fin630 final term subjective solved by shahida khalid, waqas ahmed

Question No: 44 (Marks: 3)

What are the causes of risk?

There are causes/sources of risk

1. Interest Rate Risk:
2. Market Risk:
3. Inflation Risk:
4. Business Risk:
5. Financial Risk:
6. Liquidity Risk:
7. Exchange Rate Risk:
8. Country Risk:

Question No: 46 (Marks: 5)

Why is yield to maturity important?

Yield to Maturity:

The YTM is the most important yield indicator for a bond investment. It factors in the nominal yield, bond price and length of maturity held. When investors buy bonds, the coupon rate is important, but if the bond price is higher than par - the yield to maturity will be lower. If the bond is bought at a discount, the yield to maturity will be higher.
The rate of return on bonds most often quoted for investors is the yield to maturity (YTM), a promised rate of return that will occur only under certain assumptions. It is the compound rate of return, an investor will receive from a bond purchased at the current market price if:

- The bond is held to maturity, and
- The coupons received while the bond is held are reinvested at the calculated yield to maturity.

Barring default, investors will actually cam this promised rate if, and only if, these two Conditions are met. As we shall see, however, the likelihood of the second condition actually being met is extremely small.

Question No: 44 (Marks: 3)

What is the advantage of Markowitz diversification?

Even if portfolios are selected arbitrarily, some diversification benefits are gained. This results in a reduction of portfolio risk. However, to take; the full information set into account, we use portfolio theory as developed by Markowitz, Portfolio theory is nonnative, meaning that it tells investors; how they should act to diversify optimally. It is based on a small set of assumptions, including;

1. A single investment period; for example, one year.
2. Liquidity of positions; for example, there are no transaction costs.
3. Investor preferences based only on a portfolio's expected return and risk; as measured by variance or standard deviation.

Question No: 45 (Marks: 3)

Define call options.

- An ***option*** is the right to either buy or sell something at a set price, within a set period of time.
  - The right to buy is a ***call option***.
  - The right to sell is a ***put option***.
- You can exercise an option if you wish, but you do not have to do so.

OR

A call option gives the holder the right to buy (or "call away") 100 shares of a particular common stock at a specified price any time prior to a specified expiration date. Investors purchase calls if they expect the stock price to rise, because (lie price of the call and the common stock will move together. Therefore, calls permit investors to speculate on a rise in the price of the underlying common stock without buying the stock itself.

OR

A **call option**, often it is simply labeled a "call", is a financial contract between two parties, the buyer and the seller of this type of option.

Ref

http://en.wikipedia.org/wiki/Call_option

How the hedger uses different ways manage the risk? Marks 5

A hedger is someone who is engaged in some type of business activity with an unacceptable level of price risk. A farmer must decide what crop to put in the ground in each spring. The welfare of the farmer's family or business depends on the price of the chosen commodity at harvest. If the price is high the farmer will earn a nice profit in the crop. Should prices below because of overabundance or reduced demand, and then prices may fall to such a level that operating costs cannot even be recovered. It is important to recognize that the farmer cannot eliminate the risk of a poor crop through the futures market; only price risk can be eliminated. Crop insurance may help protect against such an eventuality, but the futures market cannot.

How credit risk put adverse effect upon bond market dealing? Marks 3

If a lender cannot tell whether a borrower is a good or a bad credit risk, the demand for a risk premium will be based on the average risk Borrowers having good credit risk will not pay higher risk premiums and would withdraw from the market Only bad credit risk bonds are left in the market The adverse effect resulting in good investments not to be undertaken, the economy will not grow as rapidly as it could. So there must be some way of distinguishing good firms from the bad ones

Question No: 46 (Marks: 5)

Describe the general types of risk in detail.

Risk:

- Whether it is investing, driving, or just walking down the street, everyone exposes themselves to risk.
- Risk is the chance that an investment's actual return will be different than expected. This includes the possibility of losing some or all of the original investment.

Risk Types

- Two general types:
- **(1) Systematic (general)** risk is a risk that influences a large number of assets.
  - An example is political events. It is virtually impossible to protect yourself against this type of risk.
- **(2)Nonsystematic (specific)** risk is sometimes referred to as "specific risk". It's risk that affects a very small number of assets. An example is news that affects a specific stock such as a sudden strike by employees.

Total risk = General risk + Specific risk
= Market risk + Issuer risk
= Systematic risk + Nonsystematic risk

Question No: 47 (Marks: 5)

Describe the mechanics of trading in future market.

The futures contract is a-commitment to buy or sell at a specified future settlement date, a contract is not really .being solder bought, as in tire case of Treasury bills, stocks, or Certificates of Deposit (CDs), because no money is exchanged at the time the contract is negotiated. Instead, the seller and the buyer simply are agreeing to make and take delivery, respectively, at some future, time for a price: agreed upon today. As noted above, the terms buy and sell do not have the same meanings here. It is more accurate to think in terms of;

1. A short position (seller), which commits a trader to deliver an item at contract maturity.
2. A long position (buyer), which commits a trader to purchase an item at contract maturity

- Margin

Recall that in the case of stock transactions, the term margin refers to the down payment in a transaction in which money is borrowed from the broker to finance the total cost. Futures margin, on the other hand, is not a down payment, because ownership of the underlying item is not being transferred at the time of the transaction.

- using future contracts

1. **Hedgers**

A hedger is someone who is engaged in some type of business activity with an unacceptable level of price risk

2. **Speculators**

Speculators buy or sell futures contracts in an attempt to earn a return. They are willing to assume the risk of price fluctuations, hoping to profit from them.

OR

The future market enabled farmers to eliminate or reduce their price risk, the risk of not knowing the ultimate proceeds from the sale of their crops. It serves this same function

today. Using futures, the farmers could (if they wished) promise to deliver their crop in the future at a known a price, thereby reducing anxiety and promoting market stability. Of equal importance is the fact that financial managers can use derivatives to eliminate the price risk of their stock, bond, and foreign currency portfolios or obligations.
Today's communication technology brings us virtually instantaneous information about events such as earthquakes in Turkey, airline accidents, world trade balances, and Federal Reserve Board interest rate activity. These events influence the value of our investments.
Experienced investors are seldom 100 percent bullish or 100 percent bearish. The constant arrival of new information means the investment process is dynamic. Positions need to be constantly reassessed and portfolios adjusted.

Can risk be completely eliminated if we add more and more stocks to portfolio? Explain with reasons. Marks 3

If we add a stock to the portfolio which has returns perfectly positively correlated with the portfolio, it will generally add risk to the diversified portfolio.
If we add a stock that is perfectly negatively correlated with the portfolio, it will decrease the risk of the portfolio.

http://www.slideshare.net/Alamgir_Alwani/Chapter-08-Risk-Return

Question No: 43 (Marks: 3)

What is the main purpose of diversification?

Diversification:

The insurance principle illustrates the concept of attempting to diversify the risk involved in a portfolio of assets (or liabilities). In fact, diversification is the key to the management of portfolio risk, because it allows investors; significantly to lower portfolio risk without adversely affecting return.

Question No: 45 (Marks: 3)

What do you mean by financial reengineering?

Financial Engineering:
Just as the chemist mixes compounds in the laboratory to produce something with known characteristics, a financial engineer can mix financial assets in such a way that portfolio has special characteristics. Derivative assets are the basic building blocks the engineer uses.

Some of the recent financial disasters involving derivatives occurred because the product mix was the potentially volatile. Nitroglycerin can be use to treat heart disease, but masked men of the Wild west also used it to blow up trains. Slight variations in the composition of portfolio can result in drastically different characteristics.

What is the difference between load stock and no load stock? Marks 5

Load stock is simply a large group of people who lump their money together for a management company to invest. And, like most things in life, there are fees and commissions involved. There are a couple different types of load funds out there. Back-end loads mean the fee is charged when you redeem the mutual fund. A front-end load is the opposite of a back-end load and means the fee is charged up front.
A no-load stock simply means that you can buy and redeem the mutual fund units/shares at any time without a commission or sales charge. However, some companies such as banks and broker dealers may charge their own fees for the sale and redemption of third-party mutual funds.

Write down the investment alternatives. (3)

An investment that is not one of the three traditional asset types (stocks, bonds and cash). Most alternative investment assets are held by institutional investors or accredited, high-net-worth individuals because of their complex nature, limited regulations and relative lack of liquidity. Alternative investments include hedge funds, managed futures, real estate, and commodities and derivatives contracts.

http://www.investopedia.com/terms/a/alternative_investment.asp

Keeping in the view business cycle, describe which industries are least sensitive to change in the economy? Give two examples. 3

Defensive industries are least affected by recessions and economic adversity. Food has long been considered such an industry. People must eat, and they continue to drink beer, eat frozen yogurt, and so on, regardless of the economy. Public utilities might also be considered a defensive industry

What is required rate of return? Marks 3

The shareholders' required rate of return is the sum of the expected sum of the expected dividend yield and the expected stock price appreciation.

Question No: 48 (Marks: 5)

Describe the role of clearing house in futures market.

The Clearing House:

The clearinghouse, a corporation separate from, but associated with, each exchange plays an important role in every futures transaction. Since all futures trades are cleared through the clearinghouse each business day, exchange members must either be members of the clearinghouse or pay a member for this service. From a financial requirement basis, being a member of the clearinghouse is more demanding than being a member of the associated exchange.

Essentially, the clearinghouse for futures markets operates in the same way as the clearinghouse for options. Buyers and sellers settle with the clearinghouse, not each other.

Thus, the clearinghouse, and not- another investor, is actually on the other side of every transaction and ensures that all payments are made as specified. It stands ready to fulfill a contract if either buyer or seller ^defaults, thereby helping to facilitate an orderly market in futures. The clearinghouse makes the futures market impersonal, which is the key to its success, because any buyer or seller can always close out a position and be assured of payment. The first failure of a clearinghouse member in modern times occurred in the 1980s, and the system worked perfectly in preventing any customer from losing money.

Finally, as explained below, the clearinghouse allows participants easily to reverse a position before maturity, because the clearinghouse keeps trade of each participant's obligations.

Question No: 43 (Marks: 3)

How an investor can use the value of beta for determination of risk involved in different investment?

Beta is a relative measure of risk-—the risk of an individual stock relative to the market portfolio of all stocks. If the security’s returns move, more (less) than, the market's returns as the latter changes, the security's returns have more (less) volatility (fluctuations in price) than those of the market. For example, a security whose returns rise or fall on average 15 percent when the market return rises or falls 10percent is said to be an aggressive or volatile security.

Question No: 44 (Marks: 3)

What is meant by Coupon?

The interest rate stated on a bond when it's issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate".

For example, a $1,000 bond with a coupon of 7% will pay $70 a year.

It is called a "coupon" because some bonds literally have coupons attached to them. Holders receive interest by stripping off the coupons and redeeming them. This is less common today as more records are kept electronically.

http://www.investopedia.com/terms/c/coupon.asp

Question No: 45 (Marks: 3)

Describe the primary objective of an investment portfolio.

- Portfolio is a collection of investment vehicles assembled to meet one or more investment goals.
- **Growth-Oriented Portfolio:** primary objective is long-term price appreciation
- **Income-Oriented Portfolio:** primary objective is current dividend and interest income

http://financial-dictionary.thefreedictionary.com/Investment+objective

Question No: 46 (Marks: 5)

Bonds and stocks are both securities but they are different in several aspects. Describe the differences between them.

Bonds are the most important fixed income securities. A bond is a legal obligation to repay a loan's principal and interest, but carries no obligation to pay more than this. Conversely, a convertible bond is a debt security paying a fixed interest rate. It has the added feature of being convertible into shares of common stocks by the bond holders. If the terms of the conversion feature are not particularly attractive at a given moment, the bonds behave like a bond and are classified as fixed **income** securities. On the other hand, rising stock prices make the bond act more like the underlying stock, in which case the bond might be classified as an equity security.
The point is that one cannot generalize and group all stock issues as equity securities and all bonds as fixed income securities. Their investment characteristics determine how they are treated.

Question No: 47 (Marks: 5)

Describe why an investor might sell a put.

Put:
An option to sell a stock at a stated price within a specified period of months

A put option gives the buyer the right to sell (or "put away") 100 shares of a particular common stock at a specified price prior to a specified expiration date. If exercised, the shares are sold by the owner (buyer) of the put contract to a writer (seller) of this contract who has been designated to take delivery of the shares and pay the specified price. Investors purchase puts if they expect the stock price to foil, because the value of the put will rise as the stock price declines. Therefore, puts allow investors to speculate on * decline in the stock price without selling the common stock short.

. How you explain default risk? Marks 3

The possibility that a firm will be unable to pay the principal and interest on a bond in accordance with the bond indenture is known as the default risk.

Question No: 43 (Marks: 3)

What is the relationship between risk and return?

RELATIONSHIP BETWEEN RISK AND RETURN:

Risk and potential return need to be analyzed together throughout the investment decision-making process. Considering their relationship is a big part of what investment advisers get paid to do.
The Direct Relationship:
The fundamental relationship between risk and return is well known to those who have studied the market.
The more risk someone bears, the higher are their expected return. It also points out that some rate of return can be earned without bearing any risk, and is called the risk less rate of interest, or the risk free rate in finance theory. Two important points should be noted. **First,** the risk-return relationship is based on expected return. Expected return is a before the fact, not after the fact concept. It is not correct to say that riskier securities have higher returns, although people often make this statement. If riskier securities always had a higher return they would not be risky. Sometimes an investor is hurt by a risk taken that resulted in a negative return. Such is the essence of risk.
The **second** important point is that the risk we are talking about is unavoidable, or undiversifiable, risk. An investor is not generally rewarded for bearing risk that could have been diversified away.

Define Fundamental Analysis. Marks 3

Fundamental analyst at the company level involves analyzing basic financial variables in order to estimate the company's intrinsic value. These variables include sales, profit margins, depreciation, the tax rate, sources of financing, asset utilization, and other factors. Additional analysis could involve the firm's competitive position in its industry, labor relations, technological changes, management, foreign competition, and so on.

Question No: 44 (Marks: 3)

Define a zero coupon bond?

Zero Coupons:

A zero coupon bond has a specific maturity date when it returns the bond principal, but it pays no periodic income. In other words, the bond has only a single cash inflow the par value returned at maturity. An investor might pay $450 for a bond that promises to return $1,000 in 7.5 years. The investor's return comes from the $550 increase in value over the seven-and-one-half years. These types of bonds are still relatively new in the United States.

The retail department store JCPenney (JCP, NYSE) issued the first publicly offered zero coupon bonds in 1982. Chase Manhattan Bank (CMB, NYSE) and McDonald's (MCD, NYSE) followed suit later that year.

Question No: 45 (Marks: 3)

Describe how derivatives are used as a risk management tool.

Risk Management:

Instead of wheat, imagine that your crop is equity securities: You want their value to grow and generate capital gains. Your focus is more on investor demand than on supply. When the country goes on the stock-buying binge, prices go up. When people get cold feet and retreat from the market, prices go down. This market risk phenomenon is generally analogous to the farmer’s price risk. Similarly, someone holding bonds faces a potential for a paper loss should interest rates unexpectedly. Derivative assets, especially interest rate futures, can be used to reduce the interest rate risk.

Question No: 47 (Marks: 5)

The key to maximize profits is diversification. Do you agree with this statement?

Diversification:

Yes I am agreeing this statement because the insurance principle illustrates the concept of attempting to diversify the risk involved in a portfolio of assets (or liabilities). In fact, diversification is the key to the management of portfolio risk, because it allows investors; significantly to lower portfolio risk without adversely affecting return.

Question No: 43 (Marks: 3)
Define covariance. What does covariance shows?

A statistical measure of the variance of two random variables that are observed or measured in the same mean time period. This measure is equal to the product of the deviations of corresponding values of the two variables from their respective means.

Question No: 44 (Marks: 3)

What is meant by Interest rate tradeoff"?

Definition:

An act of exchanging one thing for another as part of a business deal.

Question No: 45 (Marks: 3)

What is the difference between the spot market and the futures market?

A futures contract is a promise; the person who initially sells the contract promises to deliver a quantity of a standardize commodity to a designated delivery point during a certain month called a delivery month. The other party to the trade promises to pay a predetermined price for the goods upon delivery. The person who promises to buy is said to be long; the person who promises to deliver is short.
Spot markets are markets for immediate: delivery. The spot price refers to- the current market price of an item available for immediate delivery.

Question No: 46 (Marks: 5)

Describe the general types of risk in detail.

Risk:

- Whether it is investing, driving, or just walking down the street, everyone exposes themselves to risk.
- Risk is the chance that an investment's actual return will be different than expected. This includes the possibility of losing some or all of the original investment**.**

Risk Types

- Two general types:
- **(1) Systematic (general)** risk is a risk that influences a large number of assets.
  - An example is political events. It is virtually impossible to protect yourself against this type of risk.

- **(2)Nonsystematic (specific)** risk is sometimes referred to as "specific risk". It's risk that affects a very small number of assets. An example is news that affects a specific stock such as a sudden strike by employees.

Total risk = General risk + Specific risk
= Market risk + Issuer risk
= Systematic risk + Nonsystematic risk

Question No: 43 (Marks: 3)

Describe how bond duration is related to coupons?

Duration

The term duration has a special meaning in the context of bonds. It is a measurement of how long, in years, it takes for the price of a bond to be repaid by its internal cash flows. It is an important measure for investors to consider, as bonds with higher durations carry more risk and have higher price volatility than bonds with lower durations.

Zero-coupon Bond duration = its time to maturity

Ref

http://www.investopedia.com/university/advancedbond/advancedbond5.asp

Question No: 47 (Marks: 5)

Describe why an investor might purchase a call?

Investors and speculators buying call options believe that the stock price will move enough to the upside to generate a profit. When they are right their return on investment is huge, but if they are wrong they are at risk of losing a significant part of their invested capital.

http://www.contrarian-investor.com/call-options.html

Call option

Buying a call option gives you the right to buy a fixed quantity of the underlying investment at a specified price, called the strike price, within a specified time period. For example, you might buy a call option on 100 shares of a share if you expect the market price to increase but prefer not to tie up your money by making the actual purchase. If the price of the share goes up, you can exercise the option and buy at less than the market price. But if the price doesn't change or it drops, you can simply let the option expire. In contrast, you can sell a call option, which is known as writing a call. That gives the buyer the right to buy the underlying investment from you at the strike price before the option expires. If you write a call, you are obliged to sell if the option is exercised.

http://www.investorhelpline.in/ih/General/Glossary.aspx?alphabet=C

Question No: 48 (Marks: 5)
The correlation coefficient between the returns of the stock and the market is 0.85. The variance of stock's returns is 0.75 and variance of market returns is 0.22. Calculate the covariance of market and stock's returns.
Formula to calculate the covariance is $\sigma AB = \rho AB\ \sigma A\ \sigma B$. (page no. 210)

Solution:
Formula to calculate the covariance is $\sigma AB = \rho AB\ \sigma A\ \sigma B$. (Page no. 209)
Correlation coefficient = $\rho AB = 0.85$
Variance of stock's returns = $\sigma A = 0.75$
Variance of market returns = $\sigma B = 0.22$

$\sigma AB = \rho AB\ \sigma A\ \sigma B$
$\sigma AB = 0.85(0.75)\ (0.22) = 0.14025$

Describe Spot markets and forward markets? Marks 3

There are two types of cash markets, spot markets and forward markets. Spot markets are markets for immediate: delivery. The spot price refers to- the current market price of an item available for immediate delivery.
Forward markets are markets for deferred delivery. The forward price is the price of an item for deferred delivery.

Question No: 47 (Marks: 5)

Can risk be completely eliminated if we add more and more stock to portfolio? Justify your answer with reasons.

Stocks have -1.0 correlations then the risk was eliminated from the portfolio. In reality it is very hard to find two stocks that have a perfectly negative correlation with each others. We add tocks in a portfolio the total risk of the portfolio is reduced a little but we can't get rid of it entirely. If we keep adding more stocks to the portfolio we continue to reduce the risk until it reaches a level that we cannot get below no matter how many stocks we add together

Question No: 46 (Marks: 5)

Bonds are 100% risk free investments. Do you agree with this statement? Justify

The most obvious and well know risk with investment bonds is the interest rate risk. This means that when you buy an investment bond you have committed to a fixed return of investment until a certain date or time. However, should the interest rate rise after the bond has been purchased the bond will be worth less and its price on the market will fall. The bond will be traded at a discount to reflect this.

It can be hard to determine when buying a bond if the interest rates will rise or fall as interest rates depend on a number of factors such as demand, inflation, and the amount of money in the economy and government policy among others. So as you can see it is laden with risk and this is only one particular risk involved in investment bonds.

2nd

Bonds are among the safest investments in the world. But that hardly means that they're risk free. Here's a look at some of the dangers inherent in fixed-income investing.

Inflation Risk: Because of their relative safety, bonds tend not to offer extraordinarily high returns. That makes them particularly vulnerable when inflation rises.

Interest rate risk: Bond prices have an inverse relationship to interest rates. When on rises, the other falls.
Rip-off Risk: Finally, in the bond market there's always the risk of getting ripped off. Unlike the stock market, where prices and transactions are transparent, most of the bond market remains a dark hole
Reinvestment Risk: Many corporate bonds are callable. What that means is that the bond issuer reserves the right to "call" the bond before maturity and pay off the debt. That can lead to reinvestment risk
Liquidity risk:
Downgrade Risk:

http://bonds.about.com/od/bonds101/a/bondrisk.htm

Question No: 44 (Marks: 3)

What is meant by Interest rate tradeoff"?

Definition:

An act of exchanging one thing for another as part of a business deal.

OR

Interest Rate Tradeoff

The 2 Effects Cancel Each Other Out. When market Interest Rates Rise, Bond Prices Drop (Interest Rate Risk Goes Up) BUT Overall Returns on future reinvestment in bonds go up (i.e. Reinvestment Risk Goes Down).

Risk free Rate is 15% and expected Market Return is 20%. FM Corporation has a beta of 1.9 and Gold Corporation has beta of 1.5. Find Expected Return on FM Corporation and Gold Corporation?

Solution:

Formula:
r = rRF + Beta (rM - rRF).
Expected Return on FM Corporation
15 %+(20%-15%) x 1.9 = 24.50%
Expected Return on Gold Corporation
15 %+(20%-15%) x 1.5 = 22.5