Introduction to Convertible Debentures

Convertible debentures are hybrid securities which offer advantages of both bonds and equities. Like ordinary bonds – they offer regular interest income through coupon payments and a degree of downside protection not found in equity. Similar to equities, they also offer generally unlimited upside potential for capital appreciation in rising equity markets.

Convertible bonds are originally issued and classified as bonds but have the option to convert into a fixed number of the issuer's common shares and can be thought of as bonds with call options attached. The conversion ratio, which is usually based on the number of shares per 100, is determined at the time of issuance.

The period during which an investor can convert their bonds to stock is usually open. Most convertible bonds pay accrued interest up to the date of conversion, however, there are some that do not. Therefore, it is important to check the terms and conditions found in the prospectus on an issue by issue basis. Most prospectuses are available on Sedar (www.sedar.com).

The debt feature of a convertible debenture is derived from its stated coupon and claim to principal and provides the holder of a convertible with limited downside risk by protecting the investor from a full decline in the equity price.

Why are convertible debentures issued? They are an attractive financing vehicle for an issuer as they provide a cheaper way to raise permanent capital. The benefit to selling convertible bonds is a reduced cash interest payment. A convertible bond's issuer is effectively selling a call option on their common stock to allow for a cheaper cost of funding. The cost of having a lower interest expense is the potential dilution of shareholder's equity caused by exercising the conversion feature. Therefore, investors must weigh the loss in yield against the opportunity to convert into equity and benefit from capital appreciation. Convertibles also offer tax advantages to the issuer as fixed interest payments are tax deductible.

Features and Definitions

Since convertible bonds are unique investment instruments, it is very important to read a convertible bond's prospectus to fully understand all of its features.

Convertible bonds have all the standard features of a bond such as maturity date, coupon, currency denomination and face value. At maturity, the *face value* of the convertible is redeemed by the issuer. The *coupon* is the stated rate of interest paid by the issuer to the bondholder. Interest can be paid semi-annually or annually on the coupon date. The convertible's *denomination* is the currency and minimum amount in which the bonds are traded. *Face value* is typically stated per $100 and will be redeemed, in full, by the issuer at maturity.

The conversion feature brings with it additional characteristics and associated terminology. For illustration purposes, consider the following ABC Inc convertible debenture.

Coupon:	7.0%
Maturity:	December 31, 2011
Conversion Ratio:	9.7561 shares
Bond Price Today:	$96.00
Share Price Today:	$8.10 with an annual dividend of $0.40

The *conversion ratio* is the number of shares that each debenture is convertible into, usually stated per $100 par value of the bond. This ratio is known from the date of issuance and does not change over the lifetime of the bond.

Conversion Ratio = 9.7561

The *conversion price* is the common stock price at which the debenture is convertible into the underlying shares of the issuer. It is calculated by dividing the par value by the conversion ratio. It is therefore fixed from the date of issuance, similar to the conversion ratio.

Conversion Price = Par Value / Conversion Ratio

= $100 / 9.7561

= $10.25

The *intrinsic value* (also known as parity or conversion value) is the value of the underlying equity shares to be received if the bond is converted. This value is calculated by multiplying the conversion ratio by the current stock price. A convertible bond does not trade below it's conversion value.

Intrinsic Value = Conversion Ratio x Current Stock Price

= 9.7561 x $8.10

= $79.02

The *conversion premium* is the premium of the convertible bond's price over its intrinsic value. In dollar terms it is calculated simply by subtracting the convertible debenture's intrinsic value from its price.

Conversion Premium = Bond Price Today – (Share Price Today x Conversion Ratio)

= $96.00 – ($8.10 x 9.7561)

= $16.97

The *cash payback* period is the number of years it takes for the dollar premium to be recovered through the yield pickup of the debenture.

Payback Period = Conversion Premium / [(Coupon x Par Value) – (Conversion Ratio x Annual Dividend)]
= $16.97 / [7% x $100 – 9.7561 x $0.40]
= 5.5 years

Characteristics

Convertible debentures feature both fixed-income and equity-like characteristics, the basics of which are covered below.

Fixed Income Characteristics

Convertible debentures represent a loan to the issuing company which is paid back at maturity. Like regular bonds, convertible debentures offer regular interest income through coupon payments and repayment of principal at maturity. However, due to their conversion option, convertible bonds typically have lower coupons than their equivalent non-convertible bonds. Most Canadian convertible debentures are unsecured against the issuer's assets and are not rated by credit rating agencies.

Equity Characteristics

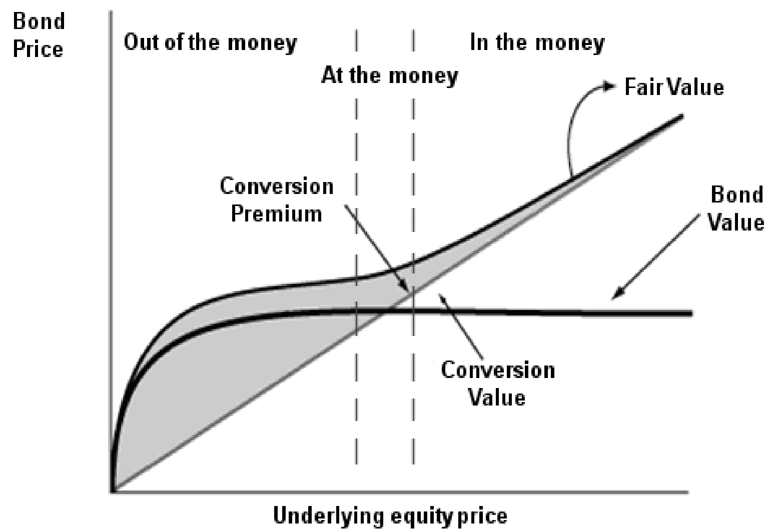
Because of their convertible feature, convertible debentures gain or lose value along with the underlying stock. When the price of the underlying shares rises, so does the price of the convertible. However, when the share price declines, the convertible bond typically declines only so far before its bond-like attributes establish an effective bond-floor - even if the stock price continues to decline. A convertible investor will continue to receive the interest income and principal repayment just like a bond holder and will be protected as long as the company remains a going concern.

When the stock price exceeds the conversion price, the convertible is said to be "*in the money*". At this point, it is more sensitive to changes in stock price than interest rates and trades in-line with common stock – offering little downside protection.

When the underlying stock is close to the conversion price, the convertible is said to be "*at the money*". At this point, it's price is influenced by both the stock price and interest rates. It will likely capture two thirds of the stocks upside movement with only one third of the downside.

Lastly, when the stock price is less than the conversion price, the convertible is said to be "*out of the money*". Here, it's price is less sensitive to changes in price of the underlying stock and is instead dominated by interest rates and credit factors. A convertible bond whose underlying equity is trading 50% below its conversion price is known as a "busted convertible".

The following chart illustrates the various stages in the lifetime of a convertible bond.



Put option

Puttable convertible bonds allow the bondholder to return the bonds to the issuer at a predetermined price usually one to several years after issuance (but always before maturity). The effect of "putting" the bond is to shorten up its maturity and effectively raise its investment value. This type of feature is usually offered by volatile emerging market issuers because investors demand increased downside protection.

Call option

Callable convertible bonds give the issuer the right to redeem the bonds prior to maturity at the *call price*. An issuer would call a convertible for early redemption to refinance at a lower interest rate. Therefore a call is less likely during periods of rising interest rates, as the issuer would have to refinance at higher rates.

Benefits and Advantages

Convertible debentures perform well in rising equity markets while mitigating downside risk during market declines. They provide a more *conservative approach to equities* because of defensive participation in the stock market. While convertible debentures can benefit from increases in the underlying stock price they are cushioned against stock price declines by the downside protection provided by consistent income characteristics of fixed income investments. Convertible debentures offer investors a higher participation in upward movements as opposed to downward movements of the underlying equity.

Fixed income potential is provided by income from regular coupon payments and re-payment of principal at maturity. The equity component has historically provided a better total return potential than a plain non-convertible bond.

Convertible debentures offer *diversification benefits* as their performance does not directly correlate to either that of equities or bonds. Therefore, adding convertible bonds to a portfolio would reduce overall portfolio volatility. They are a better diversifier than a comparable equity and bond mix without any optionality. This diversification benefit is pronounced during periods of market turmoil.

The convertible debenture market is an *Exchange traded market*. Unlike most bonds, convertibles trade in public exchanges where the bid and ask prices are visible to all market participants. This is an advantage for most investors as it provides greater transparency and efficiency in pricing.

Convertible debentures also offer relatively *cheap optionality* and have had attractive risk/return characteristics in the past. They can provide optionality for companies where there is no liquid option market. Furthermore they can offer investors the opportunity to buy volatility exposure at a relatively cheap price.

Risks

The Canadian convertible market is generally a sub-investment grade, high-yield market with few exceptions and therefore convertible debentures are more appropriate for a diversified portfolio and for investors with a moderate to high risk tolerance. It is important to read the convertible bond's prospectus and term sheet to fully gauge investor risk.

Credit risk is a concern as with any bond. Most Canadian convertible bonds are not rated by the credit rating agencies. One way to gauge credit risk is to consider the creditworthiness of the issuer and examine the possibility of *default*. A convertible debenture's issuer is in default if it's unable to repay principal and interest. If an issuer is insolvent, the convertible bondholder's claim on assets will depend on where the convertible resides in the capital structure. Often, bank debt and senior unsecured bonds will have a prior claim.

Interest rate risk also affects convertible bonds just like all other fixed income securities. A convertible bond's price would fall if interest rates were to rise. An increase in interest rates reduces the convertible's downside protection. Similarly, a decrease in interest rates increases the bond's price.

Lower interest rates lead to *call risk*. Call risk is the possibility that a callable convertible bond would be redeemed by the issuer before its maturity date so that the issuer can refinance at a lower interest rate. This would force an investor to reinvest the principal sooner and usually at a lower interest rate.

Conclusion

We believe that convertible debentures offer ScotiaMcLeod retail investors beneficial features and will continue to exhibit attractive risk/return properties within a diversified portfolio.

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None.

The supervisors of the Portfolio Advisory Group own securities of the following companies.
None.

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