

Corporate finance overview



Finance Questions a) US Treasury is a risk-free security. It is issued by the US government, thus bears no default risk. My discount rate for this type of security will be close to the US Treasury actual rate. As of March 17 2006, US six-month treasury had yield to maturity of 4.775% (Wall Street Journal, 23).

b) A CD of a South American bank paying in local currency bears a number of risks. Country risk, exchange rate risk, default risk of this particular bank should be embedded in my estimation of discount rate for this security. It will certainly be above 10%.

c) This security should bear country risk and default risk of the company. Even though the company has a secure stream of income from a long term contract, it still bears a default risk, albeit rather small. My estimation of the discount rate has to reflect all this information. It will be definitely higher than discount rate of government securities.

d) This security has substantial default risk as the issuing company is a start-up without proven history of operations and no secure stream of income. Therefore, the discount rate will be higher than for the company with secured stream of income (from the previous question).

2. Capital Asset Pricing Model (CAPM) can be used to quickly estimate the expected rate of return on a certain security. In an essence, it provides the best guess market can provide for future return on a particular security in a simple but powerful way. It was estimated that nearly 3/4 of financial managers use CAPM to estimate the cost of capital (Brealey, Myers & Allen, 192). CAPM reflects two crucial points. First, investors require extra return for extra risk (as shown in risk premium component). Second, investors are concerned with the risk that they cannot eliminate by diversification (as shown in beta component).

Expected return = risk-free rate + beta x (risk premium).

Therefore, when used to estimate expected return on a particular security, CAPM accounts for the overall additional risk premium historically required by investors for this type of security (risk premium) and for the systematic risk that this particular security adds to the diversified portfolio (security's beta).

3. a) It is possible to estimate net present value of this project rather accurately. Buying new equipment for a factory line at Ford is a part of regular established operations of Ford. Therefore, the expected rate of return estimated for the Ford as a company is appropriate for this particular project. Since Ford is a mature company, with its stock having been traded for many years, its expected rate of return can also be estimated rather accurately.

b) The estimation of net present value of buying a patent for a new drug at Pfizer might not be very accurate. Development of new drugs is extremely uncertain and long-term projects, substantially differing from one another. Therefore, using the cost of capital of Pfizer or of its other projects for this particular project can be rather erroneous.

c) It is possible to estimate NPV of this project rather accurately, as this project constitutes an integral part of already established route within a core business of the company. So it bears about the same risks that should be already well estimated for Japan Air Lines.

d) The estimation of NPV for this project can be rather inaccurate. Because it is a start-up company, it is hard to precisely estimate the required rate of return on its projects.

4. Convertible bond can be viewed as equivalent to a regular bond plus an option to acquire common stock. In my opinion, many small “ dot-com”

companies used it to get financing for two major reasons. First, because dot-coms in most cases were new and small companies it was very hard for investors to estimate their risks and appropriate rate of interest. The option to convert debt into company's equity decreased the risks of issued debt to investors. Second, the fact that the company gives investors the right to participate in company's ownership can be regarded as a sign of its honorable intentions and secures that the company will act at bondholder's best interest (Brealey, Myers & Allen, 683).

I think that generally it was a good idea to issue convertible bonds. On one hand, it allowed to diminish complexities faced by small and start-up companies in finding financing and. On the other hand, it allowed investors to better secure their investments. However, it could also contribute to the “financial bubble” associated with dot-coms.

References

Brealey, R., Myers, S., & Allen, F. (2006). *Corporate Finance*. New York: McGraw-Hill/Irwin.

U. S. Treasury yield curve. ” *Wall Street Journal* 17-19 March 2006, p. 23.