CHAPTER 11: ANSWERS TO CONCEPTS IN REVIEW

11.1 Preferred stocks are equity issues that hold a position senior to common stock. Even though preferred shares are a form of equity, they are considered fixed-income securities because their level of current income is usually fixed. This current income (dividend payments) is paid quarterly and has priority over common dividend payments; that is, all preferred dividends must be paid before any payment to common stockholders may be made. Also, in the event of bankruptcy, the claims of preferred stockholders—up to the par or stated value of the securities—must be satisfied prior to any claims of common stockholders.

11.2 A share of preferred stock may be considered a hybrid security to the extent that it has some characteristics of both equity and debt. Like common equity, preferreds pay dividends that may be passed when corporate earnings fall below certain levels. They are also issued without maturity dates. Like bonds, the preferred shares have a prior claim on earnings and assets: the level of current income is specified for the life of the issue, and preferreds may have call features and sinking fund provisions. Also, firms can have several issues of preferred stock outstanding at the same time. The market considers preferreds as fixed-income obligations, competitive with bonds, as evidenced by the fact that preferreds usually sell on a yield basis.

11.3 Advantages of preferred stock:
1. High current yield, which is very predictable;
2. 70 percent of the preferred dividends received by corporations are tax-exempt; low unit cost, since most shares are priced between $25 and $100;
3. Safety: since almost all quality preferreds meet dividend payments in a timely manner.

Disadvantages of preferred stock.
1. As with other fixed-income securities, preferreds are susceptible to the ravages of high rates of inflation and interest; preferreds have not proven to be an adequate hedge against inflation;
2. Capital gains potential is low relative to common stock.

11.4 Cumulative preferred and Callable preferred refer to preferreds with two different provisions, each of which affects the investment merits of preferred issues. A cumulative provision means if any preferred dividends are passed, they must be paid in full before any common dividends may be paid. Most preferreds are cumulative. A callable preferred is one in which the company has the right to call the issue in for retirement; this right usually becomes effective several years (perhaps 5–7) after the date of issue. After this deferral period, the preferreds become freely callable—meaning they are susceptible to call if market rates decline substantially. Callable preferreds are fairly common today.

Other things being equal, a cumulative preferred should be more highly valued than an issue without such a provision—i.e., it should raise the price/lower the yield of these issues; in contrast, because callable preferreds have a good deal of call risk (i.e., with a callable preferred, there's always a chance the investor will have that high yielding preferred called away), they usually provide a higher yield than noncallable preferreds.

11.5 The price of high-grade preferred stocks depends on the annual dollar dividend they pay and their dividend yield. Since preferred dividends are fixed, the market price of preferred stocks depends on their dividend yield in an inverse way. In the specific case of high-grade preferred stocks, their value is closely related to prevailing market interest rates. If the general level of interest rates moves up, so does the yield on preferreds and, as such, their market prices decline.
Preferreds pay a constant level of dividends forever, so they can be considered stocks with zero dividend growth and priced using the zero-growth dividend valuation model:

\[
\text{Price} = \frac{\text{Annual dividend income}}{\text{Prevailing market yield}}
\]

11.6 **Dividend yield** is the key to determining the price and return behavior of most investment-grade preferred stocks. Because preferreds are considered to be fixed-income securities, one can normally expect the price of investment-grade securities to vary inversely with interest rates. Thus, if one expects the market yield to fall, he or she would expect the price of a high-grade preferred to rise. This would make the issue more attractive—not only would one expect high current income from dividends, but also an expected capital gain.

11.7 **Monthly Income Preferred Stocks (MIPS)** have a structure quite different from a conventional preferred stock. A conventional preferred stock would normally be issued by Firm XYZ, which needs the money. On the other hand, MIPS are issued by a limited-life company (LLC) which is a partnership firm set up by XYZ. LLC lends the proceeds of the MIPS to XYZ and receives monthly interest payments, which get passed on to the MIPS holders.

MIPS are attractive to investors because they offer higher yields than CDs, MMMF, corporate bonds or conventional preferred stock. The dividend payments are also made monthly, whereas bonds pay interest every six months and stocks pay dividends quarterly.

But the higher yields are due to higher risk involved in these securities. If an issuer (XYZ) is in financial trouble, MIPS holders have to stand towards the end of the repayment line. If interest rates drop, the issuer can also “call” these securities back without paying a penalty. The income tax documents that MIPS holders receive are more complicated than conventional preferred stock (as MIPS are issued by an LLC).

11.8 Several investment strategies, both conservative and aggressive, are available for use with preferred stocks.

1. **Obtaining attractive yields**: This conservative strategy, best suited to income-oriented investors, involves seeking out those preferreds with the highest yields. Issue quality, call feature, and cumulative/participating characteristics must be considered. High-quality issues are required for this strategy, since high yield is attractive only if it is actually received.

2. **Trading on interest rates**: This strategy adopts an aggressive short-term posture and attempts to capture capital gains. Since preferreds react to interest rate changes, like any fixed rate security, their price behavior (at least for investment grade issues) is closely related to interest rate changes. One selects high-grade securities to get maximum interest sensitivity, a key ingredient for this strategy. Although this strategy is almost the same for preferreds as for bonds, preferreds have less liberal margin requirements than bonds. The selection process is simpler for preferreds, since maturity and dividend size do not affect price volatility.

3. **Speculating on turnarounds**: This very aggressive strategy requires finding firms that have passed preferred dividends and have had their investment ratings lowered; their preferreds will have depressed prices. In order to profit, however, the investor must determine which of these speculative issues is about to experience a turnaround and begin to pay preferred dividends again. Some fundamental analysis should be performed to determine which firms will be able to again service preferred dividends. This strategy is highly risky, but it does have the potential for very high returns.

11.9 A **convertible debenture** is a long-term, unsecured corporate bond carrying the provision that within a stipulated time period, the bond may be converted into a certain number of shares of the
issuing corporation's common stock. A *convertible preferred* is very similar to a convertible bond except that it is initially issued as a preferred stock and then is convertible into common shares. Thus, a debenture is a bond and a preferred is a stock; another difference between a convertible debenture and convertible preferred is that while the conversion ratio of the debenture generally deals with large multiples of common stock, the conversion ratio of a preferred is generally very small. This is because corporate bonds are sold in $1,000 increments, while preferreds sell for $25 to $100.

11.10 The convertible debt market offers capital-hungry companies another financing option besides selling stock or issuing high-yield debt. In addition, they may get a relatively low interest rate with considerable flexibility in terms. Investors like the product because the ongoing interest payments provide some protection against market volatility.

11.11 The *equity kicker* feature of a convertible security gives the investor an opportunity to participate in the potential price performance of the underlying common stock. When the market price of the common is equal to or greater than the stated conversion price, the equity kicker has value to the investor and the price of the convertible will move with the common. When the price of the stock goes up, the price of the convertible will increase by a multiple that approximates its conversion ratio; likewise, if the price of the stock falls, the convertible will decline by the same multiple. (Subject to the conversion price being less than the stock price.)

Over a 2 year period from 1975 to 1977, convertible bonds did almost as well as the S&P 500 Index. The S&P 500 produced an average return of 15.85% in this period while the convertibles were a little behind with an average return of 14.87%. In comparison, an index of government and corporate bonds had an average return of 9.63%.

In a more recent period, convertible bonds did not match up as well as stocks. In 1997, the S&P 500 yielded 52% while the convertibles and bonds were lagging behind at 27% and 15% respectively. But the high returns on the S&P 500 were due to excellent performance by the blue-chip stocks. Since convertibles are issued by small companies, the Russell 2000 index would be a better benchmark for stocks. The Russell 2000 index yielded 25% in 1997; hence convertibles rank up quite well with stocks.

11.12 The *convertible* receives value from *both* its bond and stock properties. At the minimum, the security is worth what it earns as a fixed-income security (present value of interest and face value at maturity). This is its *bond (or investment) value*, and it sets the price floor for the convertible. In addition, the security has the potential to earn a capital gain based on the fact that it can be traded for a fixed number of shares of common stock (as specified by the conversion ratio). If, for example, a $1,000 bond can be converted into 50 shares of common stock, then as the stock begins to sell for more than $20 per share (the conversion price), there is a potential capital gain, and the value of the convertible will reflect this (i.e., the behavior of the underlying common stock).

11.13 A convertible issue provides attractive current income and limited downside risk. Its potential for capital gains is virtually unlimited—though convertibles must often be purchased at a *premium*, which has the obvious disadvantage of reducing capital gains potential. Though it is possible to reap the capital gains advantages of convertibles while generating improved current income, these returns are usually *not* as great as those from either the direct purchase of common stock or debt. Hence convertibles offer a *combination of some risk protection and considerable upward price potential*. 
11.14 *Conversion value* is an indication of what a convertible issue would trade for if its price were based on its stock value. It is equal to the conversion ratio times the current stock price. *Conversion parity* indicates the price the common stock should sell for in order to make the convertible worth its present market price. It is equal to the current price of the convertible divided by the conversion ratio.

*Payback period* is a good tool to assess the *conversion premium* on convertibles. The payback period is a measure of the length of time it takes for the buyer of a convertible to recover the conversion premium from the extra interest income earned on the convertible. As an investment rule, everything else being equal, the *shorter* the payback period, the better.

The *bond investment value* of a convertible is a price at which the bond would trade if it were nonconvertible and if it were priced at or near the prevailing market yields of comparable issues. This figure indicates how far the convertible will have to fall before it hits its price floor and begins trading as a straight debt instrument.

11.15 Since a convertible issue has the features of both an equity and a debt instrument, it can be used as if it were either equity or debt. Convertibles are most often used as *deferred equity investments*. Investors try to use convertibles to obtain attractive equity attributes. This strategy is followed whenever the underlying stock offers excellent capital gains opportunities. One should be sure, when using this strategy, that a direct equity investment is not a superior strategy. Sometimes, convertibles are used as *high-yield fixed income investments*. This approach is followed by those who are heavily committed to fixed-income securities and find high-yield convertibles appealing investment outlets. Normally, those using this strategy go for discount issues trading close to their bond investment values; in this way, by investing in the convertible, the investor gets an attractively yielding fixed-income security, and an equity kicker to boot.

The three attributes that equity-oriented investors should look for are: 1) an underlying stock that is under strong upward price pressure, 2) at a time when interest rates are expected to drop sharply, and 3) there is little or no conversion premium in the price of the convertible. The first feature means conversion value should move up, leading to desirable appreciation in the price of the convertible; the second means that the bond price floor should also move up, and thereby reduce risk exposure; and the third means that the investor should be able to capture all or most of the price appreciation of the underlying common stock, rather than lose a chunk of it to the inevitable drop in conversion premium.