# The Navigator 

## Bonds: The Tax Implications

## Your ACB on purchase and the tax implications when you sell bonds

The following article provides an overview of bonds denominated in Canadian dollars that pay regular interest. It discusses how the Adjusted Cost Base (ACB) is determined, explains premiums and discounts and discusses how to calculate and report a capital gain or loss on the sale of a bond. The following discussion applies to bonds held in a non-registered account.

## Bonds that Pay Regular Interest

A bond is a debt instrument that pays interest at a set rate at regular intervals such as monthly, semi-annually or annually. The stated interest rate, at the time of issue of the bond, is usually close to the interest rate in the market at that time. The principal amount of the bond is known as the "face value". Most bonds trade on an active secondary market where the price fluctuates based on the difference between the stated interest rate and current market interest rate for a bond with a similar time to maturity. Many other factors, including changes in the credit rating of the bond also affect the price. Interest income is reported to you on a T5 slip, "Statement of Investment Income" and should be reported on your annual tax return. Residents of Québec will also receive a Relevé 3.

## Canada Savings Bonds

Canada Savings Bonds (CSBs) do not trade on a secondary market because they are not transferrable. The principal amount you invest is what you receive for them on maturity and they will never produce a gain or loss. Compound-interest CSBs do not pay anything until maturity, but interest accrues to each anniversary date of purchase (every three years for investments acquired before 1990). You are required to report the interest income on your annual tax return at each anniversary date.

## Guaranteed Investment Certificates (GICs)

Normally, GICs, when purchased from the issuer and held to maturity by you, do not produce capital gains or losses. A simple interest GIC pays interest annually and needs to be accounted for on your annual tax return if held in a
non-registered account. If the GIC held in your non-registered account does not pay interest annually (a compound GIC), you will need to accrue and report interest annually on your tax return, to the anniversary date of the issue.

While a GIC is not a bond, it can act like a regular bond when purchased or sold on the secondary market. Since you are not necessarily buying or selling them at PAR, you may incur a capital gain or loss which would be calculated the same way as a regular bond as described below. You will need to calculate and subtract any interest from your outlay or proceeds, to get your actual adjusted cost base or proceeds of disposition.

## Buying A Bond

When you buy a bond on its issue date, there is no accrued interest on

the bond. You typically pay the bond's stated face value.

The Effect of Regular Interest Payments on the Price You Pay
If you buy a bond on a date other than the date an interest payment is paid, the price you pay will likely contain an amount of accrued interest. This
amount will show up on the year end tax reports that come with your tax slips (but will not appear on the tax slips themselves) as an amount "Paid By You". It can be deducted as an expense on schedule 4 "Statement of Investment Income" of your tax return.

## Example 1 - Accrued Interest in Between Payment Periods

Let's assume the following:

| Face value of the bond | $\$ 100,000$ |
| :--- | :--- |
| Interest rate | $6 \%$ |
| Date of issue | January 1 |
| Maturity date | December 31 |
| Interest payment - semi annually | June 30 and December 31 |
| Your purchase date | January 31 |
| Accrued interest (30days/365days $\times 6 \% \times \$ 100,000)$ | $\$ 493.15$ |

Since you bought it from someone else in between payment periods, you will receive the full semi-annual interest payment of $\$ 3,000(\$ 100,000 \times 6 \% / 2)$. This means that you should pay $\$ 493.15$ ( 30 days $/ 365$ days $\times 6 \% \times 100,000$ ) interest to the person you bought the bond from for the 30 days that they held the bond. The price you paid to purchase the bond will include the $\$ 493.15$ interest and it will show on your year end tax reports as an amount "Paid by You".

Bond prices move in the opposite direction to interest rates. If the market interest rate drops after
issue, you may find that your bond is trading for more than you paid for it. Conversely, if interest rates rise after issue, you may end up holding a bond that is paying interest at less than the current rate and potential purchasers will only buy your bond at a discount.

The Effects of Interest Rates on the Price You Pay
Bond prices move in the opposite direction to interest rates. If the market interest rate drops after issue, you may find that your bond is trading for more than you paid for it. The drop of the interest rate makes your bond more valuable, causing it to trade at a premium (i.e.: a percentage of more than par or more than $100 \%$ of face/ maturity value). Conversely, if interest rates rise after issue, you may end up holding a bond that is paying interest at less than the current rate and potential purchasers will only buy your bond at a discount (i.e.: a percentage of less than par or less than $100 \%$ of face/ maturity value).

## Continuing our Example 1:

If on January 31, the current interest rate dropped to $5.5 \%$, potential buyers would probably offer you a premium price for your bond as your bond pays more interest than similar available bonds.

If on January 31, the current interest rate rose to $6.5 \%$, potential buyers would probably require a discounted price for your bond as your bond pays less interest than similar available bonds. However, if you plan to hold the
bond to maturity the fluctuation in the bond price doesn't matter. You'll still receive the face value, all other things being equal.

## Maturing at Par - Capital Gain/ Loss and Interest Income

When you hold a bond that pays regular interest and it matures at par, the difference between the par value at maturity and your adjusted cost base (ACB) is considered a capital gain or capital loss for tax purposes.

Generally your ACB is your original purchase price for the bond. Keep
in mind that if you had originally purchased the bond between coupon dates, your original purchase price may have included an amount for the accrued interest which you had to pay to the seller of the bond. This amount should have been deducted on your tax return in the year of purchase as interest paid and does not form part of your ACB.

We continue with the facts in Example 1 to illustrate how to calculate capital gain/loss and interest income earned on a bond when purchased at a discount or premium.

## Example 2 - Holding to Maturity When Purchased at Discount

| Your purchase price at a discount | $\$ 98,900.15$ |
| :--- | ---: |
| Less: Accrued interest (30days/365days $\times 6 \% \times \$ 100,000$ ) | $(493.15)$ |
| ACB | $\$ 98,407.00$ |
| Interest income to report | $\$ 3,000.00$ |
| Interest payment received on June 30 | $3,000.00$ |
| Interest payment received on December 31 | $(493.15)$ |
| Less: Accrued interest included in purchase price | $\$ 5,506.85$ |
|  |  |


| Capital gain to report |  |
| :--- | :---: |
| Face value of the bond | $\$ 100,000.00$ |
| Less: ACB | $(98,407.00)$ |
| Capital Gain | $\$ 1,593.00$ |



When you sell a bond that pays regular interest between coupon dates, the proceeds you receive from the purchaser will include accrued interest income paid to you by the purchaser for the interest you earned on the bond which has not yet been paid by the issuer. The remaining portion of the sales proceeds you received for the sale of the bond is your "proceeds of disposition" (POD) for purposes of calculating your capital gain or loss on the sale.

## Example 3 - Holding to Maturity When Purchased at Premium

| Your purchase price at a premium | $\$ 101,003.15$ |
| :--- | :---: |
| Less: Accrued interest (30days $/ 365$ days $\times 6 \% \times \$ 100,000)$ | $(493.15)$ |
| ACB | $\$ 100,510.00$ |


| Interest income to report |  |
| :--- | ---: |
| Interest payment received on June 30 | $\$ 3,000.00$ |
| Interest payment received on December 31 | $3,000.00$ |
| Less: Accrued interest included in purchase price | $(493.15)$ |
|  | $\$ 5,506.85$ |


| Capital loss to report |  |
| :--- | :--- |
| Face value of the bond | $\$ 100,000.00$ |
| Less: ACB | $(100,510.00)$ |
| Capital Loss | $\$(510.00)$ |

## Selling Prior to Maturity

When you sell a bond that pays regular interest between coupon dates, the proceeds you receive from the purchaser will include accrued interest income paid to you by the purchaser for the interest you earned on the bond which has not yet been paid by the issuer. The remaining portion of the sales proceeds you received for the sale of the bond is your "proceeds of disposition" (POD) for purposes of calculating your capital gain or loss on the sale. Your "Summary of Securities Dispositions" will report the POD net of the portion which is interest income.

We continue with the facts in Example 3 to illustrate how to calculate capital gain/ loss and interest income earned on a bond when sold prior to maturity.

Example 4 - Selling for a Gain When Purchased at Premium

| Your purchase price at a premium | $\$ 101,003.15$ |
| :--- | :---: |
| Less: Accrued interest (30days/365days $\times 6 \% \times \$ 100,000)$ | $(493.15)$ |
| ACB | $\$ 100,510.00$ |
| Interest rates fall, sell bond for a gain on September 30 (POD) |  |


| Interest income to report |  |
| :--- | ---: |
| Interest payment received on June 30 | $\$ 3,000.00$ |
| Plus: Accrued interest included in sale price (91 days/365days x 6\% x  <br> $\$ 100,000$ ) (July 1 to September 29) $1,495.89$ <br> Less: Accrued interest included in purchase price $(493.15)$ <br>  $\$ 4,002.74$ l |  |


| Capital gain to report |  |
| :--- | :---: |
| Net amount of POD (POD - Accrued interest included in sale price) | $\$ 104,015.00$ |
| Less: ACB | $(100,510.00)$ |
| Capital Gain | $\$ 3,505.00$ |

## Example 5 - Selling for a Loss When Purchased at Premium

| Your purchase price at a premium | \$101,003.15 |
| :---: | :---: |
| Less: Accrued interest (30days/365days x 6 \% $\times \$ 100,000$ ) | (493.15) |
| ACB | \$100,510.00 |
| Interest rates rise, sell bond for a loss on September 30 (POD) | \$101,805.89 |
| Interest income to report |  |
| Interest payment received on June 30 | \$3,000.00 |
| Plus: Accrued interest included in sale price (91days/365days x $6 \% \times$ $\$ 100,000$ ) (July 1 to September 29) | 1,495.89 |
| Less: Accrued interest included in purchase price | (493.15) |
|  | \$4,002.74 |


| Capital loss to report |  |
| :--- | :---: |
| Net amount of POD (POD - Accrued interest included in sale price) | $\$ 100,310.00$ |
| Less: ACB | $(100,510.00)$ |
| Capital Loss | $\$(200.00)$ |

You may note that although you sold the bond at a premium, you still end up with a capital loss to report on your tax return.

Same calculations apply when the bond is purchased at a discount.


YTM for a bond is the total return, including interest and capital gain, obtained from a bond held to maturity. When comparing bonds with similar ratings and the same YTM, the bond with the highest discount may be a more tax efficient vehicle.

## Yield to Maturity (YTM)

YTM for a bond is the total return, including interest and capital gain, obtained from a bond held to maturity. When comparing bonds with similar ratings and the same YTM, the bond with the highest discount may be a more tax efficient vehicle. Example 6 will demonstrate this concept.

## Example 6 - Income Comparison for Bonds with Same YTM

Assume you have $\$ 100,000$ that you want to invest for one year in interest-bearing bonds. There are 2 different bonds that produce the same yield. You would pay a $\$ 500$ premium for one of them and receive $\$ 500$ discount for the other.

|  | Premium | Discount |
| :--- | :---: | :---: |
| Purchase price | $\$ 100,000.00$ | $\$ 100,000.00$ |
| Face value | $99,500.00$ | $100,500.00$ |
| Interest rate | $7.60 \%$ | $6.53 \%$ |
|  |  | $7,562.00$ |
| Interest income | $(500.00)$ | $5,562.65$ |
| Capital gain/loss at maturity | $7,062.00$ | $7,062.65$ |
| Total income for the year | $7.06 \%$ | $7.06 \%$ |
| Yield (total income / purchase price) | $\$ 7,312$ | $\$ 6,812.65$ |
| Taxable income <br> (interest income $+50 \%$ of capital gain/loss) |  |  |

Although the two bonds produce the same total income, the taxable income is higher with the bond purchased at a premium assuming that you have capital gains to offset the capital loss. If not, the taxable income would be $\$ 7,562$ interest in the case of the bond purchased at a premium.

A premium bond usually produces a capital loss for tax purposes. The discount bond, on the other hand produces less of its return in the form of interest than a premium bond. Because interest income is taxed at your marginal tax rate while capital gain is only $50 \%$ taxable, discount bonds would appear to be a more tax efficient investment vehicle.

## Summary

Since current interest rates fluctuate constantly and seldom match the bond stated interest rate, bonds will generally produce both interest income and a capital gain/loss whether held to maturity or sold before maturity.

The following table summarizes the different possible taxation outcomes you could have from selling a bond.

Table 1: Potential tax results from selling a bond paying regular INTEREST

|  |  | Sell at Discount | Mature / Sell at Par | Sell at Premium |
| :---: | :---: | :---: | :---: | :---: |
|  | Price | ..., 97, 98, 99 | 100 | 101, 102, 103, ... |
| Buy at Discount | $\begin{aligned} & 97 \\ & 98 \\ & 99 \end{aligned}$ | Capital Gain or Capital Loss | Capital Gain | Capital Gain |
| Buy at Par | 100 | Capital Loss | No Capital Gain or Capital Loss | Capital Gain |
| Buy at Premium | $\begin{gathered} 101 \\ 102 \\ 103 \\ \ldots \end{gathered}$ | Capital Loss | Capital Loss | Capital Gain or Capital Loss |

It is important to understand the components that make up the amount you pay or receive for a bond as well as the concepts of a premium and discount. If you have any questions on how to report for tax purposes the proceeds you have received from the sale of a bond, it is recommended that you discuss this with your professional tax advisor.

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