-annual, Monthly or Compounding	Buy & hold	Yes
Canada Bonds	Highest	Highest	Semi-annual	Quality/liquidity	Yes
Provincial Bonds	High	High	Semi-annual	Higher yield than Canada bonds	Yes
Municipal Bonds	Varies	Moderate to Low	Semi-annual	Buy & hold	Yes
Corporate Bonds	Varies	High to Low	Semi-annual	Higher yield than Government bonds	Yes for Canadian corporate bonds
Strip Bonds Government	Highest/high	High to Moderate	Discount Security – no interim interest payments	Wide range of terms/ compound interest	Yes
Strip Bonds Corporate	Varies	High to Low	Discount Security – no interim interest payments	Wide range of terms/corporate compound interest	Yes for Canadian issuers
NHA Mortgage-Backed Securities	Highest	High	Monthly – Principal and Interest	Monthly income/ higher yield than Canada bonds	Yes
Real Return Bonds	Highest	Moderate to low	Semi-annual protection	Inflation	Yes
Foreign Currency Bonds	Varies	Moderate	Annual/ Semi-annual	Portfolio diversification	Yes but subject to foreign content limits

C O N C L U S I O N

As one of Canada's leading investment firms, BMO Nesbitt Burns has an established reputation within financial services. Since its origins in 1912, the firm has been committed to helping clients meet their investment objectives and goals with the highest of standards.

Today, the Private Client Division of BMO Nesbitt Burns is focused on meeting the needs of individual investors through a customized approach to investing. More than 1,500 Investment Advisors provide clients with personal advice and services, drawing upon some of the best knowledge and expertise in the industry including BMO Nesbitt Burns' top-ranked research.*

As a member of BMO Financial Group and part of the organization's Private

Client Group, BMO Nesbitt Burns also provides clients with access to one of the broadest selections of investment solutions and products available today.

The Private Client Group brings together all of the bank's wealth management services, both in Canada and the United States.

Whether you need income or longer-term capital growth; whether you are planning for your retirement or are just starting to enjoy it; whatever your objectives, your BMO Nesbitt Burns Investment Advisor will work with you to determine the blend of bonds and other securities that will help you to achieve your goals.

Visit us on the World Wide Web at www.bmonesbittburns.com.

* Brendan Wood International. Institutional Equity, Research, Sales and Trading Performance in Canada, 2002 Report.

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