DAFFODIL INSTITUTE OF INFORMATION TECHNOLOGY (DIIT)

Third Year, Sixth Semester

BBA (Honours) in Tourism and Hospitality Management (THM)

Fundamentals of Finance

Chapter -2

Concepts of Risk and Return

1. Define Risk (2006, 2008)

Risk: Risk is the deviation between actual return and expected return on an investment. Risk is the variability of the actual return from the expected return associated with a given investment. Risk is the variability of returns from those that are expected on an investment.

Risk is possibility that an actual return of an investment will be lower than the expected return. The greater the variability, the riskier is the security; the lesser the variability, less risky is the security.

According to Brigham, "Risk is the chance that some unfavorable events will occur."

According to Van Horne, "Risk is the variability of returns those that are expected."

2. What is return?

Return: Return is the income received on an investment plus any change in the market price of share. Return may be positive or negative.

According to Van Horne, "Return is the income received on an investment plus change in the market price."

The return on an investment for the given period of time is the income received and capital gain or loss from the difference between beginning and ending market price. The return of an investment consists of two components:

1. Current Yield or profit and
2. Capital gain or loss.

Total return = Total return = Current return (yield) + Capital returns (gains/losses)

Current Return/ Yield/ profit= Annual income ÷ Beginning price

Capital Return/ Gain or Loss= (Selling price**-** Purchasing price) ÷ Purchasing price

Return $=D_1 + (P_1 - P_0)/ P_0$

Where,

D_1= Annual income or dividend at the end of time period.

P_1= Closing security price at time period.

P_0= Opening security price at time period.

Example:

If the price of a stock on Jan 1 is $50, the annual dividend received at the end of the year is $2 and the year end price on Dec 31 is $60, what is the rate of return?

Current yield= Annual income ÷ Opening price = $2 ÷ $50 = 0.04 or 4%
Capital gains/losses=(Closing price - Opening price) ÷ Opening price= ($60 -$50) ÷ $50 = 0.20 or 20%

3. Explain the classification of risk with example. Or. Types of risk. (2007,2008,2010)

Types of risk: Broadly risk can be divided into two types:

1. Systematic risk or non- diversifiable risk
2. Unsystematic risk or diversifiable risk

Systematic risk: The risk which cannot eliminate through diversification is called systematic risk or non- diversifiable risk. Systematic risk is a risk which affects all firm of an industry simultaneously. Systematic risk can minimize but it cannot avoid through diversification.
Systematic risk arises due to change in government, change in government policy, inflation, increase in the tax rate, change in foreign exchange rate, and change in national economy etc.
Systematic risk can be divided into following types:
Interest rate risk: The risk which arises due to the fluctuation of interest rates (on fixed income securities like bond, debenture, mortgage, preferred stock) is called interest rate risk.
Exchange rate risk: The risk which arises due to the fluctuation of foreign currency exchange rate is called exchange rate risk. The investors who invest internationally face exchange rate risk.
Market risk: The risk which arises due to the fluctuation of the market price of financial assets is called market risk. Market risk arises due to recessions, wars, change in the economy and consumer preference.
Inflation risk: Inflation risk arises due to the increase in demand or increasing in price of commodity.
Default risk: Default risk arises when a firm unable to repay the principal loan amount to the lender.
Liquidity risk: Liquidity risk can be defined as the chance that an investment cannot easily convertible into cash at a reasonable price.
Political risk or country risk: political risk arises to change in government or change in government policy of a country. Now country risk is seen in Iraq, Afghanistan etc.

Unsystematic risk: Unsystematic risk is the risk which occurred due to the action of management and it is unique from firm to firm. The risk which can eliminate through diversification is called unsystematic risk or diversifiable risk.
Unsystematic risk arises due to labor unrest, mismanagement in production process, taking large amount of long term debt, imprudence of management, enter new competitor in the market etc. Unsystematic risk includes business risk, financial risk etc.

Unsystematic risk can be divided into following types:
Business risk: The risk which arises due to the tough competition of the market is called business risk. This type of risk is mainly dependent upon changes in demand, input prices and technological obsolescence.
Financial risk: The risk which arises due to taking long term loan is called financial risk. If other things remain unchanged the larger the proportion of assets financed by debt, the larger the financial risk.

Operational risk: Operational risks are the business process risks falling due to human errors. This risk change from industry to industry.

Credit risk: A credit risk is the risk of default on a debt that may arise from a borrower failing to make required payments. Credit risk is most simply defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms.

Industry risk: Risks that is specific to a certain industry. For example, the profitability of insurance companies writing deferred fixed-rate annuities is more heavily impacted by large shifts up or down, in market interest rates than industrial companies or even other insurance companies.

3. How is risk classified from the viewpoint of an investor? Explain with example. (2013)
Or. How does the notion of risk and reward govern the behavior of financial managers?

Notion of risk and return govern the behavior of financial managers. In competitive and efficient marks, greater rewards can only be achieved with greater risk. Any financial manager can be categorized as one of the following based on his/her attitude towards risk and return:

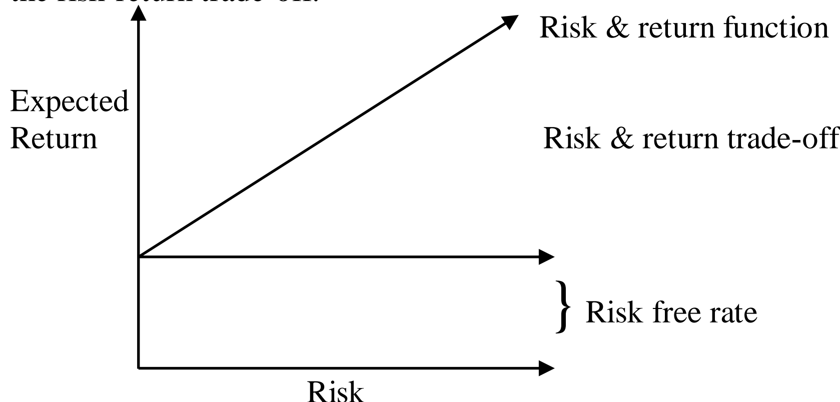
a. **Risk-averse:** This kind of manager does not like to take risk. However, he will make an exception if you provide the manager with excess return corresponding to the extra or excess risk that he takes.
b. **Risk-Neutral:** This kind of manager is neutral towards any combination of risk and return.
c. **Risk-taker:** This kind of manager loves risk and he will take extra risk irrespective of the return he gets. Unlike a risk-averse financial manager, he will chose to take extra or excess risk even when he is not adequately compensated for the extra risk he takes.

4. What is meant by risk-return trade-off? (2013)

Risk-return trade-off: The risk–return tradeoff (also called spectrum or risk–reward) implies the greater the risk, the greater the return expected. Low levels of uncertainty (low-risk) are associated with low potential returns, whereas high levels of uncertainty (high-risk) are associated with high potential returns.

A common misconception is that higher risk equals greater return. The risk/return tradeoff tells us that the higher risk gives us the possibility of higher returns.

All financial decisions involve some sort of risk-return trade-off. The following figure depicts the risk-return trade-off.



The above diagram depicts that:

1. More the risk more is the expected return.
2. Less the risk, less is the expected return.
3. Risk-free rate is the rate of return commonly required on a risk-free security.
4. Risk-return function depends upon the degree of risk and return.