

for chartered flights or modest accommodations when a business is remote and there are not other options.

4. Limit gifts.

5. Restrict Investments.

6. Review Procedures.

7. Establish a formal written policy on the independence and objectivity of research and implement reporting structures and review procedures to ensure that research analysts do not report to and are not supervised or controlled by any department of the firm that could compromise the independence and objectivity of the analyst.

C. Misrepresentation – Members and candidates must not knowingly make any misrepresentations relating to investment analysis, recommendations, actions, or other professional activities.

1. Maintain Copies.

2. Attribute quotations to their sources any direct quotations, including projections, tables, statistics, model/product ideas, and new methodologies prepared by persons other than recognized financial and statistical reporting services or similar sources.

3. Attribute summaries to their sources paraphrases or summaries of material prepared by others.

D. Misconduct – Members and candidates must not engage in any professional conduct involving dishonesty, fraud, or deceit or commit any act that reflects adversely on their professional reputation, integrity, or competence (lying, cheating, stealing, and other dishonesty).

1. Develop/adopt a code of ethics to which every employee must subscribe and make clear that any personal behavior that reflects poorly on the individual involved, the institution as a whole, or the investment industry will not be tolerated.

2. Disseminate to all employees a list of potential violations and associated disciplinary sanctions, up to and including dismissal from the firm.

3. Check references of potential employees to ensure they are of good character and not ineligible to work in the investment industry because of past infractions of the law.

II. Integrity of Capital Markets

A. Material Nonpublic Information – Members and candidates who possess material nonpublic information that could affect the value of an investment must not act or cause others to act on the information.

1. We can interpret the Sign of Covariance as follows:

a. – Covariance of returns is negative if, when the return on one asset is above its expected value, the return on the other asset tends to be below its expected value (an average inverse relationship between returns).

b. Covariance of returns is 0 if returns on the assets are unrelated

c. Covariance of returns is positive when the returns on both assets tend to be on the same side (above or below) their expected values at the same time (an average position relationship between returns).

2. The covariance of a random variable with itself (own covariance) is its own variance:

$$\text{Cov}(R, R) = E\{[R-E(R)][R-E(R)]\} = E\{[R-E(R)]^2\} = \sigma^2(R)$$

Q. Properties of Correlation

1. Correlation: is a number between -1 and +1 for two random variables, X and Y:

$$-1 \leq \rho(X,Y) \leq +1$$

2. A correlation of 0 (uncorrelated variables) indicates an absence of any linear (straight-line) relationship between the variables. Increasingly positive correlation indicates an increasingly strong positive linear relationship (up to 1, which indicates a perfect linear relationship). Increasingly negative correlation indicates an increasingly strong negative (inverse) linear relationship (down to -1, which indicates a perfect inverse linear relationship).

R. The Joint Probability Function: gives the probability of joint occurrences of values of X and Y.

T. Independence for Random Variables – two random variables X and Y are independent if and only if $P(X,Y) = P(X)P(Y)$.

4.1 Bayes' Formula

a. Bayes' Formula – given a set of prior probabilities for an event of interest, if you receive new information, the rule for updating your probability of the event is

Update probability of even given the new information = [(Probability of the new information given event / unconditional probability of the new information)] x Prior probability of event

Standard Deviation – is the positive square root of the variance. Standard deviation measures dispersion (as does variance), but it is measured in the same units as the variable.

Study Session III: Quantitative Methods: Application

Reading 9 – Common Probability Distributions

2.0 Discrete Random Variables

a. Random Variable – is a quantity whose future outcomes are uncertain.

b. Discrete Random Variable – can take on at most a countable number of possible values. For example, a discrete random variable X can take on a limited number of outcomes $x_1, x_2, \dots, x_n$ (n possible outcomes), or a discrete random variable Y can take on an unlimited number of outcomes $y_1, y_2, \dots$

Discouraged Worker – are people who are available and willing to work but have not made specific efforts to find a job within the previous four weeks.

Real Wage Rate – is the quantity of goods and services that an hour's work can buy. Measures the reward for labor.

The second measure of the real wage rate is calculated by dividing total wages and salaries in the *National Income and Product Accounts* by aggregate hours.

- it is equal to the money wage rate (dollars per hour) divided by the price level

4.0 Unemployment and Full Employment

People become unemployed if they

1. Lose their jobs and search for another job
2. Leave their jobs and search for another job
3. Enter or reenter the labor force to search for a job

People end a spell of unemployment if they:

1. are hired or recalled
2. withdraw from the labor force

Types of Unemployment

1. Frictional – the unemployment rate that arises from normal labor turnover—from people entering and leaving the labor force and from the ongoing creation and destruction of jobs
2. Structural – the unemployment that arises when changes in technology or international competition change the skills needed to perform jobs or change the allocation of jobs
3. Cyclical – the fluctuating unemployment over the business cycle
4. Natural Rate of Unemployment – the unemployment rate at full employment. No cyclical.

Full Employment – occurs when there is no cyclical unemployment, or equivalently, when all the unemployment is frictional and structural

Natural Rate of unemployment – the unemployment rate at full employment

Real GDP and Unemployment over the Cycle

Potential GDP – the quantity of real GDP at full employment

- economy at full employment, the unemployment rate equals the natural rate of unemployment and real GDP equals potential GDP

5.0 CPI

- CPI – is a measure of the average of the prices paid by urban consumers for a fixed “basket” of consumer goods and services

Money in the US Today

1. Currency – bills and coins we use
2. Deposits at Banks and other depository institutions – savings and loan associations Can be converted into money

M1: consist of currency and traveler's checks plus checking deposits owned by individuals and businesses (does not include currency held by banks, or currency and checking deposits owned by the U.S. government) M1 is money.

M2: consists of M1 plus time deposits, savings deposits, and money market mutual funds and other deposits. These are liquid assets.

Deposits are Money but Checks are not

Credit Cards are not money

3.0

Depository Institutions – a firm that takes deposits from households and firms and makes loans to other households and firms. The deposits of three types of depository institution make up the nation's money:

1. Commercial Banks

Assets of Commercial Banks:

1. Liquid Assets – U.S. Treasury Bills and commercial bills
2. Investment Securities – are longer term U.S. govt. bonds and other bonds
3. Loans – are commitments of fixed amounts of money for agreed-upon periods of time. Riskiest asset of bank carrying highest interest rate

2. Thrift Institution

Types:

1. Savings and Loan Associations – is a depository institution that receives checking deposits and savings deposits and that makes personal, commercial, and home-purchase loans
2. Savings Banks – is a depository institution that accepts savings deposits and makes mostly mortgage loans. Mutual Savings Banks are owned by their depositors
3. Credit Unions – depository Institution owned by a social or economic group that accepts savings deposits and makes mostly consumer loans.
3. Money Market Mutual Funds – is a fund operated by a financial institution that sells shares in the fund and holds liquid assets such as U.S. Treasury bills or short-term commercial bills.

Depository Institutions provide four main services:

1. Creating Liquidity
2. Minimizing the Cost of obtaining funds
3. Minimizing the cost of monitoring Borrowers
4. Pooling Risk

Financial Regulation

- FDIC Deposit Insurance
- Balance Sheet Rules

1. equity capital requirements – the minimum amount of an owner's financial resources that must be put into a depository institution
2. Reserve requirements – rules setting minimum percentages of deposits that must be held in

Unanticipated Inflation – only when inflation is unanticipated does real GDP depart from potential GDP. Increases in unanticipated inflation coincide with decrease in unemployment.

Unanticipated inflation decreases potential GDP and slows economic growth. These adverse consequences arise for three major reasons:

1. Transaction costs – costs that arise from an increase in the velocity of circulation of money and an increase in the amount of running around that people do to try to avoid incurring losses from the falling value of money.
2. Tax effects – anticipated inflation swells the dollar returns on investments. But dollar returns are taxed, so the effective tax rate rises. (pg 413 real after-tax example). The higher the inflation rate, the higher is the effective tax rate on income from capital.
3. Increased uncertainty – increased uncertainty misallocates resources.

If the inflation rate is greater than anticipated, workers lose and employers gain.

If the inflation rate is greater than anticipated, lenders lose and borrowers gain.

6.0

Philips Curve – shows the relationship between inflation and unemployment

Short-Run Philips Curve – shows the relationship between inflation and unemployment, holding constant:

1. the expected inflation rate
2. the natural unemployment rate

- Negative relationship between inflation and unemployment along the short-run Philips curve; If inflation rises above its expected rate, unemployment falls below its natural rate.

Long-Run Philips Curve – shows the relationship between inflation and unemployment when the actual inflation rate equals the expected inflation. LRPC is VERTICAL at the natural unemployment rate. LRPC tells us that any anticipated inflation rate is possible at the natural unemployment rate.

- A change in the natural rate of unemployment shifts both the SR and LR Philips curves. Positive relationship.

7.0 Interest and Inflation

- The demand for money and the supply of money determine the nominal interest rate in the money market.

Reading 27: Fiscal Policy

- at full employment, the real wage rate adjusts to make the quantity of labor demanded equal to the quantity of labor supplied.
- Potential GDP is the real GDP that the full-employment quantity of labor can produce using the existing quantity of physical capital and human capital and the current state of technology
- Income taxes result in a smaller quantity of labor and a lower potential GDP.
- Tax wedge – the gap between the before-tax and after-tax wage rates
- Taxes effect the level of real GDP, but not its growth rate.

Laffer Curve – the relationship between the tax rate and the amount of tax revenue collected

- if net taxes, T , exceeds government purchases, G , the government sector has a budget surplus and the government saving is positive – govt adds to private saving
- if government purchases exceed net taxes, the government sector has a budget deficit and government saving is negative.

- Management must highlight any favorable or unfavorable trends and identify significant events and uncertainties that affect the company's liquidity, capital resources, and results of operations.
- MD&A section must also provide information about the effects of inflation, changing prices, or other material events and uncertainties that may cause the future operating results and financial condition to materially depart from current.
- must include critical accounting policies that have required management to make subjective judgments that have a significant impact on reported financial results

3.1.7 Auditor's Reports

- provides *reasonable assurance* that the financial statements are *fairly presented* and free from *material* error, fraud, or illegal acts that have a direct effect on the financial statements.
- Unqualified is best statement, aka "clean" statement.

New Publically traded companies requirements and Sarbanes-Oxley Act Requirements (pg. 23)

4.0 FSA Framework (pg. 27 exhibit)

- 4.1 Articulate the Purpose and Context of Analysis
- 4.2 Collect Data
- 4.3 Process Data
- 4.4 Analyze/Interpret the Processed Data
- 4.5 Develop and Communicate Conclusions/recommendations

Typically Include

- a. summary and investment decision
- b. business summary
- c. risks
- d. valuation
- e. historical and pro forma tables

4.6 Follow Up

Reading 30: Financial Reporting Mechanics

2.0 Classifying Business Activities (pg. 37 example)

Operating – day-to-day business function of an entity

- Sales of goods and services to customers
- Costs of providing the goods and services
- Income tax expense

Revenue	Cash Movement Prior to Accounting Recognition	Cash Movement after Accounting Recognition
	Deferred (Unearned) Revenue - Originating Entry – record cash receipt and establish a liability - Adjusting Entry – reduce the liability while recording revenue	Accrued (Unbilled) Revenue - Originating Entry – record revenue and establish an asset (such as unbilled revenue) - Adjusting Entry – when billing occurs, reduce unbilled revenue and increase AR. When cash is collected, eliminate the receivable
Expense	Prepaid Expense - Originating Entry – record cash payment and establish an asset (such as prepaid expense) - Adjusting Entry – reduce the asset while recording expense	Accrued Expenses - Originating Entry – establish a liability (such as accrued expenses) and record an expense - Adjusting Entry – reduce the liability as cash is paid

- pg. 69 example of accounting system flow.

Reading 31: Financial Reporting Standards

IASB – International Accounting Standards Board – international accounting standards setting body.
IOSCO – International Organization of Securities Commissions – capital markets regulation in the EU.

Objectives:

1. protecting investors
2. ensuring that markets are fair, efficient, and transparent
3. reducing systematic risk – risk factors common to the whole economy; cannot be eliminated through diversification

3.4.1 Significant Securities-Related Legislation

- Securities Act of 1933 – specified information all investors must receive when securities are sold
- Securities Act of 1934 – Created SEC
- Sarbanes-Oxley Act of 2002 – created Public Company Accounting Oversight Board (PCAOB). Addresses auditor independence and strengthens corporate responsibility for financial reports.

3.4.2 SEC Filings

10-K - Annual Report (not required by SEC)

Def-14A Proxy Statement – contains executive compensation, must be filed before any vote

8k – material corporate events

Form 144 – notice of the proposed sale of restricted securities or securities held by an affiliate of the issuer in reliance on Rule 144

Study Session 8: Financial Statement Analysis, Income Sheet, BS, and CFS

Reading 32: Understanding Income Statement

2.0 Components and Format of the Income Statement

Net Revenue – means that the revenue number is shown after adjustments (e.g. for estimated returns or for amounts unlikely to be collected).

Gross Profit: Net Revenues – COGS

Operating Profit – reflects profits on usual business activities before deducting taxes (financial firms would include interest expense in operating profit whereas non-financial would list it after operating profit).

Grouping by nature – grouping depreciation on manufacturing equipment and on administrative facilities in one

Grouping by function – grouping together expenses into a category such as COGS which would include some salaries, materials costs, depreciation, etc related to those sales

Consolidation (in reference to minority interest) – means that companies include all of the revenues and expenses of subsidiaries even if they own less than 100 percent.

Minority Interest – represents the portion of income that belongs to minority shareholders of these consolidated subsidiaries, as opposed to the parent company.

3.0 Revenue Recognition

Unearned Revenue – when a company receives cash upfront and actually delivers the product or service later.

Pg. 149 Chart

3.2.1

Long Term Contracts – is one that spans a number of accounting periods. (i.e. construction contracts)

Percentage-of-Completion – in each accounting period, the company estimates what percentage of the contract is complete and then reports that percentage of the total contract revenue in its income statement.

Preferred method when outcome of a construction contract can be measured reliably.

Completed Contract Method – the company does not report any revenue until the contract is finished.

- under IFRS and GAAP, if a loss is expected on the contract, the loss is reported immediately (CBI)

Installment Sales – sales in which proceeds are to be paid in installments over an extended period.

Installment Method – the portion of the total **profit** to **sales price** [(Sales Price – Purchase Price) / Sales Price] of the sale that is recognized in each period is determined by the percentage of total sales price for which the seller has received cash.

1. first calculate [(Sales Price – Purchase Price) / Sales Price] = x
2. then calculate X*Down Payment = revenue recognition at time of sale

Cost Recovery Method – the seller does not report any profit until the cash amounts paid by the buyer – including principal and interest on any financing from the seller – are greater than all the seller's costs of the property.

1. Determine the straight-line rate of the depreciable cost (Cost – Residual Value = Depreciable Cost)

$$\text{Straight Line Rate} = (\text{Depreciation Expense} / \text{Depreciable Cost})$$

2. Determine an acceleration factor that approximates the pattern of the asset's wear.
3. Multiply that rate by the straight line rate
4. Apply that rate to the remaining undepreciated balance (purchase price or cost of the asset) of the net book value of the asset at each period.
5. Depreciate ONLY until the accumulated depreciation = residual (salvage) value.

- Intangibles – if a pattern cannot be determined over the useful life, then the straight-line method should be used.
- Goodwill and intangible assets with indefinite life are NOT amortized. They are tested at least annually for impairment

Goodwill – is recorded in acquisitions and is the amount by which the price to purchase an entity exceeds the amount of net identifiable assets acquired (the total amount of identifiable assets acquired less liabilities assumed)

5.1 Discontinued Operations – disposed or plan to dispose one of its component operations

5.2 Extraordinary Items – useful and infrequent

- Fires – a loss of goods in a fire is part of continuing operations.

6.0 Earnings Per Share

- Ordinary Shares aka Common Stock are those equity shares that are subordinate to all other types of equity.

Complex Capital Structure – when convertible bonds, convertible preferred stock, employee options or warrants are present. A warrant is a call option typically attached to bonds giving bondholder right to buy.

- Complex capital structure could result in dilution upon conversion

32-1 Basic EPS = (NI – Preferred Dividends) / Weighted Average Shares Outstanding

- Time Weighted Average by number of months a given amount of stock existed.
- if a number of shares of common stock increases as a result of a stock dividend, stock bonus, or stock split, the EPS calculation reflects the change retroactively to the beginning of the period.
- if a 2:1 split occurs, just multiply the weighted average shares outstanding at year end.

32-2 Diluted EPS – If-Converted Formula

Diluted EPS = Net Income / (Weighted Average Shares Out + New Common Share that would have been issued at conversion)

- DO NOT include preferred shares in denominator UNLESS they are converted.

32-3 Diluted EPS – Convertible Debt Outstanding

Diluted EPS = (NI + After-Tax Interest on Convertible Debt – Preferred Dividends) / (Weighted Average Number of Shares Out + New Common Share that could have been issued at conversion)

32-4 Diluted EPS – Treasury Stock Method - When Co. has options, warrants, or their equivalents outstanding

Diluted EPS = (NI – Preferred Dividends) / (Weighted Average Number of Shares Outstanding + New

Reading 36: Analysis of Long-Lived Assets: Part I – The Capitalization Decision

- example 1
- example 2
- example 4

2.0 Acquiring the Asset: The Capital

- the costs of acquiring resources that provide services over more than one operating cycle are capitalized and carried as assets on the balance sheet.

3.0

Income Variability – firms that capitalize costs and depreciate them over time show smoother patterns of reported income. Firms that expense costs as incurred have greater variance in reported income, as the variance in spending is transmitted directly to income.

Profitability – expensing lowers profitability in early years. Profitability remains lower for expensing firms as long as the level of expenditures is increasing. Because they report lower assets, their ROA and ROE measures can be higher than those of firms that capitalize costs.

Cash Flow From Operations – CFO will always be higher for the capitalizing firm (because cash expenditures are included in investing cash flow and *never* flow through CFO), and the cumulative difference increases over time. Thus, the capitalization of long-lived assets results in a permanent shift of expenditures from CFO to CFI.

Leverage Ratios – expensing firms report lower assets and equity balances, and debt-to-equity and debt-to-assets solvency ratios will appear worse for expensing firms.

4.0 Capitalization versus Expensing: General Issues

- In US, SFAS 34 requires the capitalization of interest costs incurred during the construction period of a company constructed long-lived asset. Specific borrowing to that asset is also capitalized. If no specific borrowing is identifiable, the weighted-average interest rate on outstanding debt (up to the amount invested in the project) is capitalized. Under SFAS 34, interest is capitalized only if the firm is leveraged.

- For purposes of analysis, the income statement capitalization of interest should be reversed, resulting in:

a. capitalized interest should be added back to interest expense

b. adding capitalized interest back to interest expense reduces net income.

c. the capitalization of interest also distorts the classification of cash flows. Interest capitalization as part of the cost of fixed assets will never be reported as CFO, but as an investment outflow. To restore comparability with firms that do not capitalize interest, the amount of interest capitalized should be added back to cash for investment and subtracted from CFO.

International - all borrowing costs are expensed unless those costs are directly attributable to the acquisition, construction, or production of qualifying assets, which may be expensed.

Intangible Assets – are identifiable, nonmonetary resources controlled by firms.

Recognition and Measurement Issues

- the cost of acquiring intangible assets from unrelated entities is capitalized at acquisition, measured by the amount paid to acquire them.

Liability or Equity?

- to the extent that deferred taxes are not a liability, they are SHE
- if deferred tax liability is not expected to reverse, there is no expectation of a cash outflow and the liability should be considered as equity.
- If the deferred tax liability is the result of a temporary difference that is expected to reverse, with consequent tax payment, it should be treated as a liability

Effective Tax Rate

Effective Tax Rate = Income Tax Expense / Pretax Income

Second Effect Tax Rate = Taxes Payable / Pretax Income

Third Measure = Cash Flow Focused = Income Tax Paid / Pretax Income

5.0 Temporary versus Permanent Differences

- the income of affiliates is taxable on the parent's (U.S.) tax return only when dividends are received or the affiliate is sold, not when earnings are recognized. If affiliate earnings are permanently reinvested, then affiliate earnings may never be taxable on the parent company's tax return

6.0 Analysis of Income Tax

A forecast of future income tax expense should start with estimated pretax income and apply a statutory rate, then be adjusted for a. effects of the lower tax rate on foreign income b. effects of the lower tax rate on U.S. possession operations c. other effects.

Frequent Examples of Deferred Income Tax Expense Differences

1. Depreciation
2. Impairments – write downs do not generate tax deductions unless assets are sold
3. Restructuring costs – when a restructuring charge is taken, the tax effects generally occur as expenditures are made, with significant effects on deferred tax expense both in the year of the charge and the year(s) of payment
4. Inventories
5. Post employment benefits
6. Deferred compensation

Deferred Tax Expense Ratio – reflects the difference between taxable income reported to tax authorities and pretax income reported to shareholders

Difference = Deferred Tax Expense / Statutory tax rate

Analysis of Deferred Tax Assets and Liabilities

- The most significant deferred tax asset relates to accrued employee benefits.
- The second largest deferred tax asset is associated with inventories
- Other contributors include prepaid/deferred items, restructuring charges, and various carryforwards.

Explain in which of the following categories deferred taxes can be found & examples:

1. Current liabilities – may include deferred tax liabilities arising from installment sale with cash payments expected within one year

Periodic payment = "Coupon Rate" x Face Value

Issuance – Pg. 467 Example

- The amount borrowed (the proceeds received on issuance) depends on the market rate of interest for bonds of a similar maturity and risk as well as the payment stream
- It is the current market interest rate that allocates payments between interest and principal.

Points to Note about an Issuance

1. the initial liability is the amount paid to the issuer by the creditor (PV of the stream of payments discounted at market rate), not necessarily the face value of debt.
2. the *effective interest rate* on the bond is the market (not the coupon) rate at the time of issuance, and interest expense is that market rate times the bond liability
3. the coupon rate and face value determine the actual cash flows (stream of payments from issuer)
4. total interest expense is equal to- the payments by the issuer to the creditor in excess of the amount received. (Thus, total interest expense = \$130,000 – initial liability)
5. the balance sheet liability over time is a function of (a) the initial liability and the relationship of (b) periodic interest expense to (c) the actual cash payments.
6. the balance sheet liability at any point in time is equal to the present value of the remaining payments, discounted at the market rate in effect at the time of the issuance of the bonds.

Pg. 471 example for below

Market Rate = Coupon Rate ... = **PAR BOND**

- Liability is \$100,000 at issuance

Market Rate < Coupon Rate ... = **PREMIUM BOND**

- part of coupon payment goes towards both principal and interest. The portion of interest **REDUCES** the liability on the balance sheet. At maturity, the balance will have been reduced to the **FACE VALUE** of the bond.
- Bonds issued at a premium, the interest expense decreases over time.
- For bonds sold at a premium, part of the coupon payment is a reduction of principal and should be treated as financing cash (out) flow.
- CFO is understated and CFF is overstated

Market Rate > Coupon Rate ... = **DISCOUNT BOND**

- Interest expense is based of price paid, not face value, BUT cash interest paid is less and shortfall is added to balance sheet as liability. As a result, a higher liability is used to calculate interest expense for the second period, increasing interest expense, increasing the shortfall, and further increasing liability.
- Bonds issued at a discount, the interest expense increases over time.
- When bonds are issued at a discount, part of the discount amortization represents additional interest expense, and CFO is overstated and CFF is understated by the same amount.

Financial Statement Effects

- interest expense reported in the income statement is the effective interest on the loan based on the market rate in effect at issuance times the balance sheet liability at the beginning of the period.
- The cash flow classification of the debt payments depends on the coupon rates, not the effective interest rate.

Zero-Coupon debt – has no periodic payments and must be issued at a deep discount to face value. Lump-sum

3. the need to use judgment
4. The use of alternative accounting methods

- Receivables growing faster than revenue can indicate operational issues, such as lower credit standards or aggressive accounting policies for revenue recognition.
- Inventory growing faster than revenue can indicate an operational problem with obsolescence or aggressive accounting policies, such as an improper overstatement of inventory to increase profit.

4.0 Common Ratios Used in Financial Analysis

An analyst should evaluate ratios based on:

1. Company goals and strategy
2. Industry Norms
3. Economic Conditions

Activity Ratios – measures how efficiently a company performs day-to-day tasks, such as the collection of receivables and management of inventory

Inventory Turnover = $\text{COGS} / \text{Average Inventory}$

- Indicates the resources (money) tied up in inventory and can therefore be used to indicate inventory management effectiveness. Higher ratio (relative to industry norms, the better), shorter period that inventory is held so lower DOH.
- alternatively, high inventory turnover and LOW DOH could indicate not enough inventory on hand which could hurt revenues in event of inventory shortage.
- Slower growth combined with higher inventory turnover could indicate inadequate inventory levels.

Days of Inventory on Hand (DOH) = $\text{Number of Days in Period} / \text{Inventory Turnover}$

Receivables Turnover = $\text{Revenue} / \text{Average Receivables}$

- relatively high receivables turnover and commensurately low DSO might indicate highly efficient credit and collection
- Alternatively, a high receivables turnover ratio could indicate that the company's credit or collection policies are too stringent, suggesting the possibility of sales being lost to competitors offering more lenient terms.

Days of Sales Outstanding (DSO) = $\text{Number of Days in Period} / \text{Receivables Turnover}$

- represents the elapsed time between a sale and cash collection, representing how fast the company collects cash from customers it offers credit.

Payables Turnover = $\text{Purchases} / \text{Average Trade Payables}$

- Measures how many times per year the company theoretically pays off all its creditors.
- If purchases info is not available, use $\text{COGS} + \text{Ending Inventory} - \text{Beginning Inventory}$
- COGS sold is sometimes used as approximation of purchases
- A high ratio could indicate that the company is not making full use of available credit facilities or that the company could be making use of early payment discounts.

Number of Days Payables = $\text{Number of Days in Period} / \text{Payables Turnover}$

- represents the average number of days the company takes to pay suppliers

Dividend Payout Ratio = Common Share Dividends / Net Income Attributable to Common Shares

- Measures the percentage of earnings that the company pays out as dividends to shareholders

Retention Rate (b) = Net Income Attributable to Common Shares – Common Share Dividends / Net Income Attributable to Common Shares

- is the percentage of earnings that a company retains.

Retention Rate = 1 – Payout Ratio

Sustainable Growth Rate = $b * ROE$

- can be used to estimate company's growth rate, a factor commonly used in equity valuation

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Business Risk Ratios

Coefficient of Variation of Op. Income = Standard Deviation of Operating Income / Average Operating Income

Coefficient of Variation of Net Income = Standard Deviation of Net Income / Average Net Income

Coefficient of Variation of Revenues = Standard Deviation of Revenue / Average Revenue

Financial Sector Ratios

Capital Adequacy-banks = Various Components of Capital / (Risk-Weighted Assets, Market Risk Exposure, and Level of Operation Risk Assumed)

Monetary Reserve Requirement = Reserves held at Central Bank / Specific Deposit Liabilities

Liquid Asset Requirement = Approved "Readily Marketable" Securities / Specified Deposit Liabilities

Net Interest Margin = Net Interest Income / Total Interest-Earning Assets

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Selected Credit Ratios Used by S&P

EBIT Interest Coverage = EBIT / Gross Interest (Prior to deductions for capitalized interest or interest income)

EBITDA Interest Coverage = EBITDA / Gross Interest (Prior to deductions for capitalized interest or interest income)

Funds from Operations to Total Debt = FFO (NI adjusted for non-cash items) / Total Debt

Free Operating Cash Flow to Total Debt = CFO (adjusted) less CAPEX / Total Debt

Total Debt to EBITDA = Total Debt / EBITDA

problems with:

- a. Inventory management
 - b. Potentially obsolete inventory; or, in some cases
 - c. Inappropriate overstatement of inventory or increase gross and net profits
5. classification of nonoperating or nonrecurring income as revenue
 6. Deferral of expenses
 7. Excessive use of operating leases by lessees
 8. Classification of expenses or losses as extraordinary or nonrecurring
 9. LIFO liquidations
 10. Gross margins or operating margins out of line with peer companies
 11. Use of long useful lives for depreciation and amortization
 12. Use of aggressive pension plan assumptions
 13. Common use of fourth-quarter surprises
 14. Equity method of accounting/frequent use of off-balance-sheet SPEs or Variable interest entities
 15. Other off-balance-sheet financing or guarantees

Reading 41B: Accounting Shenanigans on the Cash Flow Statement **Ways Management Manipulates the Cash Flow Statement:**

2.0 Dispelling the Myth about Cash Flows

- Lack of regulation on cash flow presentation and categorization. Cash Flow statement can be manipulated

3.0 Stretching out Payables

- Simplest thing a company can do to improve reported operating cash flow
- Vendors will eventually put pressure on company to pay and therefore, any benefit may be unsustainable
o at a minimum, any reporting improvement in operating cash flow may be unsustainable

4.0 Financing of Payables

- occurs when a company uses a third-party financial institution to pay the vendor in the current period, with the company then paying back the bank in a subsequent period

5.0 Securitizing Of Receivables

- occurs when companies package their receivables, most often those that have a longer term and higher credit quality, and transfer them to a financial institution or a variable interest entity (VIE). If the VIE is a bankruptcy-remote, then GAAP indicates that the receivables have effectively been sold and the proceeds received should be reflected in the operating section of the cash flow statement.

- GAAP does not prescribe where on the income statement this gain is to be recorded. Recording it within revenues is the most aggressive approach, and below the line is the most conservative approach.

6.0 Tax Benefits from Stock Options

- IRS does not allow companies to take a deduction on its tax return when options are granted, but only when the options are exercised, for the difference between the strike and market price of the option

- the boost to operating cash flow is greatest in a period when the stock price has increased, as more stock options are being exercised, resulting in a higher tax benefit, which is included as a source of operating cash flow, implying improving growth of operating cash flow.

7.0 Stock Buybacks to Offset Dilution

- cash expended by the company for the buyback of corporate stock is considered a financing activity on the cash flow statement. Consequently, as option exercises grow, so does the boost to operating cash flows for the tax benefit, but the outflows for stock buybacks to offset dilution of earnings are recorded in the financing section of the cash flow statement.

8.0 Other Means

- increasing the use of capital lease transactions, accounting for outstanding checks and financing receivables are additional ways to influence cash flow

Reading 42: Financial Statement Analysis: Applications

3.0 Projecting Future Financial Performance

- For a newer or relatively volatile business, or one with significant fixed costs (which can magnify the volatility of operating margins), historical operating profit margins are typically less reliable for projecting future margins.

- pg. 646 forecasting format

FCF (Free Cash Flow to Equity) =
NI + Adjustments for Non Cash Items
Less: Investment in NWC
Less: Investments in Fixed Assets
+ Net Borrowing

4.0 Application: Assessing Credit Risk

Credit Risk – is the risk of loss caused by a counterparty's or debtors failure to make a promised payment.

Four Groups of Quantitative Factors in Credit Analysis:

1. Scale and Diversification – relates to a company's sensitivity to adverse events and economic conditions as well as to other factors – such as market leadership, purchasing power with suppliers, and access to capital markets-that can affect debt-paying ability
2. Tolerance for Leverage – relates to the obligor's ability to service its indebtedness
$$RCF = \text{Operating Cash Flow Before Working Capital Changes} - \text{Dividends}$$
3. Operational Stability – relates to cost structure: companies with lower costs are better positioned to deal with financial stress
4. Margin Stability – relates to the past volatility of profit margins: higher stability should be associated with lower credit risk.

5.0 Application: Screening for Potential Equity Investments

Top-Down Analysis – involves identifying attractive geographic segments and/or industry segments and then the most attractive investments within those segments

Bottom-Up Analysis – involves selection from all companies within a specified investment universe

Pg. 654 example for calculating how many stocks meets requirements if criteria were independent

= Percentage of Total Screen A * Percentage of Total Screen B ... * Percentage of Total Screen n

Growth Investors - focused on investing in high earnings-growth companies

Value Investors – focused on paying a relatively low share price in relation to earnings or assets per share

BOOK 4

Study Session 11: Corporate Finance

Reading 44: Capital Budgeting

Types of Projects

1. Replacement
2. Expansion
3. New Products and Services
4. Regulatory, Safety, and Environmental Projects
5. Other

3.0 Basic Principles of Capital Budgeting

Required Rate of Return – is the discount rate that investors should require given the riskiness of the project

Sunk Cost – is one that has already been incurred

Opportunity Cost – is what a resource is worth in its next best use

Use of Idle Property – opportunity cost is current market value of land

Replace an old Machine with new – opportunity cost is the cash flows the old machine would generate

If you invest \$10million – opportunity cost is the \$10million (which you could invest elsewhere)

Externality – is the effect of an investment on other things besides the investment itself

Cannibalization – is one externality. It occurs when an investment takes customers or sales away from another part of the company

Conventional Cash Flow – pattern with an initial outflow followed by a series of inflows

Nonconventional Cash Flow – the initial outflow is not followed by inflows only, but the cash flows can flip from positive to negative again. When cash flows change signs more than once multiple IRR's are possible.

Project Interactions:

Independent Projects – projects whose cash flows are independent of each other

Mutually Exclusive Projects – projects compete directly with each other. Pick higher NPV project in this situation

Project Sequencing – many projects are sequenced through time, so that investing in a project creates the option to invest in future projects

Unlimited Funds – environment that assumes that the company can raise the funds it wants for all profitable projects simply by paying the required rate of return

Capital Rationing – exists when the company has a fixed amount of funds to invest

4.1 NPV

$NPV > 0$, invest

$NPV < 0$, do not invest

4.2 IRR

$IRR > r$, invest

$IRR < r$, do not invest

r = cost of capital

Estimating Capital Structure

1. Assume the company's current capital structure, at market value weights for the components, represents the company's target capital structure
2. Examine trends in the company's capital structure or statements by management regarding capital structure policy to infer the target capital structure
3. Use averages of comparable companies' capital structures as the target capital structure

2.3 Applying Cost of Capital to Capital Budgeting and Security Valuation

- a company's marginal cost of capital (MCC) may increase as additional capital is raised
- a company's investment opportunities are generally believed to decrease as the company makes additional investments.
- the optimal capital budget is that amount of capital raised and invested at which the marginal cost of capital is equal to the marginal return from investing

- if we use the company's WACC in the calculation of the NPV of a project, we are assuming the project:

- a. has the same risk as the average-risk project of the company
- b. will have a constant target capital structure throughout its useful life

Analyst uses WACC when cash flows are cash flows to the company's suppliers of capital

FCFF – cash flow available to the company's suppliers of capital after all operating expenses (including taxes) have been paid and necessary investments in working capital (inventory) and fixed capital (PPE) have been made

Analyst uses Cost of Equity Capital if cash flows are strictly those belonging to equity owners

FCFE – cash flow available to holders of the company's common equity after all operating expenses, interest, and principal payments have been paid and necessary investments in working capital and fixed capital have been made

3.0 Costs of the Different Sources of Capital

3.1 Cost of Debt

Cost of debt is the cost of debt financing to a company when it uses a bond or takes out a bank loan. Methods to estimate the before tax cost of debt,

1. yield to maturity approach – pg. 46 example
2. debt rating approach – when a reliable market price for a company's debt is not available, we estimate the before-tax cost of debt by using the yield on comparable rated bonds for maturities that close match that of the company's existing debt

3.2 Cost of Preferred Stock

Cost of preferred stock is the cost that a company has committed to pay preferred stockholders as a preferred dividend when it issues preferred stock.

In the case of nonconvertible, noncallable preferred stock that has a fixed dividend and no maturity date, use

$$P_p = D_p / r_p$$

- For example, if company has callable, convertible preferred stock outstanding, yet it is expected to issue only noncallable, nonconvertible preferred stock in the future, we would have to either use the CURRENT yields on comparable companies' noncallable, nonconvertible preferred stock or estimate the yield on preferred equity (N/A for Level I)

3.3 Cost of Common Equity

- the cost of common equity (r_e), is the rate of return required by a company's common shareholders.

3.3.1 CAPM

2. Comparable Company – is a company that has similar business risk

4.3 Marginal Cost of Capital Structure

45-14 Break Point – the amount of capital at which the WACC changes

Break Point = $\frac{\text{Amount of Capital at which the source's cost of capital changes}}{\text{Proportion of new capital raised from the source}}$

4.4 Flotation Costs

Reading 46: Working Capital Management

Liquidity – is the extent to which a company is able to meet its short-term obligations using assets that can be readily transformed into cash.

Drag on Liquidity – is when receipts lag, creating pressure from the decreased available funds

Pull on Liquidity – is when disbursements are paid too quickly or trade credit availability is limited, requiring companies to expand funds before they receive funds from sales that could cover the liability.

- Uncollected receivables, obsolete inventory, tight credit.

Major pulls on payments:

1. Making payments early
2. Reduced credit limits
3. Limits on short-term lines of credit
4. Low liquidity positions

Creditworthiness – is the perceived ability of the borrower to pay what is owed on the borrowings in a timely manner and represents the ability of a company to withstand adverse impacts on cash flow

Operating Cycle = Number of Days of Inventory + Number of Days receivables

- is a measure of time needed to convert raw materials into cash from a sale

Net Operating Cycle = Number of Days Inventory + Number of Days Receivables – Number of Days Payables

- is a measure of time from paying suppliers for materials to collect cash from the subsequent sale of goods produced from these supplies

*in general for both of above, the shorter these cycles, the greater a company's cash-generating ability and the less its need for liquid assets and outside finance

4.0 Investing in Short-Term Funds

Discount Interest – the difference between the purchase price and the face value

Nominal Rate = a rate of interest based on the security's face value

Yield = is the actual return on the investment if it is held to maturity

Reading 48: The Corporate Governance of Listed Companies: A Manual For Investors

- good corporate governance leads to better results for companies and for investors.

Summary of Corporate Governance Considerations

- pg. 160 – 161

Corporate Governance – is the system of internal controls and procedures by which individual companies are managed. It provides a framework that defines the rights, roles and responsibilities of different groups-management, board, controlling shareowners and minority or non-controlling shareowners-within an organization

- at its core, is the arrangement of checks, balances, and incentives a company needs to minimize and manage the conflicting interests between insiders and external shareowners. Prevent one group from expropriating the cash flows and assets more than other groups.

Independence – a board must not have a material business or other relationship with the following individuals or groups: company and its subsidiaries, individuals, groups or other entities such as controlling families and governments, executive management, company advisers, and a company that has a cross-directional relationship with the company.

Board Members

Executive – members of executive management sitting on the board

Independent Board Members

Non-executive board members – may represent the interests that may conflict with those of shareowners

Two-Tier Board

a. Management Board

b. Supervisory Board

Unitary Board – board may include executive, non-executive, and independent board members

Corporate Auditors System in Japan – includes board of independent and non-executive and a board of corp. auditors

Committees System in Japan – board of executive, independent, and non-executive

THE BOARD – make decisions that is best for the long-term interests of Shareowners

1. Independence – refers to the degree to which they (board) are not biased or otherwise controlled by company management or other groups who exert control over management
2. Experience
3. Resources

Board Committees

1. Audit Committee – objective is to ensure that the financial information reported by the company to shareowners is complete, accurate, reliable, relevant and timely.
2. Remuneration/Compensation Committee – is responsible for ensuring that compensation and other rewards encourage executive management to act in ways that enhance the company's long-term profitability and value

4. All investors have the same one-period time horizon
 5. All investments are infinitely divisible; meaning it is possible to buy or sell fractional shares of any asset or portfolio
 6. There are no taxes or transaction costs involved in buying or selling assets
 7. There is no inflation or any change in interest rates, or inflation is fully anticipated
 8. Capital markets are in equilibrium – all assets are properly priced in line with their risk levels
- A zero variance asset would have zero correlation with all other risk assets and would provide the RFR
 - The standard deviation of a portfolio that combines the risk-free asset with risky assets is the *linear proportion of the standard deviation of the risk asset portfolio*
 - Both return and risk increase in a linear fashion along the original line RFR-M when leveraging
 - This line is referred to as the CAPITAL MARKET LINE
 - pg. 259
 - Because the market is in equilibrium, it is also necessary that all assets are included in this portfolio *in proportion to their market value*. If an asset accounts for a higher proportion of the M portfolio than its market value justifies, excess demand for this asset will increase its price until its relative MV becomes consistent with its proportion in the M portfolio

Market Portfolio – the portfolio that includes all risky assets

Unsystematic Risk – diversifiable risk

Systematic Risk – non-diversifiable risk common to entire market (influenced by macro-economic variables, such as variability in growth rate of money supply, interest rate volatility, and variability in industrial production, corporate earnings, and corporate cash flow)

- Completely diversified portfolios (which lie on the CML) are perfectly correlated with the market portfolio because it (portfolio) only has systematic risk which cannot be diversified away
- By adding stocks to a portfolio that are not perfectly correlated with stocks in the portfolio, you can reduce the overall standard deviation of the portfolio but you cannot eliminate variability.
- Separation Theorem – the proposition that the investment decision, which involves investing in the market portfolio on the CML, is separate from the financing decision, which targets a specific point on the CML based on the investor's risk preference
- reading 51 shows that the only important consideration for any individual risky asset is its average covariance with all the risk assets in the M portfolio, or simply, the asset's covariance with the market portfolio (versus covariance with other stocks in the portfolio as shown in reading 50).

3.0 CAPM: Expected Return and Risk

Beta – the standardized measure of systematic risk.

- includes covariance between the stock and the benchmark and the variance of returns for the benchmark series
- $$\text{Beta} = \text{Covariance}_{i,m} / \text{Variance}_m$$

Reading 55: Market Efficiency and Anomalies

Market Efficiency – refers to the informational efficiency of markets as opposed to structural efficiency, administrative efficiency, or operational efficiency

Arbitrage – refers to a profit earned with zero risk and zero investment

Limitations of Market Efficiency

1. Cost of Information – prices take time to reflect new information because obtaining and processing that information is costly
2. Cost of Trading – one factor that can have a large influence of prices is the difficulty in short selling. If short selling is more difficult than buying long, then prices are likely to be biased upward. The greater the cost of trading, the greater the mispricing
3. Limits of Arbitrage – in an instance where no close substitutes are available, mispricing of a security may persist indefinitely

Mispricing – is any predictable deviation from a normal or expected return.

When Is Mispricing Not a Mispricing?

Pricing Anomaly – is any predictable deviation from a normal or expected return, up or down (down less than 15%)

Abnormal Return – Actual return less expected return

- Long-term mispricing should generally be subject to much greater degree of skepticism than short-term mispricing.

Causes of Discovered Market Anomalies:

Data Mining – the practice of determining a model by extensive searching through a dataset for statistically significant patterns

Out-of-Sample Test – testing the same relationship using data from a different country or an entirely different period.

Survivorship Bias – exists when results are based on existing entities

Small Sample Bias – small sample refers to the period of observation

Selection Bias – the sample may be biased in favor of finding the desired result

Nonsynchronous Trading – returns caused by nonsynchronous trading is that those returns are not actually tradable due to the thinly traded nature of the underlying stock

Misestimation of Risk

Home Bias – is the tendency of investors to underweight foreign stocks compared to an optimally diversified portfolio.

Why Does a Mispricing Exist

1. The mispricing is not well understood.
2. Arbitrage is Too Costly – bid-ask spread, brokerage fees, large trades can have a market impact
3. Profit Potential is Insufficient
4. Arbitrage is not possible due to trading restrictions
5. Behavioral Biases may affect investment decisions

Debenture Bonds – unsecured debt

Negative Pledge Clause – found in most senior unsecured debt issues, prohibits a company from creating or assuming any lien to secure a debt issue without equally securing the subject debt issue (s) with certain exceptions.

Medium Term Note – notes that are offered continuously to investors by an agent of the issuer.

Structured Notes – MTNs created when the issuer simultaneously transacts in the derivative market

Deleveraged Floater – is a floater that has a coupon formula where the coupon rate is computed as a fraction of the reference rate plus a quoted margin

Dual-Indexed Floater – fixed percentage between two reference rates

Range Note – a floater whose coupon rate is equal to the reference rate as long as the reference rate is within a certain range at the reset date

Index Amortizing Note – is a structured note with a fixed coupon rate but whose principal payments are made prior to the stated maturity date based on the prevailing value for some reference interest rate. With an IAN, when interest rates decline, the investor will receive the principal back faster

6.5 Commercial Paper – is a short-term unsecured promissory note that is issued in the open market and represents the obligation of the issuing corporation. Maturity typically less than 270 days. Rolling over risk is mitigated by unused bank credit lines.

Bankers' Acceptance – is a vehicle created to facilitate commercial trade transaction. Created for the importing of goods, the exporting of goods to foreign entities and the storing and shipping of goods between two foreign countries where neither the importer nor the exporter is a U.S. firm and the storing and shipping of goods between two U.S. entities in the US.

- Investing in bankers acceptances exposes the investor to credit risk and liquidity risk. Liquidity risk is not a concern though to investors who plan to hold the note to maturity.

7.0 Asset-Backed Securities

Special Purpose Vehicle – a legal entity that a corporation sells the assets to. Plays a critical role in the ability to create a security – an asset-backed security – that separates the assets used as collateral from the corporation that is seeking financing. Created as a form of credit enhancement, although is not cheap so it doesn't always make sense to set up an SPV. Also, in bankruptcy, a judge may decide that the assets of the SPV are actually assets of the corporation, and it is not protected in bankruptcy anymore.

8.0 Collateralized Debt Obligation – a fixed income product that is also classified as part of the asset-backed securities market. It is a product backed by a diversified pool of one or more types of debt obligations.

CDO – collateralized bond obligation, when underlying debt pool consists of bond type instruments

CLO – collateralized loan obligation, when underlying debt pool consists of bank loans

9.0 Primary and Secondary Market for Bonds

Primary Market – involves the distribution to investors of newly issued securities by central govts, its agencies, muni govts, and corporations.

-a US treasury note with exactly four years to maturity can be broken into at most, five Treasury Strips. Each coupon would be a treasury strip, and the principal would form the basis of the fifth strip.

- prepayments increase as interest rates decrease.
- Mortgage passthrough securities show some reduction in prepayment risk due to diversification, but prepayment risk is not eliminated
- Debentures are unsecured

9.2 Secondary Markets

and demand for funds determine the interest rate for that sector.

Preferred Habitat Theory – argues that investors prefer to invest in particular maturity sectors as dedicated by the nature of their liabilities.

Spot Rate – yield of a zero-coupon security

4.0 Yields on Non-Treasury Securities

Yield Spread = Yield on Bond X – Yield on Bond Y

Absolute Yield Spread = Yield on Bond X – Yield on On-The-Run Treasury

Relative Yield Spread = $\frac{\text{Yield on Bond X} - \text{Yield on Bond Y}}{\text{Yield on Bond Y}}$

Yield Ratio = $\frac{\text{Yield on Bond X}}{\text{Yield on Bond Y}}$

*Yield on Bond Y = Yield on On-The-Run Treasury when comparing bond's to the Treasury (reference bond).

Factors Affecting the Intermarket and Intra-market Yield Spreads

1. relative credit risk of the two issues
2. presence of embedded options
3. liquidity of the two issues
4. taxability of interest received by investors

- in general, investors require a larger yield spread for an issue with an embedded option that is favorable to the issuer (call option). For a bond with an option favorable to an investor, the interest rate may even be less than that on a comparable Treasury security.

- mortgage-backed securities expose an investor to prepayment risk

Option adjusted spread – a type of yield spread that considers changes in the term structure and alternative estimates of the volatility of interest rates

- one factor that affects liquidity (and therefore the yield spread) is the size of an issue – the larger the issue, the greater the liquidity relative to a smaller issue, and the greater the liquidity, the lower the yield spread.

- the higher the marginal tax rate, the higher the taxable equivalent yield.

- for practical purposes, the default risk on Treasury securities is considered zero; however, other risks associated in investing in Treasury securities include interest rate risk, yield risk, reinvestment risk, inflation risk, and event risk.

4.6 Taxability of Interest Income

5. Currency Futures Contracts

- Currency futures contracts call for actual delivery, through book entry, of the underlying currency.

Preview from Notesale.co.uk
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Reading 70: Option Markets and Contracts

Option Generalizations:

- Call options have a lower premium the higher the exercise price
- Put options have a lower premium the lower the exercise price
- Both call and put options are cheaper the shorter the time to expiration. Always true for American options but not always for European options.

Moneyness – refers to the price of the underlying and the exercise price.

- one would not necessarily exercise an in-the-money option, but one would never exercise an out-of-the-money option

LEAPS – long-term equity anticipatory securities – options with expirations of several years

Interest Rate Call – is an option in which the holder has the right to make a known interest rate payment and receive an unknown interest payment.

Interest Rate Put – is an option in which the holder has the right to make an unknown interest rate payment and receive a known interest payment

Interest Rate Cap – is a combination of interest rate calls; is a series of call options on an interest rate, with each

2. an assessment of the time it will take to exit the venture successfully
3. an assessment of the probability of failure.

5.0 Hedge Funds

- Typically set up as limited partnerships, limited liability corporations, or offshore corporations
- Managers compensated through base fees and incentive fees

Classifications of Hedge Funds:

- a. Long/Short Funds – taking short and long bets in common stocks
- b. Market-neutral funds – a form of long/short funds that attempt to be hedged against a general market movement. Could involve simultaneous long and short positions in closely related securities with a zero net exposure to the market itself.
- c. Global Macro Funds – take bets on the direction of a market, a currency, an interest rate, a commodity, or any macroeconomic variable
 1. Futures Funds – commodity pools that include commodity trading advisor funds
 2. Emerging-market Funds – primarily take bets on all types of securities in emerging market
- d. Event driven funds – take bets on some event specific to a company or security
 1. Distressed Securities Funds – manager invests in debt and/or equity of companies having financial difficulty
 2. Risk Arbitrage in M&A – simultaneously buying stock in company being acquired and selling the acquirer.

5.3 Fund of Funds Advantage

- a. Retailing
- b. Access
- c. Diversification
- d. Expertise
- e. Due Diligence Process

5.4.2 Unique Hedge Fund Risks

1. Liquidity Risks
2. Pricing Risk
3. Counterparty Credit Risk
4. Settlement Risk – refers to failure to deliver the specified security or money by one of the parties to the transaction on the settlement day
5. Short Squeeze Risk
6. Financing Squeeze