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of

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CME-3: Broker-Dealer Qualification Certificate

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A Learning Map which contains the full syllabus appears at the end of this manual. Please note that the examination is based upon the syllabus.

PREFACE

The Broker-Dealer Module (CME-3) is one of the specialized modules in the CMA's Certification Examination series. This module is specifically developed for those who are involved in trading of securities within an Authorized Person, especially those related to brokerage, dealership, advising investors and managing client portfolios. This study manual is developed to assist candidates to acquire the necessary knowledge regarding these functions and to prepare candidates to sit for the Broker-Dealer Module (CME-3) examination.

This manual is divided into two sections and fourteen chapters, as follows:

Section 1: Operations of Securities Markets
- Chapter 1: Understanding Securities Markets
- Chapter 2: Buying and Selling of Securities
- Chapter 3: Understanding Market Behavior
- Chapter 4: Behavioral Finance
- Chapter 5: Securities Valuation
- Chapter 6: Stock Analysis
- Chapter 7: Corporate Actions

Section 2: Broker-Dealer Regulations
- Chapter 8: Capital Market Law
- Chapter 9: Securities Business Regulations
- Chapter 10: Authorized Persons Regulations: Authorization Process
- Chapter 11: Authorized Persons Regulations: Conduct of Business
- Chapter 12: Authorized Persons Regulations: Systems and Controls Requirements
- Chapter 13: Market Conduct Regulations
- Chapter 14: Anti-Money Laundering/Counter-Terrorist Financing Rules

It should be noted that Section 2 of this study manual is meant to provide focused explanations to the Capital Market Law and its Implementing Regulations, relevant to the broker-dealer and related functions. Candidates are advised to refer to the original legislations for complete rules and regulations governing authorized persons' activities.

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Syllabus Learning Map

Answers To Sample Multiple Choice Questions

Section 1: Operations Of Securities Markets

Understanding Securities Markets

1

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

Introduction

Most people associate investment activities with starting and running a company or investing in the stock market. But what investment really means and what it entails are seldom given a deep thought. Being someone directly involved in the securities industry, the broker-dealers should have a deeper understanding of the various investment types and process and the variables involved in determining a successful investment. This chapter introduces basic elements of investment in the securities market, by providing broad and general discussions on the primary and secondary securities market, the role of stock exchanges, types of financial securities, the investment process and methods of measuring returns on investments.

1.1 Investments

1.1.1 What Is Investment?

Learning Objective 1.1.1(a) – *Know* the definitions of investment and various types of investments and their associated expected returns and risks.

Learning Objective 1.1.1(b) – *Understand* the difference between investment and speculation.

An 'investment' is a current commitment of money for a certain period of time to derive future returns that will compensate the investor for the uncertainty and risks, the expected inflation rate and the time value of funds committed. In other words, an investment is the sacrifice of current wealth (or current consumption) for an expected future wealth. The current wealth is usually in the form of an amount of money or cash that is certain in nature, in the sense that it already belongs to the investor, while the expected future wealth has an element of risk and uncertainty in its outcome, both in terms of amount and timing. An investor needs to be compensated for bearing the risk; the greater the risk, the greater would be the expected returns.

In finance, the terms "investment" and "speculation" have very specific meanings. Investment means contributing one's money for capital growth in a business organization. It is a long-term commitment of capital and the investor will not be trading the stocks for quick profits. In making investment decisions, the investor will neither attempt to make a timing strategy nor to make a stock selection. A smart investor will hold a balanced portfolio, with a variety of investments in order to minimize risk. Investors accept whatever return the markets are paying for their investments, provided that the returns commensurate with the level of risk assumed.

Speculating, on the other hand is buying and selling of shares (or securities) for profits. Speculators attempt to beat the market, that is, to do better than other investors, through clever timing, forecasting, or selection of stocks. Speculators select individual stocks that they believe will do better than the market as a whole. Speculators actively move their money in and out of the markets based on their short-term predictions. They may use fundamental analysis, technical analysis, cyclical analysis, or any other form of analysis to tell them when and what to buy and sell. It should be noted that speculation is not exactly like gambling because speculators do try to make an educated decision on the direction of the trade, but gambling is a just a game of pure chances.

Investment decision is based on two elements: risk and expected rate of return. There is a direct relationship between the two elements: if an investor wants higher expected returns, he/she should be ready to bear higher risk, and if the investor is unwilling to take risks, he/she should be content with low returns. Therefore, there is a trade-off between risk and expected rate of return. The following table illustrates different types of investment and their associated expected returns and risks:

Table 1.1: Different types of investments and their associated expected returns and risks.

Type of Investment	**Investing in**	**Form of current sacrifice**	**Form of expected future wealth**	**Nature of risks and uncertainties**
Starting a manufacturing business	Productive asset	Capital to finance fixed asset, current asset, operating expenditure	Profits, cash flows	Uncertainties in sales, costs and profits, consumer demands, economic conditions
Buying shares in the stock market	Financial asset	Purchase price of the shares	Dividends and future selling price	Uncertainties in dividend payment and share value
Studying for a university degree	Human capital	Fees, books, time	Better job and better salary	Uncertainties in job market, educational achievement
Purchasing land for speculation	Real estate	Purchase price	Rents, selling price	Uncertainties in supply and demand of real estate

1.1.2 Individual Versus Institutional Investors

Learning Objective 1.1.2 – *Understand* the different characteristics and investment behaviors between individual investors and institutional investors.

In securities market, investors may be broadly classified into individual and institutional. Individual investors are exactly what it means – people like you and I who make personal investments in the securities market using our own savings. Institutional investors, on the other hand, are institutions that manage a pool of funds to invest in the securities market. Examples of institutional investors include mutual funds, pension funds, foundations, asset managers, corporations, etc. The reason for this classification is because the two groups behave quite differently in relation to their investment behavior. A broker-dealer must know these differences in order to provide effective services to them. The following table summarizes the characteristics and investment behavior of individual versus institutional investors.

Table 1.2: Characteristics and investment behavior of individuals versus institutions.

Criteria	Individual investors	Institutional investors
Portfolio size	Small (personal assets, savings)	Large (pooling funds from many investors).
Objective	Wealth accumulation	Income, growth
Strategy	Mostly simple, straight-forward	Complicated, scientific
Tax	Non-taxable in Saudi Arabia. In taxable countries: tax on dividends and capital gains	Non-taxable in Saudi Arabia. In taxable countries: tax on dividends and capital gains
Information for investment decision	Incomplete, somewhat out-of-date	Comprehensive, up-to-date, timely
Investment horizon	Mostly short-term	Medium to long-term
Risk taking	Mostly speculative	Calculated risk

1.2 Securities Market And Stock Exchange

A securities market consists of two types of market based on the securities offering, namely primary market and secondary market.

1.2.1 The Primary Market

Learning Objective 1.2.1 –*Understand* what is the primary market and its importance toward economic development of a country.

Primary market is a market for newly issued securities. This is the market where the securities are created and offered to the public for the first time. Example of primary securities markets are new share issues from companies and new issues of government securities. For example, a private company that wants to become a public listed company will normally expand its capital base by offering new shares to the public. The offering of these new shares are called “initial public offerings” or IPOs. Companies normally engage the services of investment bankers to advise and underwrite the offering of the new securities. Rights issues are also part of the primary market. The proceeds of the primary market securities will go to the issuer of these securities, whether private companies, governments or governmental agencies.

The primary market is very important to the economic development of a country because this is where funds are raised from the people with surplus funds to finance the productive activities of the economy. The primary securities market serves as an alternative source to raise funds in addition to the banking system.

1.2.2 The Secondary Market

Learning Objective 1.2.2 –*Understand* what is the secondary market and its roles.

The secondary market is the market for public trading of existing securities or securities that have been issued. The trading for secondary market is usually carried out through stock exchanges. A stock exchange is a place (need not be a physical place) where buyers and sellers of securities meet and agree on their transactions, for example Tadawul, New York Stock Exchange, Nasdaq, etc. Due to technological developments, buy and sell orders are matched electronically without the need for actual meeting of buyers and sellers.

The role of secondary securities market is important because it performs the following functions:

- **Price discovery.** Secondary market provides market price for the securities. Price discovery is the outcome of the actions of many buyers and sellers in the market, with each trying to seek relevant information in order to arrive at a fair value for the securities. Without a stock market, buyers and sellers will have to physically meet, negotiate and agree on terms before a transaction can take place, and the price may not reflect a market consensus.

- **Reduced transaction costs.** With the presence of a secondary market, related information on the company and its stock are more readily available, thereby reducing costs of obtaining and analyzing the information. Transactions are also facilitated and effected electronically without the need for buyers and sellers to look for their counter-parties.

- **Diversification improvement.** By having many different stocks from various industries that are listed in the market, it becomes very convenient for investors to invest in many different stocks in order to diversify their investment portfolios.

- **Liquidity.** One of the important roles of the secondary market is providing the liquidity for the securities. Liquidity enables buyers and sellers to buy and sell the securities at or close to their desired prices. Without liquidity it would be difficult for the shareholders to sell (i.e. transfer) the shares to other people who want to own (buy) the shares.

1.2.3 The Role Of Stock Exchange

Learning Objective 1.2.3 – *Know* the roles of the stock exchanges in the economy.

Stock exchange plays very important roles in economic development of a country. These roles include the following:

1. *Raising capital for businesses.* Probably the most important and direct role of a stock exchange is to enable companies to raise capital through shares offering to the public. Without a stock exchange it would have been difficult, or almost

impossible for companies to issue shares to the public, and the only recourse would have been bank financing, which may be limited in scope and volume.

2. *Mobilizing savings for investment.* The flip side of the coin to raising capital is the mobilization of savings for investments. When people use their savings to buy the new shares, they are in fact providing capital to the businesses. Idle money is now being mobilized for productive use. As more savings are mobilized the pace of economic development will increase. Economic development brings about more wealth to the country and more employment to people.

3. *Facilitating company growth through mergers and acquisitions.* When shares are listed on the exchange, the shares are freely available for any investor, and their values are determined by the market. This facilitates mergers, acquisitions and takeovers of companies for growth and expansion.

4. *Sharing of companies' wealth*. By buying shares on the stock exchange, individuals are able to become owners of companies, and thereby participating in the companies' businesses and sharing their profits. Small and large investors, casual and professional investors, as well as institutional investors are able to share the profits of profitable businesses through dividends and capital gains.

5. *Improved corporate governance*. With the strict rules and regulations of the exchange and the capital market authority, and also with the scrutiny of analysts and investors, corporate governance will be improved. Listed companies have to step-up their management standards and operational efficiency. In contrast to unlisted companies, listed companies have to be more responsible in their products and services and preserving the rights and interests of stakeholders.

6. *Creating investment opportunities for the public.* In addition to long-term investments and participating in companies' profits, investors may construct their preferred portfolios and manage them well to make profits from the movement in share values. Institutions may also engage in funds management and sell investment units to retail investors. By buying these units, small investors are indirectly participating in well diversified investments.

7. *Raising money for Governmental development projects.* Government and its agencies need money to finance their operations and projects. Government needs money to build schools, hospitals, offices, and infrastructure projects such as roads, dams, and sewage systems. Government may raise the required funds through issuing securities, such as treasury bonds and bills through the stock exchange. People buying these securities are in fact lending money to the government.

8. *Barometer of the economy*. The rise and fall of share prices as represented by a stock index may provide a useful indicator of the health of the economy. When the economy is rising, companies will be making profits and share value will increase. Likewise, when the economy is in recession, share prices will drop. The rise and decline in share prices are due to market's expectation of companies' profitability. Therefore the movement of share prices as

represented by the stock index can be an indicator of the general trend in the economy.

1.3 Types Of Securities

1.3.1 Money Market Securities

Learning Objective 1.3.1 – *Know* the meaning of money market and the various types of money market securities.

Money market securities are short-term assets typically with a maturity of one year or less. Securities that fall into the category of money market securities include Treasury bills (T-bills), commercial paper, certificates of deposit (CDs), and bankers' acceptances. These securities are generally considered to be high grade because the maturity is short and they are typically issued by large, trustworthy organizations including the government of a country. This makes the risk associated with holding a money market security very low. However, low risk also means low return.

- **Treasury Bill (T-bill)**

Treasury bills are short-term securities issued by the government which typically have maturities less than a year. They are usually issued with a 3-month, 6-month and one-year maturities. T-bills do not have a stated interest rate of return (or coupon rate). Instead they are sold at a discount and the full amount of the face value will be redeemed at maturity. This is known as selling on a discount basis. Risk associated with Treasury bills is so low or almost zero that in most financial calculations the T-bill is considered a riskless asset and, hence, the rate on a very short term T-bill is used as a proxy for risk-free rate of return.

- **Commercial Paper**

Commercial paper is an unsecured promissory note sold by large organizations typically for the purpose of financing account receivables and inventories, and to pay for short-term liabilities. In the US, the minimum size is usually set at USD100,000. Similar to T-bills, commercial papers are issued at a discount, with the face value redeemed at maturity. The maturity of commercial paper is between 1 and 270 days (9 months). Companies that issue commercial papers usually have secured lines of credit from large banks to ensure that cash are available to pay off the papers, reducing the risk taken on by their holders.

- **Certificates of Deposit (CDs)**

Certificates of deposit are securities issued by commercial banks to raise cash for loans and other purposes. Maturities usually range from 6 months to 5 years. Unlike Treasury bills, CDs are sold at face value and accumulate interest at a fixed rate with the principal (face value) and interest paid at maturity. Negotiable CDs have face values of USD100,000 or more and can be traded in secondary markets.

- **Bankers' Acceptances (BAs)**

Bankers' acceptances are short-term credit instrument issued by non-financial firms and guaranteed by a bank, typically used by importers and exporters. This instrument helps facilitate international trade by allowing a customer to pay for products with the acceptance. The acceptance may either be held until maturity or cashed in at a discount. Since a bankers' acceptance is a two-party obligation (the customer and the bank), the risk is low. BAs usually have maturities of 180 days and are redeemable by any holder.

1.3.2 Equities

Learning Objective 1.3.2(a) - *Know* the meaning and types of equities.

Learning Objective 1.3.2(b) – *Understand* the differences between common stock and preferred stock.

Equities represent ownership claims in a corporation that belong to the shareholders of the firm. In accounting, equity capital is the owners' interest on the assets of the firm after deducting all its liabilities. As an ongoing representation of ownership in a corporation, equities do not have a maturity date but continue to exist and hold value as long as the firm exists. There are two types of equities: Common Equities (or Common Stocks) and Preferred Equities (or Preferred Stocks).

- **Common Stocks**

Common stocks are the most prevalent security traded in capital markets. Among the various securities issued by a company such as bonds and preferred stocks, common stock has the last or lowest claim on profits and liquidation value. Hence common stockholders are often referred to as the "residual owners" of the firm. The implication is that the stock value is based on the value of a corporation that is left over after senior obligations are met. Senior obligations can include debt repayments, taxes due, preferred dividends, etc. The concept of residual owner can be best explained in a liquidation situation. When a company is liquidated, its assets are sold and the proceeds are used to pay the liabilities in the following order: the company's debts, followed by preferred shares and lastly, common shares. The common shareholders may get full amount of the capital contributed or a proportion of their contribution, depending on how much is left after distributions to the debt holders and preferred stockholders.

- **Preferred Stocks**

Preferred stock is also an equity investment in a corporation with some important differences from common stock. Preferred stockholders are guaranteed dividend payments whereas common stockholders have no such guarantee. Although some companies pay regular dividends to common stockholders, there is no guarantee that they will continue to do so in the future. Essentially, preferred stockholders must be paid dividends before common stockholders are paid any dividends. In addition to the higher priority to dividend payments, preferred stock holders also have a senior claim to proceeds acquired through liquidation compared to common stockholders. However, preferred stockholders cannot force a firm into bankruptcy in case of dividend default; and usually do not have voting rights.

- **Comparison between Common and Preferred Stocks**

Comparison between common stocks and preferred stocks may be made along the following aspects.

Claims on assets. Common stocks have the lowest claim on companies' assets compared to other liabilities. The will get whatever is left after debts and preferred stocks have been paid. Because of this ranking in claims, common stock holders are often referred to as 'residual owners' of the firm. In a sense the common stock holders may be termed as the 'true owners' of the firm because they bear the risk of losing all their capital contributions, whereas other securities holders enjoy some form of protection.

Voting rights. Common stocks carry voting rights whereas preferred stocks usually do not carry voting rights. Common stock holders attend general meetings and have rights to vote on various issues concerning the governance and management of the company. Appointment of directors, key company decisions such as mergers and acquisitions, dividend distribution and capital changes typically require common shareholders' approval in a general meeting. If the shareholders are unhappy with the firm's performance, they can collect proxies from other shareholders and change the board of the company. In this sense, the common stock holders are said to have controlling rights on the company.

Pre-emptive rights. Common shareholders have a right to subscribe to new share issues of the company to maintain their proportionate ownership. If a company decides to issue new common stocks to raise new capital, the new shares must initially be offered to the existing common stock holders. If the shareholders choose not to exercise their rights, then the shares may be offered to the public. Preferred shareholders, however, are not entitled to any pre-emptive rights.

Dividends. Dividend for preferred stocks are pre-determined and fixed, whereas dividends for common stocks are subject to management's discretion. Common stock's dividend cannot be distributed unless the preferred dividends have been fully paid. Usually the amount of preferred dividend is higher than that for common stocks. If a preferred dividend is missed in any period, the company has to pay the arrears prior to distributing any dividend for common stocks.

Price Volatility. Due to the certainty in dividend payment, market price of preferred stocks does not fluctuate as much as common stock. Since the returns are fixed, the value of preferred stocks is also more or less fixed. On the other hand, prices of common stocks are subject to high volatility, much of which is due to fluctuations in revenues and the changing market perception about share value.

1.3.3 Bonds

Learning Objective 1.3.3 - *Know* the meaning and characteristics of bonds.

Unlike stocks which represent firm's ownership, bonds are long-term securities representing firm's debt. A company or a government may make long-term borrowing from the banking system or from individual investors by issuing debt securities. These debt securities are called bonds. Investors, that is, debt holders, pay cash in the beginning when they purchase the bond. They are entitled to two types of payments: first, a stream of fixed interest payments (or coupon payments), usually paid every six months; and second, the payment of the face value of the bond at the maturity date. Interest is paid to the bondholder over the life of the bond. Interest is usually expressed as a percentage over the face value of the bond. A bond is usually issued at par value, therefore the principal is usually equal to the amount borrowed and must be repaid in conformity to bond agreement. When a firm fails to make payments to the bondholder (interest and/or principal), the firm is said to be in default and bondholders may take legal action on the firm. Bonds are long-term securities usually with maturities of 10 years or more. Bonds are also called 'fixed-income securities' because they pay a fixed stream of income (interest) to bondholders over the life the bond.

1.3.4 Sukuk

Learning Objective 1.3.4 - *Understand* the various types and characteristics of sukuk.

For all intents and purposes, sukuk are considered as Islamic alternative to the conventional bonds. Sukuk are shariah-compliant debt securities. Sukuk have become an increasingly popular source of financing, particularly in Muslim countries. The increased popularity is due to the fact that it is shariah-compliant and therefore permissible in Islam.

There are some fundamental differences between the conventional bonds and sukuk. First, bonds are debt instruments that have a fixed interest payment on periodic basis and a full redemption of the face value at its maturity. Sukuk, on the other hand do not have the promised payment. Instead, the issuer agrees to pay to investors a payment that is linked to the cash flows generated by the underlying assets for which the money is raised. Sukuk investors are proportionate owners of the underlying asset. In short, bonds are a proof of debt, whereas sukuk are a proof of ownership.

Another feature that distinguishes bonds from sukuk is that bond holders are guaranteed the interest payment regardless of the gains and losses of the issuer, whereas the return on sukuk is based on the value of the underlying asset and the terms of the contract between the issuer and the investor, which is more or less centers around a profit and loss sharing arrangement.

Sukuk have been structured in various ways. Some of the basic structures are as follows:

1 *Ijarah Sukuk.* Ijarah sukuk are the most prominent form of sukuk. Ijarah-based sukuk are primarily used in project financing. It is generally structured based on sales and leaseback approach.

2 *Murabahah Sukuk***.** Murabahah Sukuk entails the sale and purchase of an asset using the cost plus (mark-up) method. It is widely used for short-term financing in trade finance.

3 *Mudaraba Sukuk***.** Mudaraba sukuk are a form of investment sukuk that entitle their holders to a share in specific projects against which the sukuk has been issued.

4 *Musharaka Sukuk***.** Musharaka sukuk are similar to mudaraba sukuk, except the party issuing sukuk forms a committee comprising holders of the sukuk.

1.3.5 Derivative Securities

Learning Objective 1.3.5(a) - *Understand* the various types and characteristics of derivative securities.

Learning Objective 1.3.5(b) - *Understand* the meaning and characteristics of Options and Futures.

Derivatives are securities that derive their values from other securities, called the underlying securities (or assets). Options and Futures are the two most common derivatives. It is important to note that derivatives do not grant ownership of the underlying asset until either an option is exercised or a futures matures.

- **Options**

A stock option represents a right (not the obligation) to buy or sell a specified number of shares within a specified time period at a specified price. Suppose a stock is currently selling for SR50 per share and an investor pays SR5 for an option to buy (known as call option) one share of the stock for SR60 in one year. Let's assume that when the option nears its maturity the share price is SR70. If the investor decides to exercise his/her option, he/she will pay only SR60 for each share and make a gross profit of SR10, and after deducting SR5 for the cost of the option, the net profit is SR5. If the stock price were to be SR40 at the option's maturity, the investor would simply not exercise the option. This means he/she would lose only the SR5, the price paid for the option. The option that gives the right to buy is called at 'call option', while the option that gives the right to sell is called a 'put option'.

Sometimes options are hidden. A warranty on consumer durables is a kind of (put) option that gives a purchaser the option to return the goods (i.e. sell it back to the company) within a certain time limit and get his money back should the product loses its appeal for whatever reason. Another example of a hidden put option is one used by car dealers. Sometimes, to boost sales, a car vendor may sell a car with a buy-back guarantee at a certain price within a certain time. Buyers should beware;

this guarantee does not come free. The price of the car is a bundled price: price of the car plus the value of the put option.

- **Futures**

A 'futures' (or 'futures contract') and a 'forward contract' is an agreement between two parties to buy or sell a certain goods that is to be delivered at a certain future date, at a price agreed upon today. Unlike options that give the holder a right but not an obligation to buy or sell, a futures contract is an obligation to buy or sell the underlying asset or security. A futures contract is a standardized type of forward contract traded on an organized futures market. It is standardized in terms of the quality and quantity of the asset, the contract period and other related terms. Futures are often traded on commodities such as palm oil, wheat, coffee, and gold. Futures also exist for financial assets such as stocks, bonds, interest rates and foreign currency. Futures contracts are traded on formal exchanges. There is a clearing house that acts as a buyer to the seller and seller to the buyer of a futures contract

One needs to differentiate futures contracts from forward contracts. Although both futures and forward contracts are agreements to buy and sell an asset or a security in the future for a stated price, forward contracts are a non-standardized contracts. In a forward contract, the terms of the contract are directly negotiated and agreed between a buyer and seller of the assets. A forward contract is usually meant for delivery of goods at maturity, and generally used for hedging purposes, but a futures contract is usually traded as a speculative instrument and open positions are usually closed before maturity.

The benefits of futures (or forward contracts) may be shown by the following example. Suppose that Mr. A will need wheat in the future but at this time wheat has not been harvested yet. By buying a futures now, Mr. A has secured the price he will pay for the wheat. In this way, Mr. A eliminates the risk of the unavailability of the wheat and its price increase. Of course if wheat prices fall, he is obligated to pay the higher price as agreed in the futures contract. Futures contracts have the benefit of allowing the producers and buyers of commodities to concentrate on their respective businesses without having to worry about availability of goods and future prices fluctuations.

1.4 The Investment Process

1.4.1 Elements Of The Investment Process

Learning Objective 1.4.1 - *Know* the various steps that need to be taken by an investor in order to make systematic investment decisions.

The investment process consists of a series of logical steps taken by an investor in making investment decisions.

Step 1: Setting the investment policy.

This involves determining investment objectives, the amount of investment and broad asset categories. Possible investment objectives include income, growth or income and growth. The amount of investment would depend on the resources available at the investor's disposal. Determining asset categories include defining a general outline of the investment portfolio, which means deciding on the type of securities for investment. The investor must also determine the risk and return expected from his investment. In addition, an investor must also decide whether to go for an active strategy or a passive strategy. An active strategy is one that attempts to profit from identifying mispriced securities, whereas a passive strategy seeks to profit solely from bearing investment risk.

Step 2: Security Analysis

This step flows from the earlier step by determining the criteria, defining investment universe (the list of stocks or companies that are likely to be invested in) and performing security analysis and valuation. Security analysis is performing a fundamental analysis on a company to determine its strengths and weaknesses for investment purposes. Valuation is a process of evaluating a security to assess its intrinsic or fundamental value.

Step 3: Portfolio Construction

Portfolio construction or asset allocation may be considered as the most important investment step. This step involves deciding the weights or percentages of funds to be assigned to each asset category and to each security that have been identified, followed by the actual buying and selling of securities. Usually, this step would be completed over a period of time. The investor or portfolio manager must manage two aspects of portfolio construction: timing and selection decisions. Timing decision (or tactical asset allocation) involves the identification of periods when stocks are undervalued or overvalued relative to other assets. This may be done with the aid of some form of technical analysis. Selection decision is selecting securities in order to reduce the risk of the portfolio and not trying to find mispriced securities.

Rational investors are assumed to be risk-averse. Investment risk is defined as the uncertainty about the future value of a portfolio when it is expected to be liquidated. Different asset classes have different amount of investment risk, usually the longer the investment horizon, the greater the investment risk. It is a well-established fact that risk can be reduced by diversification across securities in an asset class and across asset classes. Investment risk can be managed by changing the asset allocation of the portfolio. It is therefore important for the portfolio manager to select stocks within a certain class to obtain the broadest possible diversification.

Step 4: Portfolio Revision

The portfolio needs to be actively managed and revised on a regular basis to take opportunities of new information and the changing environment.

Step 5: Performance Evaluation

From time to time, usually on a periodic basis, the performance of the portfolio needs to be evaluated based on its stated objectives and also in relation to certain appropriate benchmarks. One of the outcomes of the performance analysis is determining the gap between expected and realized returns and finding ways to improve the performance.

1.4.2 Concepts Of Investment Return

Learning Objective 1.4.2 - *Know* the definition of various return concepts:
- required return
- expected return
- realized return

Returns are rewards for undertaking an investment. Risk-averse investors seek to maximize returns per unit of risk on their investments and do so by comparing alternative investments based on the risk criteria. There are different concepts of return related to investments:

- **Required returns**

These are minimum returns investors require given the risk of the investment; the higher the risk, the higher would the required returns be. Required return consists of three components as follows:
- real rate of return
- inflation premium, and
- risk premium.

However, under most situations, the real rate of return and the inflation premium are quite small and stable over time and they exist in all investments in equal magnitude. This leaves us with the "risk premium" as the most important component determining the required rate of return on investments.

- **Expected returns**

These are the returns estimated from the expected cash flows to be generated by the investment. A general rule for investment is that the expected returns must be greater than the required returns; otherwise there is no incentive for the investor to make the investment. The following table illustrates the different economic scenarios and the expected rate of returns of assets:

Table 1.3: Different economic scenario and expected rate of returns of assets.

Economic condition	Probability (%)	Rate of return for asset A (%)	Rate of return for asset B (%)
Strong	20	30	15
Average	50	15	10
Poor	30	-10	5

Expected return = ∑ (probability) x (possible return)
For Asset A, expected return = (0.2x30%)+(0.5x15%)+(0.3x-10%) = 10.5%
For Asset B, expected return = (0.2x15%)+(0.5x10%)+(0.3x5%) = 9.5%

Based on expected returns alone, we may be inclined to invest in asset A because it provides the higher return. However, taking the range of the price movements as a rough measure of risk, we see that asset A has a higher risk than asset B.

Therefore, considering both expected return and risk, neither A nor B dominates the other. Investors who prefer higher returns may invest in asset A if they are willing to bear the higher risk. What is your choice?

- **Realized Returns**

These are returns actually realized by the investor. Realized returns are measured when the investments are liquidated, that is, when the assets are sold. Realized returns may be measured in terms of dollar returns and/or percentage returns. Realized returns are measured against expected returns when measuring investment performance.

1.4.3 Return Calculation

Learning Objective 1.4.3 – *Understand* the definition of various return concepts and how to calculate them.

When an investor makes an investment, he/she expects to receive a certain amount of return or profit. Investment returns are used to measure the performance of an investment. However there are different types of return that can be calculated. We explain below different types of investment returns that are commonly used in evaluating investments.

(i) Dollar and percentage return
(ii) Holding period return
(iii) Annualized return
(iv) Average return

(i) Dollar and percentage Return

Dollar (or currency) returns are the return on an investment measured in currency term. In this context the term ‘dollar’ is used in generic sense to mean ‘currency’ in order to be consistent with most financial literature.

The returns on an investment usually come in two forms:

- The cash received during the investment period (such as interest or dividends), and
- The change in value of the asset (the capital gain or loss).

The total dollar (or currency) return is the sum of the cash received and the capital gain or loss on the investment.

Example

On 1st March 2011 Ahmad purchased 100 shares of Company ABC at SR10 per share. Then in the month of June 2011 he received a cash dividend SR1 per share. On 31st August 2011 Ahmad sold the shares at SR12 per share. What is the dollar (or currency) return for Ahmad?

- The cash received from dividend distribution SR100
- The change in value of the asset SR200
- Total dollar (or currency) return on investment SR300

The dollar returns may be converted into percentage returns to facilitate comparison between investments of different scale. Percentage return provides a relative measure of returns and tell us how much we receive for every dollar (or Riyal) invested. For this example, the percentage returns are as follows:

- The cash received from dividend distribution SR100 or 10%
- The change in value of the asset SR200 or 20%
- Total dollar and percentage returns SR300 or 30%

(ii) Holding Period Return (HPR)

If an investment is held for a specific period and then it is liquidated, the period is called an investment holding period, and the return over this period is called 'holding period return' (HPR). The total HPR of a share of stock consists of two components:

1. Dividend yield, and
2. Capital gain (that is, the percentage change in asset value)

These components are calculated as follows:

Dividend yield = $\frac{Dividend}{Beginning\ price}$

Capital gain = $\frac{Ending\ price - Beginning\ price}{Beginning\ price}$

The sum of the above two components are called HPR. Alternatively, HPR can be calculated as follows:

HPR = $\frac{(Dividend) + (Beginning\ price - Ending\ price)}{Beginning\ price}$

Note that 'capital gain' can be a negative number if the ending price (selling price) is lower than the beginning price (buying price), in which case it becomes a 'capital loss'.

Example

On January 1, 2011 Ahmad purchased 100 shares of Company ABC at SR10 per share. Then at the end of June, 2011 he received a cash dividend of SR1 per share. At the end of June 2011, right after receiving dividend, Ahmad sold the shares at SR12 per share. What is the HPR for Ahmad?

- Cash received from dividend distribution SR100
- Change in value of the asset SR200
- Total dollar returns: SR300

Dividend yield = SR100/1000 = 10%
Capital gain = (SR1200 – SR1000)/SR1000 = 20%
HPR = 10% + 20% = 30%, or
HPR = [(SR100) + (SR1200 – SR1000)] / SR1000 = 30%

(iii) Annualized Return

Usually returns on investment are estimated and converted to an annual basis. The reason for calculating an annualized return is for standardization purposes and to facilitate comparison between investments or benchmarks in performance analysis. If the holding period is different from one year, we may annualize the HPR using the following formula:

Annualized HPR = $[(1+HPR)^{(1/n)} -1]$, where n is the holding period expressed in years.

In the above example, HPR of 30% is over a period of 6 months, so *n= 0.5*.

Therefore the annualize HPR is calculated as follows:

Annualized HPR = $[(1+.30)^{(1/0.5)} -1]$ = 0 .69, or 69%

(iv) Average Return

Average returns may be calculated across several assets/investments (cross-sectionally) and/or over several time periods (time-series). Let us say we have investments in equal proportion in three assets: A, B and C; and their respective annual returns are: 8%, 15% and 20%. The average return for this portfolio (cross-sectionally) is calculated as follows:

Average return = (Return A + Return B + Return C)/3
= (8% + 15% + 20%)/3
= 14.33%

For time-series, the average return may be calculated using arithmetic average or geometric average. Let us calculate average return for our investment in asset A that yields the following returns in each of the past 4 years:

Year	Return
1	5%
2	10%
3	-3%
4	15%

Method 1: Arithmetic Average

Average return = (5% + 10% + (-3%) + 15%)/4
= 27/4
= 6.75%

Method 2: Geometric Average

Average return = $[(1+5\%)x(1+10\%)x(1+(-3\%))x(1+15\%)]^{(1/4)} - 1$
$= (1.2884)^{(.25)} – 1$
= 6.54%

Which is a better measure? As can be seen above, arithmetic average tends to overestimate the average return compared to the geometric average. Conceptually, geometric average is the “correct” measure because it is based on the compounded return, which is the true measure of investment returns over a multiple period. However for short period of time, arithmetic average may be used as an approximation.

Review Questions

1. What is investment? Describe various types of investments and their associated expected returns and risks.

2. What is the significant difference between investment and speculation?

3. Describe the difference in characteristics and investment behaviors between individual investors and institutional investors.

4. What is primary securities market and how it is important toward a country's economic development? What is secondary securities market and what are its roles?

5. Describe the roles of the stock exchanges in the economy.

6. What is money market? Describe the various types of money market securities.

7. What are equities? Describe the various types of equities and the significant differences between each type of equity.

8. Describe bonds and its characteristics.

9. What are the various types and characteristics of derivative securities? Describe the key characteristics of options and futures.

10. What are the key steps required to be taken by an investor in making systematic investment decision?

11. Describe the various returns concepts such as required returns, expected returns and realized returns. How do you calculate these returns?

Sample Multiple Choice Questions

1. Which of the following is true regarding the primary and secondary securities markets?

   A. Primary and secondary markets are independent of each other.
   B. Without a primary market there will be no secondary market.
   C. Without a secondary market, there will be no primary market.
   D. Without a primary market, it would be difficult to transfer shares in the secondary market.

2. Which of the following are considered as roles of a stock exchange?

   I. It facilitates raising new capital for companies.
   II. It helps to raise money for government projects.
   III. It promotes acquisitions and takeovers of companies.
   IV. Helps investors to diversify their investments.

   A. I and II only
   B. I, II and III only

C. I, II and IV only
D. I, II, III and IV

3. ________ represent ownership claims in a corporation that carries with them ______ to dividends, voting, liquidation, and subscription of subsequent new shares.

A. Common stocks; rights
B. Preferred stocks; rights
C. Bonds; rights
D. Bonds; liabilities

4. Which of the following are features of a common stock?

I. It has the highest claim on company's asset.
II. It has voting rights.
III. Its dividend may be greater than that for a preferred stock.
IV. It has preemptive rights.

A. I, II and III only
B. I, II and IV only
C. II, III and IV only
D. I, II, III and IV.

5. On 1st Feb 2010, Mr. AB bought 100 shares of SMB Company at SR50 per share. In March 2010, he received dividend of SR1.00 per share. On 31 July 2010, he sold his shares for SR54 per share. What is his annualized holding period return?

A. 18.57%
B. 19.01%
C. 20.00%
D. 21.00%

Buying And Selling Of Securities 2

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

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Introduction

This chapter provides the basic tools to those involved in securities trading. The first section discusses various types of orders, their meanings and uses. Numerical examples are provided where appropriate to ensure better understanding. It is absolutely necessary for a broker-dealer to understand the type of orders to perform their jobs efficiently. The next section talks about a typical stock trading process where the focus is to explain what goes on to the orders once they are entered into the system for execution. Understanding how the matching between buyer and seller orders take place would give traders greater confidence in conducting their tasks. This is followed by an explanation of stock quotation that is usually found on financial pages of daily newspapers. This is important not only to traders but to investors as well.

Stock quotation provides important information on the market situation for each stock, which is important for investment decisions. The next section discusses short-selling. Short-selling is somewhat controversial, but it has its own merits. The following section discusses major concepts regarding margin trading. Margin trading is considered very important as this is an attractive form of leverage trading that amplifies returns (and losses) and should be attractive for aggressive traders. The chapter ends with a discussion on the various types of investment stocks; understanding them would elevate the confidence of the broker-dealer practitioners.

2.1 Types Of Orders

2.1.1 Market Order

Learning Objective 2.1.1- *Understand* market order and its usage.

A market order is an order to buy or sell a specific number of shares at the current market price. This is the most common type of order placed by investors with a broker. Usually, no price is specified by the trader because it is understood that a market order is to be filled at the best available market price.

Example

Let us say you want to buy some shares of Homfi that is currently trading at SR28.50 per share. You place a market order to your broker to buy 100 shares of Homfi. Now your broker will purchase 100 shares of Homfi stock at the best available market price when your order is entered into the system. Your order may be filled at, say SR28.80.

The main benefit of a market order is that the order is guaranteed to be filled. However, it is not guaranteed to be filled at a specific price. In a fast moving market, prices change so rapidly and your order may be filled not exactly at your desired price but at the next best available price.

2.1.2 Stop Order

Learning Objective 2.1.2- *Understand* stop order and its usage.

A stop order is an order to buy or sell stock when its price touches a certain point. It allows the investor to trade at or close to the desired price. Once the stop price is touched, the order becomes a market order. Stop buy (sell) orders are orders to buy (sell) at a certain higher (lower) prices than the current market price. The word 'stop' means to stop buying at a higher price than the one stipulated or to 'stop the loss' by selling at the beginning of a stock's declining stage.

2.1.2.1 Buy Stop Order

There is always a possibility that when you buy a stock, its price starts declining. You want to buy a stock that you believe the price will be trending upwards after showing an initial increase. For this purpose you would place a buy stop order. A buy stop order is an order to buy a stock at a price *above* the current market price. Once a stock's price trades at or above the price you have specified, it becomes a market order to buy.

Example

You have been studying SABC shares. Its current market price is SR22. You believe if the price starts to show an uptrend it will go much higher. You therefore place a buy stop order at SR24 on SABC. If SABC then proceeds to trade up to SR24, your order would become a market order to buy and your order would be filled at the next best available price.

The main advantage of a buy stop order is that you will only buy the stock if the price begins to show an upward trend, which is exactly following your trading strategy. Once your stop price is reached, your order becomes a market order to buy, and it may be filled at a price higher or lower than your stop price. The disadvantage is that once the price reaches the stop price, it may change direction and you have just bought the share at its high price.

2.1.2.2 Sell Stop Order

You own some shares that you believe may be going on a downward trend. You can limit your loss by placing a sell stop order at a price lower than the current market price but before it goes further down. For this reason, a sell stop order is also commonly called a "stop-loss order". If the price reaches your stop price order, it becomes a market order to sell, and your order will be executed.

Example

You own 100 shares of Dewania and based on your information you believe that the price may be going on a downward trend. Assume that Dewania is currently trading at SR48 per share, you then place a sell stop order at SR45. Suppose Dewania then declines to SR45, your order then becomes a market order to sell and it will be filled at the next best available price.

The advantage of a sell stop order is that you limit the amount of losses by selling it at the earlier stage of a downward trend. The disadvantage is that the price may change direction and goes upwards once it reaches your stop price, in which case you are selling at its low price.

2.1.3 Limit Order

Learning Objective 2.1.3 - *Understand* limit order and its usage.

Limit orders are orders to buy or sell stocks at a specified price, or better. Limit prices are higher than market price for sell limit orders, while they are lower than market price for buy limit orders. Limit orders will remain valid until it is filled or until end of the day or until it is cancelled.

Buy Limit Order

Let's say you want to buy a certain stock at a price lower than the prevailing market price. So you place a buy limit order, stating a price which is lower than the market price. The limit price is the maximum you want to pay for the stock. If the stock's price goes down to your limit price your order will be filled at that price or lower.

Example

Suppose you want to own 100 shares of SALAM, and it is currently trading at SR35 per share. You would like to buy the shares if the stock's price drops to SR32 or less. You place a buy limit order at SR32 for 100 shares of SALAM. Now suppose the price goes down to SR32. Your shares would then be bought at that price or lower.

The main advantage of a buy limit order is that you are bargaining with the market, as you state the maximum price you are willing to pay. This is a great strategy for stocks that behave erratically and tend to have sharp movements in their prices. The disadvantage of this order is that you may not get to buy the shares if the price never reaches your limit price, or upon reaching the limit price it changes direction before your order is filled.

Sell Limit Order

Let's say you want to sell a stock at a price higher than the prevailing market price in order to have a good sale. So you place a sell limit order, stating a limit price which is higher than the market price. The limit price is the minimum you want to sell the stock for. If the stock's price goes up to your limit price your, the order will be filled at that price or higher.

Example:

Suppose you would like to sell 100 shares of SABC that is currently trading at SR48 per share. You would like to sell the shares and take your profits if the stock's price goes up to SR52. You place a sell limit order at SR52 on 100 SABC shares. If the price indeed goes up to SR52, your order will be executed at SR52 or higher.

The main advantage of a sell limit order is that you are bargaining with the market as you state the minimum price for your shares. Similar to the buy limit order, this strategy is suitable for stocks that behave erratically and tend to have sharp movements in its price. You will be happy if you can sell at that price or higher. But if the market price does not touch the limit price, you would be willing to continue holding the stock. Of course the disadvantage of this order is that your shares may not be sold if the price never reaches your limit price, or upon reaching the limit price it changes direction before it can be sold.

2.1.4 Stop Limit Order

Learning Objective 2.1.4 - *Understand* stop limit order and its usage.

This is a composite order that combines a stop order with a limit order. When you make a stop limit order, you have to specify a stop price and a limit price. When price touches the stop price, your order becomes a limit order and will be executed at the limit price or better.

Buy Stop Limit Order

You want to buy a certain stock only if it shows sign of an upward movement, but you don't want to pay more than a certain amount. So you place a buy stop limit order.

Example

Suppose you are planning to buy 100 shares of ACIH if it shows an upward momentum. The stock is currently trading at SR35, and you feel it is going on an upward trend if it moves to SR38, but you don't to pay more than SR40. So you place a buy stop limit order for SR38 on ACIH, with a limit at SR40. If ACIH then trades up to your stop price of SR38, your order would become a buy limit order and will be filled as long as the stock trades below your limit price of SR40.

The main benefit of a buy stop limit order is that you have more control on the price of your order because you set the maximum price. The disadvantage of this order is that your order will not be filled if the stock price does not reach your stop price, or if the price hits your stop price and then trades above your limit price.

Sell Stop Limit Order

You want to sell a certain stock only if it shows sign of a downward movement, but you don't want to sell at a price lower than a certain level. So you place a sell stop limit order.

Example

You want to sell 100 shares of ZAMBA if it shows signs of going downward, but you don't want to sell if the price is too low. Assume ZAMBA is currently trading at SR43 per share. You place a Sell Stop Limit Order for SR40 on ZAMBA, with a limit at SR38. Suppose ZAMBA then trades down to SR40. At that time, your order becomes a sell limit order and will be filled at the next best available price as long as the stock trades above your limit price of SR38.

The main benefit of a sell stop limit order is that you have more control on the price of your order because you set the minimum price you want to sell at. The disadvantage of this order is that your order will not be filled if the stock price does not reach your stop price, or if the price hits your stop price and then trades below your limit price.

2.1.5 Time-In-Force Designation For Orders

Learning Objective 2.1.5(a) - *Understand* the meaning of time-in-force options in making a stock order.

Learning Objective 2.1.5(b) - *Understand* the meaning of the following commonly used time-in-force designations:

- Fill-or-kill
- All or nothing and
- Good till cancelled

Time-in-force designations are additional instructions used by active traders to state the time conditions of an order, especially for a limit order. The time-in-force options specify how long the order should stay active before it is executed or expires. The time-in-force options allow an investor to be more specific in terms of the timing of the trade. If nothing is mentioned on the timing of the order, the order will remain active for the day. The following are example of the more commonly used time-in-force options.

- ***Fill-or-Kill (FOK)***

Fill-or-kill order designation is an instruction to the broker to either completely fills the order immediately or otherwise not at all. In other words there will be no partial fulfillment of the order. This type of order may be used for large orders by active traders who need to know the outcome of the order so that he/she may proceed with a follow-up strategy. Without FOK designation, the order may be filled partially, a little at a time and therefore may take a while before it is completely filled.

Other variations include "immediate or cancel (IOC)," which means to fill all or part of the order immediately and cancel any part that cannot be filled, and 'good-'til-canceled (GTC)' which keeps an order valid as long as it takes, even over a period of several days, until the order is entirely filled at the specified price or canceled by the trader.

- ***All-or-Nothing (AON)***

All or nothing (AON) designation means the order must be entirely filled or not at all. The order may take a while to be completely filled, may be at different prices. If the order is not completely filled at the end of the day, the order will be cancelled. The reason for this option is that the trader does not want a partial fulfilment; either the whole block of shares is cleared or not at all. The difference between AON and FOK order is that AON's execution time is until end-of-day while FOK's execution time is immediate, at the time the order is made.

- ***Good-'til-Canceled (GTC)***

A good-till-cancelled (GTC) order simply means what it says. The order remains valid until it is completely filled, or cancelled by the client. The reason why this option is used is that the order may take a few days to reach the limit price to fill the order, and without the GTC designation the order will expire at the end of each day, if it is not completely done. This type of order is traditionally used for limit orders in which the limit prices are substantially far from the current market price. The brokers normally have their own expiry limit for GTC orders even if they are not cancelled by the trader.

2.2 Stock Trading

2.2.1 Trading Execution

Learning Objective 2.2.1 – *Understand* how orders are executed and how buy and sell orders are matched.

In the stock market, to 'trade' means to buy and sell stocks. A trader (or an investor) just needs to call his broker and place an order to buy or sell a certain stock at a certain price. Then he/she will be informed by the broker if the trade is done or not done. That is it. But for a broker, it would be important for him to have a basic understanding on how the process works.

The execution of an order to purchase and sell securities is generally performed by a trading system which is commonly known as an Order Management System (OMS) or an Automated Trading System (ATS) which will execute orders in an efficient and cost-effective manner. The trading systems would normally have various features that enable brokers and traders to track the progress of each order throughout the system.

In a continuous trading system, orders to buy and to sell are entered into the system as they come and the matching is done continuously. At any time there are two prices on the board/screen: the bid price and the ask price. The bid price is the buyer price. This is the price buyers are standing ready to buy any sell order that matches with the bid price. If a trader wants to sell immediately, this is the price they have to accept, and this is the price at which a market sell order will be filled. The ask price is the seller price. This is the price sellers are standing ready to sell to any buy order that matches with the ask price. If a trader wants to buy immediately, this is the price they have to pay, and this is the price at which a market buy order will be filled.

Usually the bid price is lower than the ask price. This is necessarily so because if they were to be equal, a matching would have occurred and the quote would no longer be on the screen. The difference between the bid and ask price is referred to as the 'bid-ask spread'. This spread carries significant meaning that reflects the liquidity of the stock. Stocks that are actively traded (high liquidity) will normally have narrow spreads while those that are infrequently traded (lack of liquidity) will show a wider spread.

In the local market, Tadawul uses a continuous processing system for the trading, clearing and settlement of shares. It provides a continuous, order driven market, with up to the minute price, volume and company information. Transfer of ownership and payment occur immediately after the trade is consumed. All trades are settled on the day of execution.

2.2.2 Order Matching Principle

Learning Objective 2.2.2 – *Understand* the order matching principle called *price-time priority* and its effects on the way orders are executed.

One of the features which are used in most trading systems relate to the use of matching principle called *Price-Time Priority.*

The principle of price-time priority refers to both orders and quotes. When an order is entered into the trading system, it would be matched according to price, and then time priority. In other words, the order that was entered earliest at a given price limit has the priority to be filled.

When a new order (or quote) is entered, the trading system first checks the limits of all orders in the system. Orders may not necessarily be executed at a single price, but may generate several partial transactions at different prices. When a large order executes against the total available quantity at a given price level, the next best price level becomes best. This process continues as long as the incoming order remains executable. If not executed upon entry, an order is held in the system.

Also, it is possible for a single order to generate multiple executions at different points in time. For example, an order may generate a partial execution upon entry, while the remaining open order remains in the system. The open portion may get executed a minute later, an hour later, or even a day later, depending on the type of order.

Market orders, generally, have the highest priority for matching. In the case of limit orders, orders with the best possible prices (highest price limit for buy orders, lowest price limit for sell orders) always take precedence in the matching process over other orders with worse prices. Again, if the limit orders have the same price limit, the criterion used for establishing matching priority is the order time.

2.2.3 Understanding Stock Quotations

Learning Objective 2.2.3 – *Understand* elements of stock quotation and be able to explain the common terms and abbreviations used in stock quotation.

Stock quotation contains valuable information on the stock that helps investors in their investment decisions. Stock quotations are usually available in daily newspapers, or on online trading screens. Newspapers usually report the information pertaining to the previous trading day. Although the format may change from one market to another, but in general they report more or less similar type of information. The following table shows a typical stock quotation that may be found in financial pages of a daily newspaper.

Table 2.1: A typical stock quotation

1	2	3	4	5	6	7	8	9	10	11	12
52W high	52W low	Stock Name	Ticker	Div	Div. Yield %	P/E	Vol (000s)	Day High	Day Low	Close	Net Chang e
90.78	39.5	Altaiba	ATB			52.5	766	84.00	77.02	83.00	-3.8
23.26	7.1	RedSea	RDS				32	12.18	11.80	12.18	0.24
154.5	110.3	ArabGulf	ABG	4.60	3.16		34	145.5 0	143.6 8	145.4 8	0.06
62.62	33.26	Almanar	AMN			20.9	3	48.98	48.58	48.98	-0.02
16.88	**3.5**	**BenIssa**	**BIS**				**6206**	**9.00**	**8.40**	**8.62**	**0.42**
77.26	37.62	Almaadin	AMD			26.5	1303	54.30	53.00	53.00	0.28
102.5	55.38	Alicafe	ACF	2.04	2.15	14.5	1282	95.98	95.08	95.08	0.48

Note: Stock names and quotations are hypothetical.

Columns 1 and 2: 52W High and 52W Low

These are the respective highest (maximum) and lowest (minimum) prices at which a stock has traded over the previous 52 weeks (one year) from the current date. This information provides the range of past price movements and may be used as a rough measure of the riskiness of the stock. A wide range between the high and low prices would indicate high volatility and therefore high risk, while a small range indicates a low risk stock.

Column 3: Stock Name

This column lists the abbreviated name of the company or the stock. Sometime a symbol is placed at the end of the stock name to indicate the type of stock, such as “pf” for preferred stock. If there are no special symbols or letters following the name, it is the common stock of the company.

Column 4: Ticker Symbol

This is the unique alphabetical name which identifies the stock. Financial TV channels would normally use the ticker symbol when they broadcast a ticker tape running across the screen, quoting the latest prices alongside this symbol. A seasoned trader usually knows the company from the ticker symbols; otherwise one can always refer to the exchange web pages for the information.

Column 5: Dividend per Share

This indicates the annual dividend payment per share stated in the relevant currency amount. If this space is blank, the company does not currently pay out dividends. For example, the above table indicates ArabGulf declared an annual dividend of SR4.60 in the preceding year.

Column 6: Dividend Yield

The dividend yield is calculated by dividing the annual dividends per share (Column 5) by the current (closing) price per share (Column 11). Some fundamental traders may find this information extremely useful because they regard dividends as an important factor in making their investments. For ArabGulf the dividend yield is 3.16% (SR4.6 annual dividend divided by the closing price of SR145.48).

Column 7: Price/Earnings Ratio

The price/earnings ratio (or the P/E ratio or simply PER) is calculated by dividing the current stock price by earnings per share from the last four quarters or last year. A blank space means that earning number was not available or last year’s earnings were negative. Mathematically, it is the multiple of market price over earnings. Some traders use the PER as a basis for their investment strategy, choosing only the low PER because these are “less expensive” or “cheaper” stocks.

Column 8: Trading Volume

Trading volume is measured as the total number of shares traded for the previous day, listed in thousands. To get the actual number of shares traded, we have to multiply the number by 1000. Trading volume indicates whether a stock was active or inactive. The table shows that Almanar’s trading volume is just 3,000 shares while BenIssa was quite heavily traded at 6.2 million shares for the day reported.

Columns 9 and 10: Day High and Low

These columns show the respective highest (maximum) and lowest (minimum) prices throughout the previous trading day. It’s a rough measure of the day’s volatility.

Column 11: Close

The close is the day's closing price or the last trading price recorded at the market close of the day. If the closing price is up or down more than 5% than the previous day's close, the entire listing for that stock is bold-faced, such as for BenIssa. When the trade opens for the following day the opening price may not be equal to the closing price due to the arrival of new information that may change the supply and demand for the shares.

Column 12: Net Change

The net change refers to the dollar (or the relevant currency) value change in the stock price from the previous day's closing price. When financial reports indicate that a particular stock is 'up for the day' it means an increase of the closing price compared to the previous day's close. For BenIssa, the net change is SR0.42; this means the previous day's close was SR8.20.

2.3 Short-Selling

2.3.1 What Is Short-Selling?

Learning Objective 2.3.1 - *Understand* the meaning and mechanics of short-selling.

Normally, a stock market investor will first buy the shares that he/she thinks will increase in value, and later sells the shares for a profit. When a trader buys and owns the stock, he/she is said to be in a 'long position'. Long position is taken when the investor believes that the stock will appreciate in value.

Short-selling is just the opposite. Short-selling is selling stocks that you don't own. A short-seller first borrows shares, normally from his/her broker, sells them in the market and later buys them back and returns the stock to the lender. Short selling is done when an investor believes that the price of the stock is going to fall. If the price goes down as expected, the investor can close his/her position by buying the stock back at a lower price and make a profit from the price difference. However, if the price rises, the short seller will have to buy back at a higher price to close his/her short position and suffers losses.

The borrowed shares may be from the broker's inventory or from another client of the broker or from another broker. The length of time one can be in a short position depends on the agreement with the broker, but the longer the time the more risk the short seller is exposed to. If the lender needs the stock, the short seller will be forced to close the position, maybe at a loss. Further, the short seller must pay the owner of the shares for any dividends or capital distribution such as rights issue, made during the borrowed period.

2.3.2 Why Short-Selling?

Learning Objective 2.3.2(a) - *Understand* the 'purpose' of short-selling.

Learning Objective 2.3.2(b) - *Understand* the differences between speculation and hedging in short-selling.

Generally, there are two main reasons why traders engage in short-selling: to speculate or to hedge.

- ### To speculate

A speculator is one who trades to make a profit from price movements. Short-sellers are speculating on a price drop. The speculation may be based on technical or fundamental analysis. If a trader strongly believes in the prediction that a stock will decline, he/she will engage in a short-selling activity to benefit from the situation. However, it needs to be cautioned that price movements are hard to predict. An experienced speculator may make more correct than wrong predictions, but the risks are always present. Some people perceive speculation as gambling, but technically speculation involves research and taking calculated risks, but gambling is a game of pure chances.

- ### To hedge

Majority of investors use short selling to hedge. Hedging means creating a protected position in securities trading. A trader who buys stocks is in a long position and exposes himself/herself to price swings. If the price drops he/she will suffer a loss. To protect against this possible loss, he/she can sell the stock short. If price drops he/she will lose on the long stock but will gain on the short stock. If the long and short positions are on the same stock with the same amount, the trader is completely hedged or 'immunized'.

Hedging strategy may also be implemented by maintaining a long position on a security or a portfolio and a short position on a derivative related to the underlying security or portfolio. For example, suppose a portfolio manager, facing a volatile market, holds a portfolio of stocks worth $200,000 (this is a long position). To protect the portfolio against a possible market decline, the portfolio manager takes a short position by selling a related stock-index futures with a value equal to the investment. Any decline in the value of portfolio will be offset by a gain on futures contract and vice versa.

In summary, there are two major differences between hedging and speculation. First, hedging is to eliminate risk, while speculation is to profit from risk, that is, price changes. Second, hedgers are risk averse and speculators are risk seekers; speculators deliberately assume risk, whereas hedgers seek to mitigate risk.

2.3.3 Short-Selling Example

Suppose that, after hours of painstaking research and analysis, an investor concludes that company XYZ in the New York stock exchange is going to suffer great losses. The stock is currently trading at $60, but the investor predicts it will trade much lower in the coming months. In order to capitalize on the decline, he/she decides to short sell 100 shares of XYZ stock. Let us consider two possible scenarios after two weeks and calculate his/her pay-offs: Scenario A: share price drops to $40, and Scenario B: share price increases to $80.

Scenario A: Share price drops to $40 per share.

Sold borrowed 100 shares of XYZ at $60	$6,000
Bought Back 100 shares of XYZ at $40	-$4,000
Profit	$2,000

Scenario B: Share price increases to $80 per share.

Sold borrowed 100 shares of XYZ at $60	$6,000
Bought Back 100 shares of XYZ at $80	-$8,000
Loss	-$2,000

The calculations clearly indicate that the short-seller would be making profits if his/her prediction is right, that is, the share price drops. But notice also that he/she will be suffering losses if the prediction is wrong. What is hidden in the above examples is the maximum profit and loss. Theoretically, the maximum profit that can be made is $6,000 (less transaction costs), if the price drops to zero. On the other hand, the potential loss is unlimited because the price can keep going up forever.

2.3.4 The Risk Of Short-Selling

Learning Objective 2.3.4 - *Understand* the high risk involved in short-selling.

a) *Going against the general trend***.** In the long run, share prices in all markets tend to go up. This is due to the fact that the real value of companies increases over time as companies grow and make profits and expand their operations. Even for companies that are not making profits, share prices may still grow due to inflation. The upshot is that share prices go upwards in the long run. In this sense, a short-seller is bucking the trend; the longer he/she is in the short position, the more risky it becomes.

b) *Limited profits, unlimited losses***.** There is a limit to the possible profits made by a short-seller. Maximum profits are made when the stock becomes valueless, that is, its price becomes zero. The amount of profit made equals the net proceeds from short-selling. However, the price of a stock can go up astronomically and the short-seller may be facing huge losses. In theory, there is no limit how high a stock price can go up.

c) *Beware of short squeezes.* Beware of the danger in “herd” behavior of taking a short position in a stock that already has a large number of short positions. If the share price begins to rise instead of decline, the short-sellers will rush to buy the stock to cover their positions, and in so doing they will drive the prices up even further and squeezing the profits out of themselves. Therefore, it may not be a good idea to join the crowd in shorting a stock.

d) *Uncertainties in direction, size and timing*. Price predictions have three elements, all subject to uncertainties: direction of price change, size of the change, and timing. A short-seller may be right in predicting the direction, but how about the size of the price change and the timing of the change? They have to bear in mind that they have to be correct in all the three elements in order to reap the benefits from short-selling activities. If the timing is not right for example, and the short-seller has to hold on for too long in the short position, he will be vulnerable to dividend and capital distributions, interest on loan, margin calls or forced closure.

2.3.5 Advantages And Disadvantages Of Short-Selling

Learning Objective 2.3.5 - *Understand* the advantages and disadvantages of short-selling.

Some critics believe that short selling is a major cause of market downturns, such as the crash in 1987 of the US market. It was said that the short sellers, acting in concert, drove down stock prices and made huge profits. The downward price momentum attracted more short sellers to jump into the market with more widespread shorting activities. Although the accusation is compelling, there is not much evidence to support this, as other factors such as derivatives and ‘program trading’ also played an important role contributing to the 1987 crash.

Despite its critics, it should be acknowledged that short selling makes an important contribution to the market at least in three ways. First, short selling activities add liquidity to the stock and to the market. Second, short selling may help to drive down overpriced securities and therefore promoting price efficiency by aligning market price with its real value. Third, as explained earlier, short selling may help investors to manage the risks to their long positions.

All things considered, there seem to be a bias in the negative perception of the impact of short-selling on the market. The main stigma seems to be that short-sellers feed on falling markets and their actions exacerbate the situation. In recent years, in the wake of the subprime financial crisis, many countries have taken drastic steps to either limit or completely ban short-selling. In September 2008, short selling was prohibited by the U.S. Securities and Exchange Commission (SEC) for 799 financial companies for three weeks in an effort to stabilize those companies. At the same time the U.K. Financial Services Authority (FSA) prohibited short selling for 32 financial companies. On September 22, 2008, Australia enacted even more extensive measures with a total ban of short selling; and on the same day the Spanish market regulator limits short positions in financial institutions and puts restrictions on naked shorting. Naked short-selling is the selling of shares without securing the borrowed shares. In June 2010, due to the economic crisis, Germany permanently banned naked short selling. In August 2011, France, Italy, Spain, Belgium and South Korea banned all short selling in their financial stocks.[1]

[1] Wikipedia, http://en.wikipedia.org/wiki/Short_(finance), Accessed: September 2011.

2.4 Margin Trading

2.4.1 What Is Margin Transaction?

Learning Objective 2.4.1(a) - *Understand* the meaning and operation of margin transaction.

Learning Objective 2.4.1(b) - *Understand* the calculations involved in margin trading.

When you buy shares in the share market, the most usual way is that you pay by cash for the entire value of your purchase. The size of your portfolio will depend on the amount of money you have at your disposal. However, there is a way to invest more than what you have – by marginal trading. In this arrangement, you pay only a certain percentage of the purchase price and the remainder is paid by loan usually obtained from your broker. Securities purchased in this way are entered into an account called a margin account that is separated from the normal investment account. The broker holds on to the stocks purchased as collateral to the loan. Dividends earned from the stocks are used to help offset the interest payments on the loan.

The percentage of the purchase price paid by the investor at the time of purchase is called the ‘initial margin’. The initial margin requirement, or simply the initial margin, is the amount (or percentage) you must deposit in your margin account when purchasing shares on margin. The ‘initial margin’ is the minimum and it is set by the market regulators. However a higher minimum requirement may be set by the broker.

After the purchase of the stock on margin, there is a ‘maintenance margin’ below which the ‘actual margin’ is not allowed to fall. If the actual margin falls below the maintenance margin, the broker calls for additional cash or additional stocks from the investor. The broker is said to make a ‘margin call’. If the cash or the stocks are not delivered within the specified time, the broker may ‘force sell’ the stock.

The Margin (M)

The margin in margin trading is determined by the following equation:

$$M = \frac{V - L}{V} \times 100$$

In the above equation, M is the margin (initial, actual or maintenance), V is the market value of the securities, and L is the broker’s loan. The margin is expressed as a percentage. When the investor first bought the stock, the margin must necessarily equal to the initial margin. After purchase, the stock price (V) is adjusted on daily basis to follow the market prices, and as V changes, M will change as well. The actual margin is monitored on a daily basis to ensure that it stays above the required maintenance margin.

Market Value (V)

This is the total value of the shares the investor has purchased as of the last trading date. The value is updated at the close of the market each day based on the closing bid. This process is known in the securities industry as "mark to market".

Loan (L)

This is actually the amount loaned by the broker to the margin trader, and often referred to as 'debit balance' in accounting. The debit balance at any point in time consists of the amount owed to the broker plus interest on the loan amount.

Equity (V-L)

This refers to the difference between the current market value of the stock and debit balance. The equity changes almost continuously as the current market value of stock rises and falls and as interest is added to the debit balance.

Margin Trading Calculations

Let us assume Ahmad buys 100 shares of SABIG at SR80 per share on margin. His initial margin is set at 40% and maintenance margin at 30%. The current market value at the time of purchase is SR8,000, his payment is SR3,200 (40% of 8,000) and his loan from the broker is SR4,800 (60% of 8,000). His margin at the time of purchase according to the above formula is 40%, calculated as follows:

$$M = \frac{V - L}{V} \times 100$$

Margin = [(8,000-4,800)/8000] *100 = 40%

Now let us assume a few days later the share price drops to SR70 per share. The current market value of the stock becomes SR7,000. Ahmad needs to know the current actual margin and whether this is above the minimum required maintenance margin of 30%.

Actual margin = [(7,000-4,800)/7,000]*100 = 31.4%

It is good for Ahmad that the actual margin is 31.4% which is above the maintenance margin of 30%. However, he should not feel very comfortable because the actual margin is too close to the maintenance margin. What happen if the price drops further to SR60 per share?

Actual margin = [(6,000-4,800)/6,000]*100 = 20%

Now the actual margin is 20%, and this is well below the maintenance margin of 30%. Ahmad's broker will make a "margin call", asking Ahmad to pump in more money into his account to bring the margin up to the required minimum level of 30%. The amount required will be SR600, which is calculated as follows:

Amount of margin call = (30%*6,000)-(6,000-4,800) = 1,800-1,200 = 600.

However, under normal situation the Broker will inform Ahmad the moment his account is near or touches the maintenance margin. The price that makes his actual margin exactly equal to the maintenance margin will be SR68.6 per share. Let us check if this is correct. At SR68.6 per share, total market value equals SR6,860.

Actual margin = [(6,860-4,800)/6,860]*100 = 30%

The following formula can be used to directly arrive at the price below which a margin call can be triggered:

$$P = L/N(1-MM)$$

Where,
P = the price of stock below which the margin call will be triggered,
L = loan,
N = number of shares,
MM = maintenance margin.

Using above example:

P = 4,800/100* (1 - .30) = 68.57

So as not to be taken by surprised when a margin call is made, Ahmad needs to personally monitor his margin account. The following table traces his margin trading performance using an Excel worksheet.

Table 2.2 Positions of margin account based on various price levels.

Market Price (1)	Market Value (2) = (1)*N	Loan Amount (3)	Equity (4) = (2)-(3)	Actual Margin [(4)/(2)]*100	Margin Call?
90	9000	4800	4200	47	No
80	8000	4800	3200	40	No
70	7000	4800	2200	31	No
60	6000	4800	1200	20	Yes

A broker may set its own maintenance margin requirement which, of course, must be above the minimum allowed by the regulation. In this case, the broker may or may not make a margin call or inform the investor that his/her account has fallen below the broker's maintenance margin requirement. However, it is important that the investor monitors his own account closely because there can be times when the broker has to liquidate securities to cover margin deficits without giving prior notice.

2.4.2 Ways To Meet A Margin Call

Learning Objective 2.4.2 - *Understand* the meaning of 'margin call' and what needs to be done when receiving a margin call.

When there is a continued trend in declining share prices a margin trader must be prepared to receive a margin call from his/her broker. When there is a margin call, it means that his/her account does not have enough safety margin as required under the margin trading agreement. There are basically three ways to meet a margin call.

Method 1: Sending in cash. The most direct and easiest method is to remit cash for the deficit amount. In the above example, Ahmad should put SR600 in his margin account to bring his account to good standing, that is, to make the actual margin stays above the maintenance margin.

Method 2: Putting in additional security. Ahmad may put into his margin account additional security that he owns from other accounts to increase the amount of collateral. If Ahmad chooses this option, he has to deposit securities with a market value of no less than SR857. Of course, this is more than the cash amount (calculated above) because the collateral value of securities is only 70% of its market value.

Method 3: Liquidating Securities. If Ahmad can neither bring in the required cash nor additional securities, he may sell enough shares in his margin account to bring his equity up to minimum requirement. Please note that the amount of stock that must sold is greater than the cash amount. In the above scenario, Ahmad has to sell SR2,000 worth of his stock. This will leave his market value (V) equals to SR4,000, and will reduce his loan to SR2,800. His margin then becomes 30%. Let us check if this is indeed the case:

Actual margin = [(4,000-2,800)/4,000]*100 = 30%

What happens if margin call fails? If Ahmad does not respond to the margin call, his broker will 'force sell' a portion of his stock and the proceeds are used to reduce the loan balance and bring the equity percentage back to the maintenance margin level

On the brighter side, some brokers allow the investor to withdraw cash so long as the equity is above the collateral value of the stock. This of course depends on the margin agreement. In the above example, if the price of SABIG stays at SR80 per share, Ahmad's collateral value is SR5,600 (that is 70% of his market value), which is greater than the loan amount of SR4,800 by SR800. Ahmad may withdraw this amount for his personal use if he wishes. The amount of cash withdrawal will be considered as additional loan taken by the investor and this will increase the loan amount. How much can he withdraw if the price rises to SR90 per share? (Answer: SR1,500).

2.4.3 Leverage Effect Of Margin Trading

Learning Objective 2.4.3 - *Understand* the leverage impact of margin trading.

Margin trading can magnify the investors profit as well as losses. This is known as the leverage effect. Let us assume the stock of SABIG that Ahmad bought at SR80 per share rises to SR100. If he bought it for cash, the profit would be 25%. But since Ahmad bought on margin and paid only SR32 per share, his profit is 62.5%. This is calculated as follows (ignoring interest on loan):

> Profit = (Selling price–Purchase Price)/Investment
> = [(10,000–(3,200+4,800)]/3200
> = 2,000/3200
> = 62.5%

The downside to using margin is that if the stock price decreases, substantial losses can mount quickly. For example, let's say the stock price falls from SR80 to SR60. The losses would amount to SR2,000 or 62.5%, compared to 25% loss had he fully paid for the stock. What happens if the price drops to SR40 per share? (This can happen if the market is in crisis.) The losses would be SR4,000. Not only the initial margin of SR3,200 is wiped out, the investor must fork out a further SR800 to settle the loan. These examples serve to show that margin trading magnifies gains as well as losses.

2.5 Types Of Stocks

2.5.1 Growth Stock

Learning Objective 2.5.1 - *Understand* what is a growth stock.

Growth stocks are basically stocks in a growth company. The definition admittedly leaves considerable flexibility in interpretation. Stocks of growth companies can be highly speculative and subject to overvaluation. Growth stocks are attractive because of their expected future value. Since growth companies are expected to accumulate value over time, their share prices are also expected to rise accordingly. Growth stocks normally do not pay dividends as the companies need earnings for business expansion. Analysts generally consider a stock with a return on equity (ROE) of 15% is qualified to be classified as a growth stock.

A growth company is a company that is experiencing an above normal rate of growth compared to its industry average or the economy in general. The growth may be measured in terms of sales, earnings, cash flows and asset value. The above normal growth may be due to new and expanding industry the firm is operating in, hence having very profitable investment opportunities. Technological companies are often cited as examples of growth companies. Sometimes, the growth is due to governmental protection in the form of protective tariff or legal protection in the form of patents.

2.5.2 Growth Stock Versus Value Stock

Learning Objective 2.5.2 - *Understand* the difference between growth stocks and value stocks.

Understanding the differences between growth stocks and value stocks can be tricky. Actually there is no hard and fast rules differentiating the two types of stocks, but as shown in the table below, the differences are quite subjective and relative. Some investors may be comfortable investing in value stocks while others may derive more success with growth stocks. It is a matter of choosing an investment style that suits one's personality. Neither approach is guaranteed to provide positive returns; both carry investment risk. Understanding the differences between them may help an investor in his/her investment decisions.

Investors often use the P/E ratio and the market-to-book ratio as guides to separate growth stocks and value stocks. Growth stocks generally have high price-to-earnings (P/E) ratios and high price-to-book (or market-to-book) ratios, whereas value stocks are those with low P/E and low market-to-book ratios. For example, if the stock is currently trading at SR52 per share and its earnings over the last 12 months have been SR2 per share, then its P/E ratio is 26. The market-to-book ratio is the share price divided by the book value per share. The market often places a high value on growth stocks; therefore, growth stock investors also may see these stocks as having great potential and may be willing to pay more to own the shares. The following table compares growth stocks against value stocks.

Table 2.3 Comparison between growth and value stocks.

	Growth Stocks	**Value Stocks**
Investor perception	High value, expensive and overvalued.	Low value, cheap, and under-valued.
Industry	Growth industry, companies making above normal profits. Examples include ICT companies, technology companies.	Stable industry, companies making normal profits. Examples include utilities, food.
Company type	High-quality, successful companies whose earnings are expected to continue growing at an above-average rate relative to the market. Example: ICT, technology companies.	Companies in low-growth industry, or have fallen out of favor or neglected by the market, or companies with long-terms problems. Example: conglomerates, mature, utilities.
Financial ratios	High PE and market-to-book ratios and high ROE.	Low PE and market-to-book ratios and low ROE.
Potential returns	Mostly from capital appreciation with little or no dividends.	Mostly from dividend income with limited price appreciation.
Stock	High volatility, aggressive, speculative.	Low volatility, defensive, non-speculative.

2.5.3 Blue-Chip Stock

Learning Objective 2.5.3 - *Understand* what is blue-chips stock.

These are stocks of well-established and financially sound companies that have demonstrated their ability to pay dividends in both good and bad times. Blue chip companies generally sell high-quality, widely accepted products and services. These companies are known to weather downturns and operate profitably in face of adverse economic conditions, which help to contribute to their long record of stable and reliable growth.

The name 'blue chip' came about because in the game of poker the blue chips have the highest value. Blue chip stocks are seen as a less risky investment than owning shares in companies without blue chip status because blue chips have an institutional status in the economy. Investors may buy blue chip companies to provide steady growth in portfolio value.

2.5.4 Large Cap Stock

Learning Objective 2.5.4 - *Understand* what is a large cap stock.

Large cap is an abbreviation of the term 'large market capitalization'. Market capitalization of a company is calculated by multiplying the number of a company's shares outstanding by its stock price per share. Large cap companies are the giants of the financial world. In the U.S. market, large "cap" stocks refers to companies with a market capitalization value of more than $10 billion such as Wal-Mart, Microsoft and General Electric.

In each stock market jurisdiction, there are large cap stocks of its own. These companies play an important role as market leaders and market stabilizers. They provide important investment avenues for institutional investments. The classification of large, medium and small cap stocks is dynamic and can change over time. The classification also can vary between different markets.

2.5.5 Speculative Stock

Learning Objective 2.5.5 - *Understand* what is a speculative stock.

The definition of speculative stocks is quite subjective. Normally a speculative stock is contrasted against a stable, large-cap, blue chip stocks that are dubbed as non-speculative. In general, speculative stocks are small-cap stocks and characterized by larger price swings or high volatility. Investors in these stocks may reap large profits but may also face huge losses. Speculative stocks are always purchased with the expectation of substantial price increase.

Speculative stocks are not normally followed by many analysts and hence information is relatively scarce. Investments in speculative stocks are often done based on rumors and word of mouth, without performing a detailed analysis. Investors in speculative stocks may be overly optimistic in getting above normal gains. Penny stocks, which are described below, are an example of speculative stocks.

2.5.6 Penny Stock

Learning Objective 2.5.6 - *Understand* what is a penny stock.

Penny stocks are stocks with very low market price. A penny is one cent of the US dollar and some people classify penny stocks as those with market prices of less than USD1.00 per share. However, this terminology is used throughout the world to describe stocks that are lowly priced. Penny stocks are in general neglected by analysts and institutional investors. They are considered to be highly speculative and high risk because of their lack of liquidity, large bid-ask spreads, small capitalization and limited following and disclosure.

2.5.7 Defensive Stock

Learning Objective 2.5.7 - *Understand* what is a defensive stock.

Defensive stocks refer to stocks whose price volatility is less than the average market volatility. This is quite a technical definition. In this context, a stock's volatility is measured by its beta, that is, the extent of the stock price co-movement with the general market. By definition, the beta of the market is equal to unity (1.00). Defensive stocks are those with betas less than one. Defensive stocks belong to companies in a stable industry, with stable earnings and constant dividend regardless of the state of the economy. They are non-cyclical and remain stable during the various phases of the business cycle. This type of stock makes a good candidate to reduce portfolio risk.

To illustrate the role of beta, consider stock A and stock B with respective betas of 0.5 and 0.8. Since both betas are below 1.0, they qualify as defensive stocks. If the market drops by 8%, stocks A and B are expected to drop to by 4% and 6.4% respectively; if the market is expected to move upwards by 15%, then stocks A and B are expected to increase by 7.5% and 12% respectively. Note that both defensive stocks move by an amount that is less than the market movement. This is the characteristic of defensive stocks.

Utility companies are often cited as examples of defensive stocks because the demand for utility is more or less constant regardless of the economic condition or stage of business cycle. Investors who actively manage their portfolios would go for defensive stocks if an economic downturn is expected.

2.5.8 Aggressive Stock

Learning Objective 2.5.8 - *Understand* what is an aggressive stock.

Aggressive stocks are the opposite of defensive stocks. Aggressive stocks are those that have high betas, typically greater than 1.0. They move in the same direction with the market but with price changes larger than the market. These stocks generate returns that vary by a larger proportion than overall market returns. They tend to perform very well in economic upswings and very poorly in economic downturns. For example, consider stock C and D with respective betas of 1.5 and 2.0. Both betas are greater than one; therefore they qualify as aggressive stocks. If the market drops by 8%, both stocks C and D would be expected to drop by 12% and 16% respectively; however if market is expected to rise by 15%, both stocks C and D would be expected to increase by 22.5% and 30% respectively. Active investors would switch to aggressive stocks if an economic upturn is expected, in order to maximize portfolio value. These are normally stocks of growth companies that do not pay dividend or pay little dividend, and most of the returns to investors are derived from price appreciation. Companies in the information and communication technology sectors are often cited as examples of aggressive stocks.

2.5.9 Cyclical Stock

Learning Objective 2.5.9 - *Understand* what is cyclical stock.

Stocks that ride an economic cycle are called cyclical stocks. However, cyclical stocks do not necessarily move up and down in tandem with the economy; most of the time they tend to lead the economic cycle. Cyclical stocks rise quickly when economic growth is strong and they fall quickly when the economy slows down. Stocks in a cyclical industry are sensitive to the business cycle, such that revenues are generally higher in periods of economic prosperity and expansion and lower in periods of economic downturn and contraction. An example of a cyclical stock would be that of an automobile market; as economy picks up, interest rates are low, consumer spending increases and demand for cars increases; but the opposite happens when the economy slows down and credit market tightens up.

The airline industry is also a fairly cyclical industry; in good economic times, people have more disposable income and, therefore, they are more willing to take overseas vacations and make use of air travel. Conversely, during bad economic times, people are much more cautious about spending. As a result, they tend to take more conservative vacations closer to home and avoid the expensive air travel.

2.5.10 Counter-Cyclical Stocks

Learning Objective 2.5.10 - *Understand* what is counter-cyclical stocks.

Counter-cyclical stocks move in opposite direction to the economic cycle. They tend to do well in economic slowdown, and perform badly in economic upturn. In other words, they are negatively correlated with the economy. As a result, the stock's price will also tend to move in a direction that is opposite to the general market trend.

It is quite hard to find a stock that behaves in a counter-cyclical manner. What type of company could possibly do well during the time when people have less money to spend and do badly when consumer spending is on the rise? Stocks of employment placement companies, for example, are usually cited as counter-cyclical because these companies get~~s~~ more revenues during economic recession when many workers are laid off, and people pay fees to these companies to help them find jobs. Purchasing counter-cyclical stocks can serve as a good hedge to prevent larger decline in value of investment portfolios.

Review Questions

1. Describe the various types of order and their usages?

2. How are orders executed? How are buy and sell orders matched?

3. Describe the price-time priority principle of order match matching in securities trading.

4. What is stock quotation? Describe the common terms and abbreviations used in stock quotation.

5. What is short-selling and its purpose?

6. What are the risks involved in short-selling? Describe the advantages and disadvantages of short-selling.

7. Describe the meaning and the operation of margin transaction/trading, calculations involved in margin trading and the concept of 'margin call'.

8. What are the different types of concept stock and their characteristics?

Sample Multiple Choice Questions

1. An order to sell your shares at a certain price higher than the current market price is called a sell _______ order; an order to sell at a certain price lower than the prevailing market price is called a sell ______ order.

   A. stop; limit
   B. limit; stop
   C. stop limit; stop limit
   D. market; stop

2. You want to sell some shares of company ABC only if it shows sign of declining. The current market price is SR55. You will sell the shares when it drops to SR52 per share, but you don't want to sell if it drops further than SR50. What type of order should you place?

   A. Sell limit order
   B. Sell stop order
   C. Sell limit stop order
   D. Sell stop limit order

3. Which of the following statements is FALSE regarding short-selling of shares?

   A. Short-selling contributes to market liquidity.
   B. Short-selling helps to check unwarranted upward movement of prices, thereby stabilizing the market.
   C. Short-selling prevents prices from going downwards.
   D. It has been accused that short-selling may result in a short-selling frenzy that may contribute to market collapse.

4. Mr. AR enters into a margin trading arrangement with his broker with the following margin requirements: initial margin = 40%, maintenance margin = 30%. If Mr. AR purchased 100 shares of ABC company at SR60 per share, how much would his loan be?

   A. SR6,000
   B. SR3,600
   C. SR2,400
   D. SR1,800

5. The following are information on beta of three stocks:

Stock	Beta
A	2.2
B	1.2
C	0.8

   Based on this information, we can deduce that stock _____ is an aggressive stock while stock _____ is a defensive stock.

   A. A; C
   B. A; B
   C. C; A
   D. C; B

Understanding Market Behavior 3

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

3.1 Stock Market Indices

3.1.1 What Is A Stock Market Index?
3.1.2 The Weighting Of The Indices
3.1.3 Major International Indices

3.2 Factors Influencing Stock Market

3.2.1 Supply And Demand Of Shares
3.2.2 Company And Non – Company Information
3.2.3 Interest Rates And The Stock Market
3.2.4 World Events And The Stock Markets

3.3 Market Efficiency

3.3.1 What Is Market Efficiency?
3.3.2 Non – Predictability Of Stock Prices
3.3.3 Forms Of Market Efficiency
3.3.4 Market Regularities
3.3.5 Policy Implication
3.3.6 Investment Strategy In An Efficient Market

Introduction

This chapter is about understanding the stock market behavior at the macro level. Market behavior is often described by the movements of its indicators, which are the stock market indices. In this chapter, we discuss the roles of the stock market indices and the basis of their calculations. Although the most common weighting basis for index calculation is the market value weighting, there are other weighting bases being used. Hence, an understanding of different weighting systems gives a deeper appreciation of the roles of these indices and the information which they convey. The movements of the market indices are dependent on many factors, mostly at the macro level. This chapter explains how changes in macro-economic factors translate directly into the firms' future profitability and therefore affecting their current values. The chapter also discusses the dynamics of market price changes that are influenced by changes in the supply and demand of the stocks. The changes in the stock's supply and demand lead to a new equilibrium that will set new prices for the stocks. We also discuss how different types of information will change investors' perceptions on the value of the companies, which will prompt changes in their desire to buy or sell stocks. The ability of the market to process information takes us directly to the efficient market hypothesis, where we discuss the ability of the market to digest relevant information and impound them into stock prices.

3.1 Stock Market Indices

3.1.1 What Is A Stock Market Index?

Learning Objective 3.1.1 - *Understand* the meaning of stock market indices and their general role as market indicators.

A stock index is a number that represents changes in the aggregate market value of a basket of shares measured against a base value from a specific date. The construction and calculation of the indices may differ from one index to another based on choices of the component stocks, the weighting system used and the determination of the base year.

Index values are useful for investors to track changes in market values over long periods of time. For example, the famous Dow Jones Industrial Average (DJIA) that tracks price movements of 30 large publicly owned companies has been universally accepted as one of the market barometers of the US stock market. Another widely used is the Standard and Poor's 500 Index (S&P 500) that is computed by combining 500 large-cap U.S. stocks together into one index value. Investors can track changes in the index's value over time and use them as benchmarks against which to compare their own portfolio returns.

A stock or company that is included as part of an index is called a "constituent". The aggregate of all the constituents make up the index, and generally each constituent has to meet the requirements to be included in the index. For example, to become a constituent in the S&P500, a stock has to meet certain requirements with regard to market capitalization, market exposure, liquidity, etc. Indexes also periodically review their constituents to make sure they meet the minimum requirements, and if they don't, they may be replaced with another company.

3.1.2 The Weighting Of The Indices

Learning Objective 3.1.2(a) - *Know* that there are different ways of constructing stock indices.
Learning Objective 3.1.2(b) - *Understand* the various method of constructing stock indices:

- Value-weighted index
- Equally-weighted index
- Price-weighted index
- Fundamental value-weighted index

The movement of a stock index is measured by the change in the value of the index portfolio in relation to a certain base value. The base value is normally the value of the portfolio when the index was first formed. This value is usually normalized to 100.00. Subsequent changes in the value of the portfolio are calculated relative to the base value, which after normalization, will become the value of the index, that is comparable to the base index of 100.00. There are different ways of assigning weights to the constituents of the index. We explain below some of the most commonly used weighting schemes in calculating a market index.

▪ Value-weighted index

This is the most common type of index weighting. The proportion of each constituent in the index portfolio is based on their respective total equity market values or also known as market capitalization. The market capitalization of a company is the market price of the shares multiplied by the number of shares outstanding. A large company would therefore have a greater percentage and hence has a greater influence on the value of the index. This kind of weighting is also known as a 'market-value weighted index' or simply a 'value-weighted index'. A simple way to calculate the value-weighted index is simply to aggregate the market values of the constituents and calculate how much the value has changed compared to the base value. Some of the famous world indices that are value-weighted include the S&P 500, Nasdaq, Footsie 100 and Hang-Seng. The local Tadawul All-Shares Index (TASI) is also a value-weighted index, based on the equity market values of all listed companies.

In a market characterized by a few large companies and a large number of small companies, the index will be practically dominated by the large companies. Price movements of small companies may not have a significant influence on the index; therefore the index may not be providing an accurate indicator of the entire market that consists of different industry sectors. However, the fact that the largest companies also have the largest shareholder bases and represent the importance of the industry sectors, may provide some justification to their influence in the value-weighted index.

Equally-weighted index

The 'opposite' of value-weighted is the 'equally-weighted' index or sometimes called the "unweighted index". In this weighting system, all constituents are given equal weight, regardless of their sizes or market values. A five percent movement in a large company is treated the same as a five percent movement in a small company. A small company will have a similar influence on the index as a large company. This equally-weighted index may represent the overall market if the market values of the constituent companies are about equal, it gives recognition to the contribution of various industry sectors. In this sense, an equally-weighted index may be able to provide a good indicator of the overall market development.

However, given the fact that most, if not all, stock markets around the world are characterized by a few large companies and a large number of small companies, the equally-weighted index may not reflect the actual movements of the market. For this reason, equal-weighting is not a popular weighting scheme in the construction of stock market indices; the indices usually exist as an addition to the more established weighting scheme indices such as the value- or the price-weighted indices. In financial research, the difference between the value-weighted and equally-weighted indices is often analyzed as an indicator for the so-called 'small-firm effect'.

Price-weighted index

The price-weighted index is an index portfolio constructed based on the share prices of the constituents. It is simply an aggregation of the prices. As prices of the constituents change, the value of the index will also change. The sum of the prices at a particular date is compared to the original sum of prices at the base year to obtain the index value. A price-weighted index gives more weights to companies with large share prices compared to companies with low share prices. Subsequent capital changes such as bonus shares, stock dividend and share splits are adjusted in the divisor of the index.

This weighting scheme may be criticized in the sense that high or low prices are not a reflection of the firms' market values. The prices are directly dependent on the number of shares outstanding of the firm. Firms of similar market values but with different number of shares will lead to different weighting in the index. Nevertheless there exist many reputable stock indices based on price weighting. A popular price-weighted stock market index is the Dow Jones Industrial Average. It includes a price-weighted average of 30 actively traded US blue chip stocks.

Fundamentally weighted index

Some observers criticize the trustworthiness of market capitalization calculated using market prices. The question is whether market prices represent the true value of the firm. Market prices are determined by many factors, such as current and future earnings, cash flows, firm's assets, investors' valuation, market sentiments, etc. In a highly volatile market, for example, market prices may not reflect the true values of companies. The fundamental values of companies are considered to be a better measure of value compared to market capitalization.

The fundamental-value weighted index is an index whose portfolio values are based on fundamental values of the constituents as opposed to the market capitalization in a value-weighted index. Fundamental values are calculated based on various factors, determined by the management of the index, such as revenues, earnings, dividends, book values, etc. Once firms' fundamental values are calculated these will be used to determine the weighting scheme, that is, the proportion of the company in the portfolio. This index, though theoretically sound, is not popular in practice.

3.1.3 Major International Indices

Learning Objective 3.1.3 - *Know* some of the world's famous stock indices, their weighting schemes, history and management:

- Dow-Jones averages
- Nikkei 225 Index
- FTSE 100 Index
- Hang Seng Index

Dow Jones Industrial Average

The Dow Jones Industrial Average is a well-known market index consisting of 30 large companies listed on the New York Stock Exchange. The Dow is among the most closely watched U.S. market index. It was created by the editor of Wall Street Journal, Charles Dow and named after him and his statistician Edward Jones. It was founded on May 26, 1896. The word 'Industrial' in the name is largely historical, as many of the current 30 companies are no longer confined to the traditional industrial companies. The index now consists of companies from various sectors including heavy industry, telecommunications, consumer, food, oil and gas and financial.

The index is price-weighted which means that it is an aggregation of the share prices of the constituent companies. The index traces the changes in this aggregate price over time, of course, by taking into account capital changes such as stock splits, stock dividends and other adjustments. The Dow Average is often criticized because of its small number of constituents, all of which are large-cap blue-chip companies.

Nikkei 225 Index

The Nikkei Index is a well-known index that represents the Japanese stock market, the Tokyo Stock Exchange. It consists of 225 stocks and is managed by Nihon Keizai Shimbun (Nikkei) newspaper since 1950. Similar to the Dow averages, the Nikkei is also a price-weighted index, or an index of price averages, and the components are reviewed once a year. The prices are weighted based on the stocks par value of 50 yen per share. Since January 2010, the index is updated every 15 seconds during trading sessions. Events such as stock splits, removals and additions of constituents are taken into account in the effective weighting of individual stocks and the divisor. The Nikkei 225 has no specific weighting of industries.

- ### FTSE 100 Index

The FTSE 100 Index or the Footsie 100, consists of 100 large-cap stocks listed on the London Stock Exchange. The index is maintained by FTSE Group, a joint venture between Financial Times and London Stock Exchange. Its name was derived from the acronym of its two parent companies. The index began on 3 January 1984 with a base level of 1000. The index is value-weighted, but the value is calculated based on the companies' 'free-float', and not the full market capitalization. The value of free-float is the market price multiplied by the number of shares that are available for buying and selling in the market. Most listed companies have the majority of their shares outstanding restricted, which means that the shares are kept by the founders and large institutional investors on a long-term basis and these shares are usually not available for day-to-day trading. The values of free-floats are therefore presumed to be a better reflection of the market movements. The index is calculated in real time and published every 15 seconds. The 100 Footsie companies represent about 81% of the market capitalization of the whole London Stock Exchange.

- ### Hang Seng Index

The Hang Seng Index (HSI) is a well-known index representing the Hong Kong Stock Exchange. It is the main indicator of the overall market performance in Hong Kong. It is calculated based on free-float values of its constituents. It consists of 45 large-cap stocks whose total market capitalization represents about 60% of the total market capitalization of the Hong Kong Stock Exchange. HSI was started on November 24, 1969.

3.2 Factors Influencing Stock Market

Stock market indices are directly related to market prices, therefore the movements of the constituent stock prices will dictate the movements of the indices. To understand how and why stock indices move, we need to understand what moves the individual stock prices.

3.2.1 Supply And Demand Of Shares

Learning Objective 3.2.1(a) - *Understand* the mechanics of stock market price determination through the interaction of supply and demand.

Learning Objective 3.2.1(b) - *Understand* the factors that influence the supply and demand of shares.

Financial news always reports the rise and fall of stock market index in the local market as well as indices in major international markets. What makes the indices rise and fall and what does it mean when there is an increase or a decrease in a stock index? Many people relate stock price changes to the economic situation, or to changes in interest rates, or to companies' earnings announcements. It is true that all these factors have their influence on stock prices, but they are not direct causes. What these factors do is to change the short-term balance in supply and demand for the shares. It is the changes in the supply and demand that move the prices.

But how could the supply of and demand for shares change? The supply and demand on the stock reflects the desirability of owning or selling the stock. Finance theory says that the value of a stock depends on its future profits. Any new information that alters investors' beliefs about the future profitability of a company will automatically change his valuation of the stock. This will in turn change the desirability to own or to dispose the stock. The actions of all investors in the market will result in the change in the supply and demand for the stock. The interaction of the new supply and demand will dictate the new price.

For example, if there is news of declining earnings of a company, investors may have the perception that future profits will also be negatively affected. This may change the desirability of the stock and more investors want to sell the stock. At the same time demand for the stock may wither. Buyers will demand a discount off the existing price and many motivated sellers will accommodate. More sellers than buyers means there is more supply than demand, so the price falls. It will fall up to a point when buyers now find it attractive. As buyers begin to move into the market, demand grows faster than supply and the price goes up.

Conversely, if a company announces an unexpected increase in profits, investors may believe that whatever is causing profit to increase will continue to influence future profits. The value of the stock will increase. Demand for the stock suddenly increases. In the short run there will be more buyers than sellers, and price will increase. However, it will only rise to the point where buyers suspect demand is waning. At that point, holders of the stock will sell. Some may have ridden the price up and believe a reversal is coming so they take their profits and sell. As more owners sell, the price begins to fall, since there is now more supply than demand.

Sometimes supply and demand find a balance that results in a price that buyers accept and sellers accommodate. When supply and demand are roughly equal, prices will bounce up and down, but in a narrow price range. It is possible for a stock to stay in this range for days or months, before something else disrupts the supply/demand balance. It is important for investors to understand that it is the interaction between supply and demand that determines the market prices of stocks. At some price, there will be willing sellers and willing buyers, and only when the two meet will a trade be consumed.

The extent of price movements or non-movements, to a large extent, depends on the differences and similarities of investors' subjective opinions and perceptions on the stock values. Some investors interpret a piece of information in a certain way that may be entirely different from some others. In general if a stock is actively analyzed and traded, the differences in opinion tend to be less compared to a stock that is inactively traded.

3.2.2 Company And Non-Company Information

Learning Objective 3.2.2(a) – *Understand* how company specific factors influence market share prices.

Learning Objective 3.2.2(b) – *Understand* how non-company factors influence market share prices.

The information that affects the supply and demand for a stock may be divided into two major components: company specific and non-company specific information. Company specific information is information and news about a particular company that will affect the supply and demand of the company's stock, and it will not affect other stock in the market in a direct way. Examples of this information include: earnings announcement, dividend announcements, bonus issue, change in the CEO, awards of new contracts, mergers and takeovers, unfavorable consumer reports on the company's product, etc.

The non-company factors may be certain information on the industry, market, country or international affairs that change the perception of investors regarding the profitability of a company in a particular market, and this will affect the supply and demand of the stocks. If it is industry information, it will affect the prices of stocks in that particular industry only. Companies in other industries are not affected. For example, if there is an announcement of an increase in import duty of automobiles, companies dealing in imported cars will be affected in a negative way, while those dealing with locally manufactured cars may be affected in a positive way. Companies in other sectors such as agriculture, construction and utilities may not be affected by this announcement.

Sometimes the information affects the entire market. For example, an increase or a decrease in interest rate, an increase or a decrease in personal taxes, an increase in the salary of public sector employees, the financial crisis in other parts of the world which affect the exports or the imports of a country, and so forth. This type of information will have an effect on the entire market, and all companies will be affected. It will change the supply and demand of the entire market. If the news is negative, there will be more sellers than buyers and this will push down market prices.

3.2.3 Interest Rates And The Stock Market

Learning Objective 3.2.3 – *Understand* how changes in interest rate influence the stock prices and stock market.

One of the macroeconomic factors that have a direct influence on stock market is the interest rate. When the government makes an announcement of a reduction in interest rate, stock market will experience a sudden boost, and vice-versa. This phenomenon is true in almost all markets. There are two reasons for this. One is the liquidity effect and the other is the substitution effect.

In terms of the liquidity effect, lowering interest rates will increase money supply in the economy. Cost of borrowing will be reduced and this will promote more consumer spending and the liquidity of the economy increases. Some of this liquidity will flow into the stock market. As a result, there will be a general increase in demand for shares and stock prices will rise.

The substitution effect says that investors are drawing their money out of their savings or fixed income securities and invest them in the share market. Due to the lowering of interest rates, savings become unattractive. Individuals will look for better investment alternatives in which case the stock market may be the obvious choice.

In the short-term, the lowering of interest rates will lead to more buyers in the market. Both the liquidity and substitution effects will lead to an increase in buying pressure and therefore stock prices in general will increase. In the long-term, low interest rates would contribute to business growth due to increase in profits and reduction in the cost of capital.

The opposite effect will take place if the interest rates rise. There will be liquidity squeeze in the economy due to high costs of borrowing and people will find it more attractive to keep their savings in banks rather than speculating in the stock market; these will result in the weakening of demand for speculative securities and stock prices will decline. In the long-run, high interest rates will result in high cost of business that will result in reduction of profits, and an increase in cost of capital that will result in a reduction in the present value of cash flows. In other words, high interest rates in the long-term will result in a decline in stock prices.

3.2.4 World Events And The Stock Market

Learning Objective 3.2.4 – *Understand* how world events can influence the stock prices and stock markets.

There is a general trend that the world stock markets are currently becoming more integrated compared to a decade or so ago. This means that what happens in one market may have a direct impact on other markets. The reason for the integration is that various parts of the world are connected in many different ways. The development in information and communication technology plays vital role in transforming the world into an information village. Business and trade have become globalized and inter-connected. Given this backdrop, it is not surprising that important events such as war, political and social unrest, natural disasters and terrorism in some countries could affect the performance of stock markets in other countries. The effects can be direct or indirect, and they often occur in chain reactions.

The terrorist attack on New York on September 11, 2001, for example, resulted in direct losses in the U.S. as well as uncertainties to world peace. This had caused investors in the U.S. to switch from stocks to safer securities. It has also resulted in investors in other parts of the world to trade in a more cautious manner. As another example, if the U.S. announces an increase in defense spending, this will affect not only the U.S. economy but also the economies of the rest of the world. The announcement will be welcomed by military equipment and weapon manufacturers and their suppliers, but the threat of widespread war might be a concern to many countries and their businesses.

Also, wars and unrest in the middle-east, means there will be lack of international trade between these countries and the rest of the world. Not only the affected countries will suffer economically in the long-term, countries having trade relations with them will also be affected. Other examples of important events that have far-reaching impact on many parts of the world include the 1997 Asian financial crisis and the 2008 U.S. subprime loan crisis.

3.3 Market Efficiency

3.3.1 What Is Market Efficiency?

Learning Objective 3.3.1(a) – *Understand* the meaning of stock market efficiency.

Learning Objective 3.3.1(b) - *Understand* the role of information in determining market prices.

When we invest in the stock market, or anywhere else for that matter, we expect to earn a return that commensurate with the risks we take, at the minimum. As a matter of fact, in choosing our investment, we would be going after securities that are expected to provide the highest returns, given the risks of those securities. Most investors usually expect to obtain high returns that are above market averages. In other words, investors want to outperform, or beat, the market.

However, the 'efficient market hypothesis' (EMH) predicts that in markets where share prices fully reflect all available information, investors will not be able to beat the market. The essence of the efficient market is that, in a market dominated by many buyers and sellers, and when information is relatively freely available, market prices will fully reflect all available information. Whenever new information reaches the market, buyers and sellers will assess the information and adjust their valuation on the affected stock. They will do this immediately and competitively to beat each other in terms of accuracy of valuation and timing of trade. These actions will ensure the new information is immediately impounded into the market prices. Thus, according to the EMH, no single investor would have an advantage in predicting a return on a stock price because he/she would have the same set of information as everyone else in the market.

3.3.2 Non-Predictability Of Stock Prices

Learning Objective 3.3.2 - *Understand* the meaning of non-predictability of prices in an efficient market situation.

Information comes to the market continuously and randomly. The information includes economic news, corporate announcements, international events, political and social news that would have a direct or indirect impact on share prices. Some of this news is accurate, some are not, and some are true others are rumors. This information is continuously absorbed by investors and translated into their trading activities. According to EMH, as prices respond to information available in the market, and because all market participants have access to the same information, no one will have the ability to make greater profit than others. Also since information arrival is random, price changes are also random and unpredictable.

No one, using the available information, would be able to correctly and consistently predict the prices, and therefore no one would be expected to earn above normal profit.

3.3.3 Forms Of Market Efficiency

Learning Objective 3.3.3 - *Understand* the three forms of market efficiency and their associated information set:
- Weak-form efficiency
- Semi-strong form efficiency
- Strong-form efficiency

The EMH is all about information and market prices. There are various types of information that are influencing investment decisions and stock prices. Academics classify the information into three sets:

1. Information on past prices and volume
2. Public information on companies and economy
3. Private company information

Based on the above different information sets, the EMH is classified into three forms based on price response to the information sets. The three forms of market efficiency are as follows:

- **Weak-form efficiency**

The weak-form EMH says that today's stock prices have fully reflected all information contained in past transactions of a stock. Transaction information includes prices and volumes. To use past price or volume trends and patterns to predict future prices will not lead to abnormal profits. There are investors who make investment decisions by looking at past price patterns and make predictions on future prices based on some trend analysis. According to the weak-form market efficiency, these traders, using the technical analysis on past prices will not be able to beat the market in a consistent manner, although they may be lucky sometimes. Studies have shown that share prices in most developed markets are weak-form efficient, while those in developing markets are efficient in varying degrees.

- **Semi-strong form efficiency**

The semi-strong form EMH implies that all public information have been accounted into the current share prices. It also implies all new information is immediately and accurately impounded into stock prices. Public information includes all corporate disclosures such as earnings, dividends, capital changes, acquisitions, etc. Public information also include non-company information, such economic reports, inflation, interest rates, taxation, GDP, imports and exports, world news, etc.

The implication of the semi-strong form EMH is that a trader who studies published accounting numbers, for example, cannot expect to make abnormal profits. Similarly one who trade based on corporate news that appears in daily newspapers should not be able to generate above normal returns. In short, if the market is efficient in the semi-strong form, neither fundamental nor technical analysis can be used to achieve superior gains.

- **Strong-form efficiency**

The strong-from EMH states that all information in a market, whether public or private, has been accounted into the current stock prices. Not even insider information could give an investor an advantage. Obviously this level of efficiency is hard to achieve in the real world. Studies have shown that people who trade based on private information can make superior returns. Therefore, to put investors at the same level, the law prohibits trading based on inside information.

3.3.4 Market Regularities

Learning Objective 3.3.4 - *Understand* the meaning of stock market regularities and the common regularities found in stock markets around the world.

Market regularities or more commonly known as market anomalies refer to systematic trends and evidences found in stock prices that are in contradiction to the notion of an efficient market. Among the common regularities found in developed as well as developing markets are as follows.

- **January effect**: Researchers have found that stock returns in the month of January are consistently higher than other months. This behavior was first discovered in the US market, but researchers in other parts of the world have also documented similar findings.
- **Monday effect**: It has been found that the Monday return, which is essentially a three day return including the weekend, is consistently lower than other days in the week.
- **Small firm**: Researchers found that small capitalization firms are providing a greater risk-adjusted return than large firms.
- **Other effects**: Some studies have found that low PE firms outperform high PE firms. Studies have also found low market-to-book ratio firms outperform high market-to-book ratio firms. Positive adjusted returns on stock splits and stock bonus issues also present anomalous market behavior. In addition, researchers have discovered other calendar effects such as turn of the month effect and turn of the year effect.

In this context a note of caution may be warranted. Although the regularities mentioned above are statistically significant, it does not mean that investors would be able to consistently make abnormal returns by trading on these regularities; for if this was the case, the regularities would disappear when many investors are making trading strategies to benefit from them.

3.3.5 Policy Implication

Learning Objective 3.3.5 - *Know* the roles of policy makers to promote an efficient market.

Market efficiency results in a level playing field for all investors because every investor is making investment decision based on the same set of information and all new information are immediately known to all investors. Appropriate policies must therefore be put in place to ensure that companies are making announcement of material information in a timely manner with complete information. Policies must also be in place to prevent unfair market practices, insider trading and market manipulations. In addition market regulators and participants need to promote an active market in which many sellers and buyers are actively seeking information and actively trading in the market.

3.3.6 Investment Strategy In An Efficient Market

Learning Objective 3.3.6 - *Understand* the appropriate investment strategies in an efficient market.

Although there are exceptions to the efficient market theory, but for many people with little knowledge, high search costs, and larger transaction costs, it is wise to assume that the markets are close to being economically efficient. It is wise for individual investors (or even some unsophisticated portfolio managers) to consider themselves operating in an efficient market. In a fairly efficient market, appropriate strategies include:

- Diversify – include various assortment of securities, especially those that are least correlated with the market. Diversification leads to portfolio risk reduction without sacrificing expected returns.
- Select a suitable asset allocation. This can be achieved through scientific calculation to achieve efficient allocation of assets, or simply make an even distribution across all assets.
- Revise the portfolio as and when it becomes necessary. Go for a buy and hold strategy with limited transaction, as frequent trading may incur more transaction costs that will reduce the profits.

Review Questions

1. What is a stock market index and what is its role?
2. Describe the various weighting schemes to construct stock indices.
3. Describe the mechanics of price determination through the interaction of supply and demand in the stock market.
4. What are the key factors that influence the supply and demand of shares? What are the specific factors which influence the market share prices?
5. How do non-company factors influence market share prices?
6. How would changes in the interest rate, world events, etc., influence stock prices?
7. What is stock market efficiency? What is an 'efficient market hypothesis'?
8. Describe the role of information in determining market prices.
9. What are the implications of an efficient market to an investor?
10. Describe the three forms of market efficiency.
11. What is meant by market regularities? Describe some of the most common market regularities and their implications to investors.
12. What are the suggested investment strategies in an efficient market?

Sample Multiple Choice Questions

1. It was reported in the network news that Dow-Jones Industrial Averages (DJIA) jumped by 500 points from 10,000 to 10,500 in the month of January. This means ___________.

   A. All share prices in New York Stock Exchange (NYSE) rose by 5% each.
   B. The value of the companies in NYSE increased by 5% each.
   C. All prices of the DJIA constituents increased by 5% each.
   D. The price-weighted average of DJIA constituents increased by 5%.

2. What is the weighting scheme used for a stock index calculation that gives relatively greater recognition to the changes in value of small-cap stocks?

   A. Value-weighted
   B. Equally-weighted
   C. Price-weighted
   D. Fundamentally-weighted

3. The following are possible reasons for an increase in interest rates to have a negative impact on the stock market:

   I. Decrease in consumer spending due to costly financing.
   II. Savings become more attractive due to increased interest rates.
   III. With decreased purchasing power, investors become more speculative.

   A. I only
   B. II only
   C. I and II only

D. I, II and III.

4. If a market is efficient, it has the following implications:

   I. Price changes are random because information arrivals are random.
   II. No one can consistently make correct prediction of prices.
   III. The roles of stock analyst are irrelevant.

   A. I and II only
   B. I and III only
   C. II and III only
   D. I, II, III.

5. Monday effect in stock prices refers to the research findings that in general, in most market around the world, ___________________.

   A. average daily returns for Monday is statistically lower than returns for other days of the week.
   B. average daily returns for Monday is statistically greater than returns for other days of the week.
   C. average daily trading volume for Monday is statistically lower than volumes for other days of the week.
   D. average daily trading volume for Monday is statistically greater than volumes for other days of the week.

Behavioral Finance

4

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

Introduction

Much progress has been made in economic and financial theories to explain human behavior when facing with choices and uncertainties, but there are still many situations in which these conventional theories are unable to provide satisfactory explanations. For example, researchers have discovered various forms of market behavior that are inconsistent with the notion of an efficient market. These are referred to as market anomalies as they cannot be explained by existing theories. Of late we begin to see psychological theories being brought in to provide behavioral elements into financial decision making to explain the so-called irrational behaviors. Hence the birth of 'behavioral finance'. Behavioral finance tries to bring in behavioral and cognitive psychological theories into financial decision making. Understanding various aspects of behavioral finance would certainly help security practitioners to deal with various sentiments and attitudes of investors that seem to be irrational from conventional perspectives.

4.1 What Is Behavioral Finance?

Learning Objective 4.1 - *Understand* the meaning of behavioral finance and how it influences investment decisions.

Conventional economics assume men are rational wealth maximizers. Economics attach 'utilities' to consumption and accumulation of assets. In investment, it is assumed that investors behave like an 'economic man'; they always strive to maximize their utilities by maximizing returns and minimizing risks. More wealth is always preferred to less. For a while these assumptions received wide acceptance and were followed obediently by academicians and practitioners. However, as time went on, people started to find anomalies and behaviors that could not be explained within the boundaries of conventional economics. There are many instances where emotion and psychology influence our decisions, causing us to behave in unpredictable or irrational ways. Some academicians began to investigate human psychology to explain the seemingly irrational behaviors. This gave birth to what is now called 'behavioral finance'. Behavioral finance is a relatively new field that combines economics and psychological theories to provide explanations as to why people make irrational financial decisions. The basic difference between conventional finance and behavioral finance is that conventional finance tries to explain the actions of an 'economic man', whereas behavioral finance tries to explain the actions of 'man' from a psychological perspective.

Three main contributors to the field of behavioral finance are psychologists Daniel Kahneman and Amos Tversky, and economist, Richard Thaler. Kahnmeman and Tversky in 1979 published their work on the prospect theory and loss aversion that contends that people view gains and loss differently. In 1985, Thaler published a seminal paper with De Bondt on the market reaction in the U.S. stock market. Thaler is widely credited for his work in applying the psychological theories in finance that paved the way for more behavioral financial studies.

Behavioral financial scholars propose several behavioral concepts to explain the behaviors that are regarded as irrational from conventional financial and economic perspectives. Some of the most common behavioral concepts are explained below.

4.2 Anchoring

Learning Objective 4.2 - *Understand* the concept of 'anchoring' behavior in making financial decisions and how to avoid its negative impact.

'Anchoring' in general refers to the tendency to attach one's thoughts to a reference point and use this reference point as the basis for decision making. The reference point becomes the anchor and that person is attached to this anchor although it may not be relevant to the problem at hand. In the investment situation, anchoring refers to the tendency for investors to base their decisions on certain belief or certain recent information about the company. For example, a stock may have climbed to an exceptional high level due to some favorable news, and shortly after some fundamental changes took place and the stock fell sharply. Some investors may rush to buy the stocks of this company believing the fall is a temporary phenomenon. In this case, the investors are anchoring their minds on the recent 'high' that the stock has achieved and believe that the price drop presents an opportunity to buy the stock at a discount.

To illustrate the anchoring concept, suppose XYZ company secured a contract to supply their products to a major overseas buyer and this had caused its share price to increase dramatically, say, from SR30 to SR70 per share. However, due to some reasons, the contract was cancelled and its share price plummeted to around SR40. Some investors understand the economic reasons behind the drastic price change. Some investors however, may choose to 'anchor' their beliefs in the recent high of the stock price and assume that the drop is just a temporary phenomenon, and proceed to buy the stock believing that it is still a good buy. This error in judgment is due to their minds being influenced by the anchoring concept.

To avoid the anchoring mistake, investors should consider only the relevant information in making investment decisions, that is, investors should evaluate companies from many perspectives, not just based on one or two observations.

4.3 Mental Accounting

Learning Objective 4.3 - *Understand* the concept of 'mental accounting' behavior in making financial decisions and how to avoid its negative impact.

The concept of mental accounting refers to the behavior of people in having different accounts in their minds that refer to different sources of money or different uses of the money. The theory assumes that the accounts are non-transferable and totally separated from one another. Also, the theory is based on the assumption that individuals assign different levels of utility to each account, hence leading to different decisions or behavior. For example, money from salary will be placed in one mental account and money from rental income in another account. Based on this division of accounts, money from salary is used for household expenditure and money from rental is used for leisure activities. Then they become lavish in their leisure expenditure. This is a wrong thinking as money from whatever source is the same and should be spent in an appropriate manner.

As another example, some investors divide their investments between a safe investment portfolio and a speculative portfolio. They convince themselves that they can afford to lose money on the speculative portfolio and become very reckless in investing their money. However, the same investor will be cautious and meticulous in investing their investment accounts. Obviously there is an inconsistency in the actions of people who practice mental accounting. The problem with mental accounting is that, despite the efforts in separating the portfolios, the investors' total wealth will be the same as if the money is held in just one portfolio.

4.4 Gambler's Fallacy

Learning Objective 4.4 - *Understand* the concept of 'gambler's fallacy' behavior in making financial decisions and how to avoid its negative impact.

If you toss a fair coin five times and the head turns out in all the five times, what is the chance that a head will turn out in the next toss? Answer: 50%. The fact that there have been five heads in a row does not make the probability of another head any more or any less than 50% in the next toss. The concept of gambler's fallacy says that after seeing the head five times, the chance of subsequent head gets slimmer, so the investor bets for a tail. In other words, an individual erroneously believes that the probability of a certain random event is less likely to happen following a series of events. This line of thinking is incorrect as past events do not change the probability that certain events will occur in the future, since each event is independent from one another.

In stock trading, an investor who happens to pick a winning stock sees that his stock price increases for five days in a row, and feels that he/she should liquidate the stock, thinking that the stock price will have a lesser chance of increasing in the next day. Here is where the gambler's fallacy sets in. Assuming that there is a 50-50 chance that the stock price will go up or down, just because the price has gone up for five consecutive days does not mean that it is less likely to go up on the next day. It is important to understand that in the case of independent events, the odds of specific outcome happening on the next chance remains the same regardless of what preceded it. Conversely, investors might hold on to a stock that has fallen in multiple sessions because they view further declines as 'improbable' or less likely. To some extent, the concept of gambler's fallacy may explain why investors liquidate winning stocks too soon and hang on to losing stocks for too long.

To overcome the gambler's fallacy, investors need to be reminded that stock market is not a gambling place. Price changes are not a game of chances; they are based on sound economic reasons. Investors should consider economic factors affecting the stock prices in making their investment decisions.

4.5 Herd Behavior

Learning Objective 4.5 - *Understand* the concept of 'herd behavior' in making investment decisions and how to avoid its negative impact.

Herd behavior refers to the tendency of individuals to follow the actions of a group, although individually they may not make the same decision. There are two reasons for this. First, those who follow the crowd are influenced by their psychological thinking that it is unlikely that so many people will go wrong. The second reason is that one feels comfortable in having a sense of belonging to the group.

Herd behavior is very common in stock markets. There might be a time when people became excited over certain types of stocks, for example the so-called dotcom companies in the late 1990s. Everybody jumped into the bandwagon to buy the stocks. Then, it becomes self-fulfilling, because the increase in demand will push the prices further up, until finally the bubble bursts. Occasionally, a stock market will experience a bull run. When the up movement is strong, everybody simply buys any stock and makes money. The herd becomes bigger and bigger and the rampage becomes stronger and stronger as if there is no end to the trend. But the trend will end, and the last to join the herd will suffer a great deal.

An investor is generally better off steering clear of the herd. Sometimes, one needs to buck the trend or becomes a 'contrarian', that is, going in the opposite direction of a general trend. Just because everyone is joining the crowd does not necessarily mean that they are correct. When it comes to investment, there is no substitute to doing a good research prior to making an investment decision.

4.6 Overreaction

Learning Objective 4.6 - *Understand* the concept of 'overreaction' behavior in making investment decisions and how to avoid its negative impact.

It has been an established fact that stock market overreacts to new information. This phenomenon was first documented in a study by DeBondt and Thaler (1985).[2] The authors found that investors overreact to bad news, driving the stock prices down disproportionately. After some time, the prices rebound as investors came to the conclusion that the stock was underpriced. The exact opposite is also true with good news: investors eventually realize that their exuberance was not totally

[2] Werner De Bondt and Richard Thaler, 1985, Does the Market Overreact?, Journal of Finance, 40(3) (July 1985), 793-805.

justified. Other studies have found that market overreacts to corporate announcements such as mergers and acquisitions and rights and bonus issues. There may be several reasons contributing to the overreaction:

(i) The market is unable to make accurate evaluation on the impact of the information on share value, or investors may be overcome by emotions and overestimate the impact of the information. This is of course inconsistent with market efficiency.

(ii) There may be distortions in the announcements that lead to the overreaction, such as an overzealous tone of the announcement.

(iii) There may be elements of herd behavior in rushing to buy or sell the affected stocks.

Knowing the prevalence of overreaction in the stock market, investors must be careful in evaluating new information and not to be influenced by emotions and herd instincts. They have to have a sense of reality and objectivity. They should research their investments and evaluate the available information thoroughly prior to investing.

4.7 Prospect Theory

Learning Objective 4.7(a) - *Understand* the meaning of 'prospect theory' and its differences with the conventional utility theory.

Learning Objective 4.7(b) - *Understand* how the 'prospect theory' affects financial and investment decisions.

Learning Objective 4.7(c) - *Understand* the meaning of 'disposition effect' in investors' behavior and possible ways to mitigate its effect.

The prospect theory proposes that people value gains and losses differently, and will base decisions on perceived gains rather than perceived losses.[3] If a person were given two choices that are equal in monetary value, but one expressed in terms of possible gains and the other in possible losses, the person would be influenced to choose the former. To illustrate this point, let's assume you are faced with the following two choices:

- Choice C1: Gaining SR500.
- Choice C2: Gaining SR1,000 then later, losing SR500.

In choosing between C1 and C2, prospect theory predicts that people prefer C1 to C2. According to prospect theory, losses have more emotional impact than an

[3] Daniel Kahneman; Amos Tversky (1979), Prospect Theory: An Analysis of Decision under Risk, *Econometrica*, Vol. 47, No. 2. (Mar., 1979), 263-292.

equivalent amount of gains. In C2, having to lose SR500, would suffer 'pain' that cannot be compensated by the 'happiness' of retaining SR500. The net 'happiness' for C2 is therefore less than the 'happiness' for C1.

Prospect theory also explains the occurrence of the *disposition effect*, which is the tendency for investors to sell winning stocks too soon and to hold on to losing stocks for too long.

To illustrate the disposition effect, consider a situation in which you just bought 100 share of a ABC for SR50 per share and paid SR5,000 for the stock. Let's assume a week later you are faced with the following scenario:

- Scenario A: ABC price goes up to SR52 per share and your paper gain is SR200.
- Scenario B: ABC price goes down to SR48 per share and your paper loss is SR200.

What is the probability (in percentage) that you would sell your stock in each of the above scenarios? If the probability to sell in scenario A is greater than in scenario B, you are being influenced by the disposition effect.

When stock price increases, investors gain from their investments. They experience a certain amount of 'happiness'. If they do not sell the stock and take the profit, they are faced with the possibility of a price decline and losing the gain, which would mean they will suffer 'pain'. Prospect theory explains that in such situation, the 'happiness' from the gain dominates, and the investor will be inclined to sell and take the profit. This represents a typical risk-averse behavior. This is the reason why prospect theory is also known as 'loss-aversion theory'. On the other hand, if investors have a losing stock, they would be suffering 'pain'. But there is a possibility that the price will go up, and this represents 'happiness'. Prospect theory predicts that 'happiness' dominates. Therefore, the investor hangs on to the losing stock.

Both of the above scenarios show disposition effect in action, and it may lead to irrational decisions. Investors need to realize this psychological effect that is influencing their decisions. They should bring rationality and objectivity into their decisions. Investors should be advised to always do their homework and evaluate their investments. If a stock is on an increasing trend, it should be sold only when the investor believes it has reached its full potential. However, if the stock is declining, it may be wise to sell early in order to avoid incurring larger losses.

Review Questions

1. What is behavioral finance and how does it come about?
2. What are the basic differences between conventional and behavioral finance?
3. Describe the concepts of *anchoring, mental accounting, gambler's fallacy, herd behavior,* and *overreaction* in the context of behavioral finance, and how to avoid their negative impact.
4. What is the *prospect theory* and how is it different from the conventional *utility theory*?
5. How does the *prospect theory* affect financial and investment decisions?
6. What is the *disposition effect* in investors' behavior? What are some possible ways to mitigate its effect?
7. Explain how different concepts in behavioral finance try to justify why investors tend to sell the gainers too quickly and hold on to the losers for too long?

Sample Multiple Choice Questions

1. Which of the following is NOT one of the reasons for the birth of behavioral finance?

   A. Failure of conventional finance to satisfactorily explain the actions of the "economic man".
   B. People started to find anomalies and behaviors that could not be explained within the boundaries of conventional finance.
   C. Conventional finance assumes that people are rational wealth maximizers, and this has been found true in many financial choices.
   D. Some academics began to investigate human psychology to explain the seemingly irrational behaviors according to modern finance.

2. When a stock is losing, investors are suffering some form of 'pain', but by holding on to it, there is hope that the prices will go up, which is a form of 'happiness'. This explanation about the tendency of investors to hang on to losing stocks for too long is given by the ________ in behavioral finance.

   A. Prospect theory
   B. Anchoring concept
   C. Gambler's fallacy concept
   D. Herd behavior concept

3. Investors believe they should liquidate a stock after it has gone up in a series of subsequent trading sessions because they don't believe that the stock is likely to continue going up. This explanation about the tendency of investors to sell gaining stocks too quickly is given by the ________ in behavioral finance.

   A. Anchoring concept
   B. Gambler's fallacy concept
   C. Prospect theory
   D. Herd behavior concept

4. _______________ is the tendency for individuals to follow the actions of a group, although individually, most people would not necessarily make the same choice.

   A. Gambler's fallacy
   B. Anchoring
   C. Herd behavior
   D. Bandwagon effect

5. Prospect theory in behavioral finance is also known as ________________.

   A. Utility-maximization theory
   B. Risk-aversion theory
   C. Rational expectation theory
   D. Loss-aversion theory

References

1. Werner De Bondt and Richard Thalern (1985), Does the Market Overreact?, *Journal of Finance,* Vol. 40, No. 3, July 1985, pp. 793-805.

2. Daniel Kahneman; Amos Tversky (1979), Prospect Theory: An Analysis of Decision under Risk, *Econometrica*, Vol. 47, No. 2, Mar. 1979, pp. 263-292.

Securities Valuation 5

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

5.1 Valuation Of Fixed Income Securities

5.1.1 What Are Fixed Income Securities?
5.1.2 Types Of Bonds
5.1.3 Bond Terminology
5.1.4 Bond Valuation
5.1.5 Bond Pricing Theories
5.1.6 Term Structure Of Interest Rates

5.2 Valuation Of Equity Securities

5.2.1 Intrinsic Value
5.2.2 The Dividend Discount Model
5.2.3 Price – Earnings Ratio
5.2.4 Cash Flow Valuation

Introduction

This chapter is about valuation of securities. We focus on two types of securities: fixed income securities and equity securities. The basis of valuation of securities or any asset is its cash flow. The basic process in evaluating the securities is to first obtain the cash flow estimates from the asset, then discount the cash flows to the present time using an appropriate discount rate. This discount rate is called the required rate of return for the securities. Each security has its own required rate of return which is mainly based on the risk of the securities. In this chapter, we discuss the valuation of fixed income and equity securities. The basic steps involved are similar in both cases, but differ in the calculation of the required rates of return and cash flows. For fixed income securities, the calculations of both the required rates of return and cash flows are quite simple and straight forward. However, for equity securities, both the required returns and cash flow estimations are quite complicated due to the risky nature of the security.

5.1 Valuation Of Fixed Income Securities

5.1.1 What Are Fixed Income Securities?

Learning Objective 5.1.1 – *Understand* the meaning of fixed income securities and its general features.

Fixed income securities are mostly debt-securities. Fixed income securities may be defined as a class of financial securities that gives fixed and regular income to the security holder over the life of the security and a final payment (redemption) at maturity date.

Bond is the most important and dominating security in the fixed income securities market. Bonds may be issued by government, in which case it is called government bonds, or by corporations, in which case it is called corporate bonds or private debt securities. Government and corporate bonds share similar cash flow features and are valued in similar fashion.

5.1.2 Types Of Bonds

Learning Objective 5.1.2 – *Know* the various types of bonds.

There are many types of bonds available in a mature and developed financial market. Some of them are listed below.

Fixed Rate Bonds. This is the most common type of bonds. When bonds are mentioned without any specific features to indicate otherwise, it should be taken to mean fixed rate bonds. This bond provides a fixed coupon interest payment at each period (usually semi-annually or annually) for a certain number of years until its maturity. Upon maturity, fixed rate bonds pay back the principal amount.

Convertible bonds. These bonds are offered with an option to the bondholders to convert them to equities of the company after a certain time has lapsed as specified by the issuer. With the added option, these bonds are usually issued at a lower coupon rate.

Callable bonds. These are bonds sold with a call option to the issue. An issuer may choose to call and terminate the bond at a time prior to the bonds' original maturity date. The issuer may call the bond if market interest rates fall substantially below the coupon rate and refinance the debt at a lower rate.

Floating Rate Notes. These bonds pay variable interest that fluctuates with the market interest rates. The principal amount remains the same.

High Yield Bonds. High yield bonds are bonds that pay out higher coupon rates than normal bonds; however they have a large chance of defaulting on these coupon payments. They are graded below the 'investment grade'. These types of bonds are also known as junk bonds.

Zero Coupon Bonds. Zero coupon bonds do not pay out any coupon interest payments hence their price is quite cheap. The investor gets the principal amount when the bonds mature.

5.1.3 Bond Terminology

Learning Objective 5.1.3 – *Know* the various terminologies related to bond pricing.

Before proceeding further, it is important to know the basic terminologies which are relevant to bond valuation. These terminologies are:

Bond. A Bond is a debt instrument in which an issuer (government or corporations) borrows money from investors for a defined period of time at a fixed interest rate. Bonds are issued by governments and corporations to raise money to finance their projects and activities.

Bond Indenture. This is a contract between the issuer and bondholders specifying a set of provisions that should be followed by the issuer to protect the rights of bondholders. Bond indenture includes features of bonds such as maturity, coupon rates, and face value.

Par value. Par value (or face value or the principal) is a dollar (or any currency unit) amount that is assigned to a security, and in this case, to a bond. Since new bonds are usually issued at par, the par value represents the original value contributed for each bond. This amount is payable at maturity. For U.S. corporate bonds, the par value is usually $1,000.

Coupon rate and coupon payment. Coupon rate is the interest rate stated on a bond when it is issued. Coupon payment is the cash payment of the coupon rate. For example, a $1,000 bond with a coupon rate of 7% will pay $70 a year or $35 every six months. The coupon is typically paid semi-annually.

*Maturity date***.** Maturity date indicates the life of the bond over which the investor will receive the periodic interest payments. On the maturity date, the principal amount of the bond becomes due and is paid to the investor.

*Yield to maturity***.** Yield to maturity (YTM) is the rate of return anticipated on a bond if it is held until the maturity date. The calculation of YTM takes into account the current market price of the bond, coupon rate, par value and time to maturity. Yield to maturity can be thought of as the required rate of return on a bond. Calculating a bond's YTM is tedious as it involves trial and error. Currently the YTM calculation is easily done by using a financial calculator.

Bond rating. This is a classification of bonds' credit quality, that is, degree of security or safety of the bonds in terms of honoring its promised payments in a timely manner. The most secured bond will be given the highest rating, 'AAA', while the least secured will get the lowest grade, 'C', with various combination of letters in between. The ratings are done by rating agencies. Two most popular rating agencies are Moody's and Standard and Poor's.

5.1.4 Bond Valuation

Learning Objective 5.1.4(a) - *Know* and understand the method of calculating a bond value.

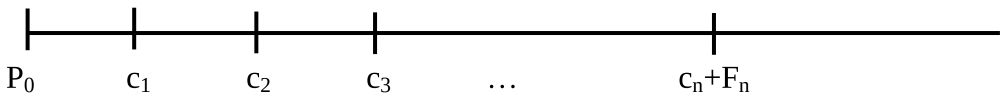
Learning Objective 5.1.4(b) - *Know* how to estimate cash flows of a bond.

Learning Objective 5.1.4(c) - *Know* the method of estimating the required rate of return on a bond.

This section discusses valuation of fixed-rate bond. The value of a bond is estimated by finding the total discounted cash flows of the bond. This value is called intrinsic value, which is actually the present value of expected cash flows. To find the intrinsic value of a bond, the investor needs to discount two types of cash flows associated with a bond: First is the periodic interest payments and second is the principal value (a single payment) payable at maturity. It should be noted that the intrinsic value of the bond is usually not the same as the market price. In fact, the intrinsic value is to be compared with the market price to determine if the bond is good for investment or otherwise.

Calculating Cash Flows

Typical cash flows of a bond look like the following:



Where:
P_0 = current price of the bond.
c_t = interest payments received, t=1,2, … n.
F_n = final payment received = face value of the bond
n = number of periods to maturity.

Calculating Bond Value

Bond value is equal to the total present value of the cash flows:

Bond Value = PV of coupons + PV of face value
= [pv(c1) +pv(c2)+pv(c3)+ … + pv(cn)]+PV(Fn)

There is a short-cut formula, as follows:

$$\text{Bond Value} = c\underbrace{\left[\frac{1-\dfrac{1}{(1+r)^t}}{r}\right]}_{\text{PV of coupon payments}} + \underbrace{\frac{F}{(1+r)^t}}_{\text{PV of face value}}$$

Where c=coupon payment, r = yield to maturity (or the required rate of return), t=years to maturity, F=face value of the bond. The above formula assumes annual coupon payments. If coupon payment is made semi-annually, the c and r will be divided by 2, whereas t will be multiplied by 2.

Estimating the Required Rate of Return

The market price of bond is the present value of all its future promised cash flows discounted at the required rate of return. Bond cash flows are fixed. Because of this, bond prices do not fluctuate as much as stock prices. However, there are risks associated with bonds, and the required rates of return on bonds must take into account these risks. The most important of these risks is the default risk, which is the possibility that the issuer will default on the promised coupon interest payment and also on the principal value.

The rate of return on short-term government security is usually regarded as the riskless rate, because the possibility of default is almost non-existent. For corporate bonds, we need to include a default premium in the required returns. Factors determining default premium include the financial strength of the issuer and the bond features that are stated in the bond indenture. Bond ratings issued by rating agencies may also be used to determine the default premium of the bond.

A Numerical Example

Company XYZ has a 10-year bond outstanding with a coupon rate of 10% to be paid annually. The par value of the bond is $1,000. The yield to maturity is estimated to be 8%. Calculate the intrinsic value of the bond.

We first estimate the cash flows on a time line:

0	1	2	3	…	10	Period
P_0	100	100	100	…	100	Interest payment
					1,000	Par value redemption

We use the short-cut formula to calculate the value of the bond:

Bond value = PV of annuity + PV of lump sum
$= 100[1 - 1/(1.08)^{10}] / .08 + 1000 / (1.08)^{10}$
$= 671.01 + 463.19 = 1134.20$

The calculated value (or the intrinsic value) of the bond is therefore $1,134.20. This value is greater than the par value; this happens because the discount rate (its yield to maturity) of 8% is *less than* its coupon rate of 10%.

In the above example, if the coupon payment were made semi-annually instead of annually, we need to adjust the discount rate to 4%, the interest payment to $50 and the number of interest payment to 20. The bond value will then be:

Bond value = PV of annuity + PV of terminal sum
$= 50[1 - 1/(1.04)^{20}] / .04 + 1000 / (1.04)^{20}$
$= 679.51 + 456.39 = 1135.90$

Currently there exist financial calculators that calculate bond value, given the coupon rate, maturity and the YTM. The calculators can also calculate YTM, given the current price, interest payment and maturity of the bond.

5.1.5 Bond Pricing Relationship

Learning Objective 5.1.5 - *Understand* the bond pricing and the relationship between bond values and the variables determining the value.

In theory, bond values are simply the sum of discounted cash flows. Since cash flows are fixed for a fixed-rate bond, the only variable that needs to be estimated by investors is the required rate of return. The bond pricing relationships stated below present the relationships between the calculated bond value (intrinsic value) and the variables involved in determining the bond value. In an efficient market, bond values should be fairly reflected by the market prices.

1. The relationship between coupon rate (r_c), YTM and bond prices:
    - If YTM > r_c, P_0 < par value (discount bond)
    - If YTM = r_c , P_0 = par value
    - If YTM < r_c , P_0 > par value (premium bond)
2. Bond prices are inversely related to YTM. The YTM is the rate at which future cash flows are discounted to the present value. The higher the discount rate, the lower would be the current value of the bond.
3. The long-term bonds are more price sensitive to a given change in the YTM than are the shorter term bonds.
4. While the price sensitivity of bonds increases with maturity, the sensitivity increases at a decreasing rate.
5. The high-coupon bonds are less price-sensitive to a given YTM change than are the lower coupon bonds.

5.1.6 Term Structure Of Interest Rates

Learning Objective 5.1.6 - *Know* the different possible behaviors of interest rates over time and how interest rates differ based on the maturity of the debt instruments.

The term structure of interest rates, also known as the yield curve, refers to the relationship between interest rates and the time to maturity of a debt security. In the context of bond valuation, a yield curve is a graph that shows the YTM for various maturities as of a particular date. Yield curves can take three different shapes: upward sloping, horizontal (or flat) and downward sloping.

Upward sloping yield-curve. The upward sloping yield-curve is the most common and considered to be the normal curve. The curve shows that long-term interest rates are higher than short-term rates. This makes sense under normal economic situation in which investors expect a higher return from long-term fixed-income securities than short-term fixed-income securities. This is a normal expectation of the market because short-term bonds generally hold less risk than long-term bonds; more uncertainties will set in as bond's maturity moves farther into the future. Figure 5.1 shows the upward sloping yield curve.

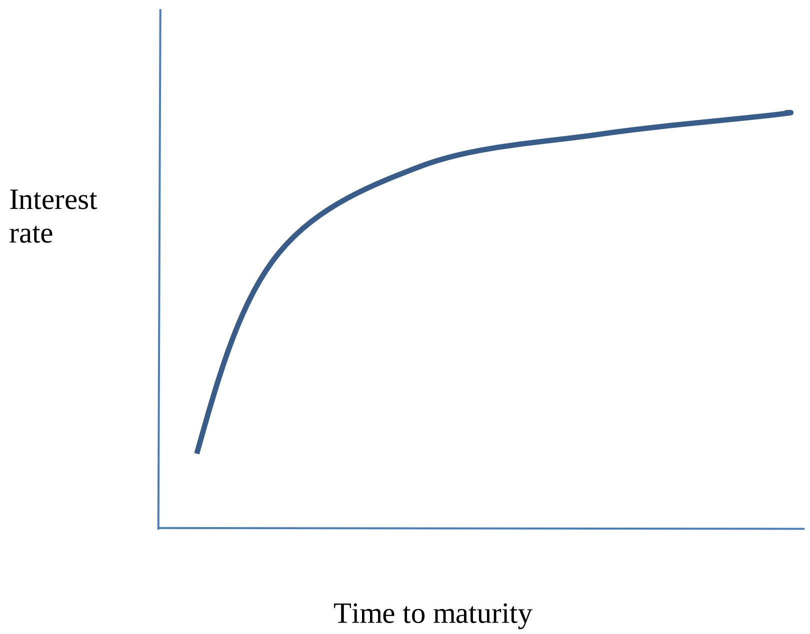


Figure 5.1: An upward sloping yield curve

Horizontal yield-curve (or flat yield-curve). A horizontal yield curve implies that the long-term rates are the same as the short-term interest rates. This is not a common occurrence. It may happen in a transition stage of economic cycle, in which future interest rates are very uncertain with a great possibility of going downwards. In this situation, it would be wise for investors to consider investing in the least risk fixed-income security or one with the highest credit rating. Figure 5.2 shows a flat yield-curve.

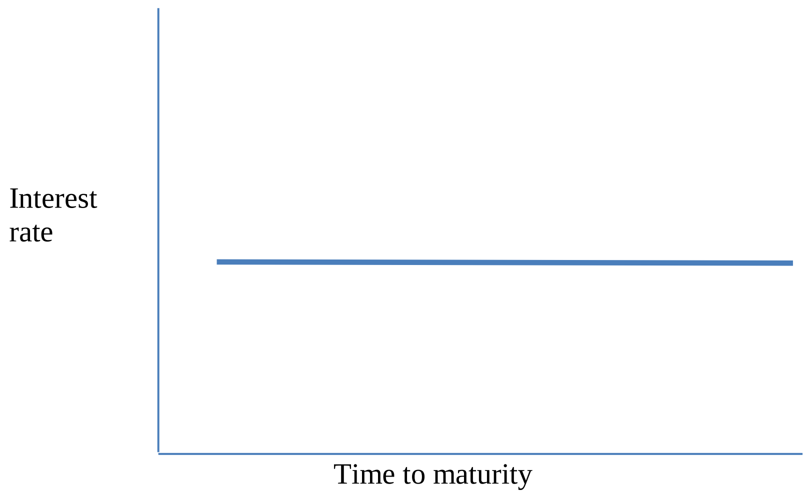


Figure 5.2: A flat yield-curve

Downward sloping yield-curve. The inverted or downward sloping yield-curve is indeed a rare occurrence. This happens when long-term rates are lower than short-term rates. This can happen in an economic situation in which a serious depression may be forthcoming and therefore interest rates are expected to be very low in the future. Investors are willing to invest in long-term securities at the current rate when they believe that it will get worse if they wait. Figure 5.3 shows an inverted yield-curve.

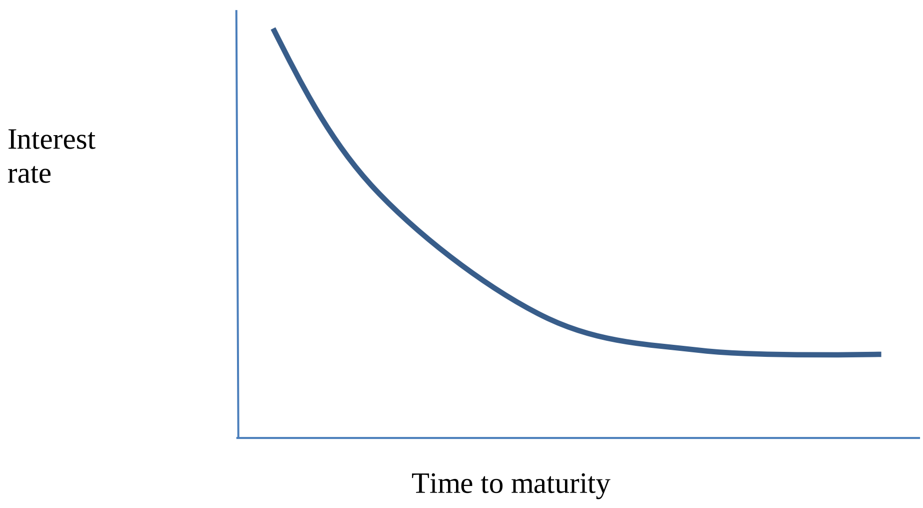


Figure 5.3: A downward sloping yield-curve

5.2 Valuation Of Equity Securities

Equity securities are basically common stocks and preferred stocks. Although there are differences in terms of dividend payments and other rights between the two stocks, the evaluation method is similar. Their values depend on the expected cash flows generated by them, discounted to the present value by an appropriate discount rate. In this section we focus our discussion on the valuation of common stock. The preferred stock valuation can be easily adapted from the common stock valuation.

5.2.1 Intrinsic Value

Learning Objective 5.2.1 - *Know* the meaning of intrinsic value of a security.

When we evaluate a stock, we are actually estimating its intrinsic value. Intrinsic value is the actual value of the stock or the value inherent in the stock. It is also known as fundamental value. It is calculated based on the present value of the expected cash flows of the stock. The intrinsic value is normally not the same as the market price of the stock. At any point in time, there is only one market price, and this may not be the market consensus about the intrinsic value of the stock; rather it merely reflect~~s~~ the price agreement between the buyer and the seller to make the transaction.

5.2.2 The Dividend Discount Model

Learning Objective 5.2.2(a) – *Know* the meaning of dividend discounting model in estimating share value.

Learning Objective 5.2.2(b) - *Know* how to estimate the required rate of return for a common stock.

Learning Objective 5.2.2(c) - *Know* how to perform share valuation based on different assumptions on dividend growth.

Based on the premise that the value of an asset is equal to the present values of all its future cash flows, the value of a stock is equal to the present values of all its future dividends. To calculate the present values of future cash flows, we need a discount rate which, in this context, is equal to the required rate of return on the stock. The stock valuation formula can expressed as follows:

$$\mathbf{P_0 = \Sigma\, D_t[1/(1+k)^t]}$$

where D_t is dividend expected in year t and k is the required rate of return given the risks of the firm. To use this model we need to have (1) the appropriate required rate of return, and (2) estimates of future dividends.

Estimating the required rate of return

There are different ways of obtaining the required rate of return for equities. The basic principle is to estimate a rate that reflects the risk of the stocks. This rate is basically the minimum rate that the investors are willing to accept in order to invest in the stock. The higher the risks, the higher would be the rate, and vice-versa. There exist scientific systematic methods of estimating this rate, for example by using the capital asset pricing model (CAPM) approach. Discussions on CAPM are rather complex and go beyond the scope of this book. However, the final equation of the model is quite simple and easy to use. The model may be expressed as follows:

$$k = r_f + \beta(r_m - r_f)$$

In the above equation, k is the required rate of return on the security, r_f is the riskless rate, β is the beta of the company and r_m is the market rate of return. The riskless rate is normally the short-term T-bill rate, r_m is normally represented by the market index (such as S&P 500 Index or TASI) and β may be obtained from established data base provider such as Bloomberg. The term in the bracket, $(r_m$-$r_f)$ is known as the market risk premium, which is the expected market return above the riskless rate. Beta (β) is a measure of risk; it measures the extent of the stock's co-movement with the market. High beta means high risk and low beta means low risk. A high beta stock should therefore have a higher required rate of return compared to a low beta stock. In a simple term, CAPM suggests that the required rate of return of an asset is equal to risk-free rate of return plus market risk premium scaled up or down depending on the riskiness of that asset as measured by beta.

Example

Calculate the required rate of return for companies A, B and C whose betas are respectively 0.8, 1.2 and 1.6, given that the riskless rate is 3% and the market premium is 10%.

Answer:

Company A: k = 3% + 0.8(10%) = 11%

Company B: k = 3% + 1.2(10%) = 15%

Company C: K = 3% + 1.6(10%) = 19%

A simpler method is to use subjective estimates. One of the subjective methods is to use the average market returns as the base rate. This rate is then adjusted upwards or downwards based on the subjective estimate of whether the security is more risky or less risky than the market. If the security is perceived to be twice as risky (price volatility is twice that of the market), then the required return will be about twice of the market return. If the security is perceived to be 50% more volatile, then its required return would accordingly be 50% above the market.

Example

Ahmad is trying to estimate the required returns for the above three companies and he figures out, in a subjective way, that the volatility (as a proxy for risk) of companies A, B and C are respectively 80% of the market, 20% above the market and 50% above the market. Given that the market return averages around 13% per year, his estimates of the required rate of return would be as follows:

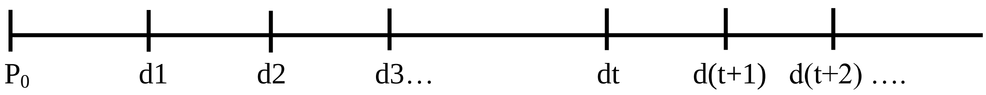
Company A: k = 0.80(13%) = 10.4%

Company B: k = 1.20(13%) = 15.6%

Company C: k = 1.50(3%) = 19.5%

Dividend payment

Assuming a common stock is paying dividends, the cash flows for the stock will look something like the following:



The above picture shows annual dividends that are paid every year to the stock holder into the foreseeable future. The valuation principle dictates that we should obtain the present values for all future dividends. But to calculate each of the future dividends is impossible and quite unnecessary. We need to make certain assumptions of the dividend behavior in order to solve the valuation equation.

(I) Constant Growth Model

Let us assume that dividends are expected to grow at a constant percentage, say at g% per year indefinitely.

$$P_0 = \frac{D_1}{(1+k)^1} + \frac{D_2}{(1+k)^2} + \frac{D_3}{(1+k)^3} + \dots.$$

$$P_0 = \frac{D_0(1+g)^1}{(1+k)^1} + \frac{D_0(1+g)^2}{(1+k)^2} + \frac{D_3(1+g)^3}{(1+k)^3} + \dots$$

For those who are familiar with calculus, the above equation represents a geometrical series. After some mathematical operations, the sum of the series can be simplified into the following equation:

$$P_0 = \frac{D_0(1+g)}{(k-g)} = \frac{D_1}{(k-g)}$$

In this equation, P_0 is the intrinsic value, D_0 is last dividend paid, D_1 is the next dividend, k is the required rate of return, g is the constant dividend growth rate.

Example:

Company A is paying dividend regularly and its annual dividend increases at a constant rate of 5% per year, indefinitely. The last dividend paid was SR1.00. The required rate of return on the stock is 12%. What is the current value of the share?

$P_0 = D_1/(k-g) = D_0(1+g)/(k-g)$

$= 1.00(1.05)]/(.12-.05)$

$= 15.00$

(II) Zero Growth

As a special case, if dividend is constant from year to year, (which means that dividend growth rate is 0.0), the above formula is reduced to the following:

$$P_0 = \frac{D}{k}$$

Apparently the zero dividend growth is also a characteristic of a preferred stock. Bear in mind that dividend on preferred stocks are promised at a fixed amount and therefore represents a constant dividend with zero growth. Therefore, the same formula applies when valuing a preferred stock.

Example:

Company B pays constant dividend of SR1 per share per year. Given that the required rate of return is 12%, what is the current value of the share? (Answer: SR8.33)

(III) Non-constant Growth of Dividend

Admittedly the constant dividend growth assumption may not be very realistic in the real world, and so is the zero dividend growth assumption. A more realistic assumption would be a non-constant growth of dividend. In this situation, we assume companies are paying dividends that grow at different annual rate for a few years until a time comes when it stabilizes into a constant growth situation. In this case, the value of stock will be determined as follows:

P_0 = PV of dividends during the non-constant growth period

\+

PV of dividends during the constant growth period.

$$P_0 = \underbrace{\frac{D_0(1+g_1)}{(1+k)^1} + \frac{D_1(1+g_2)}{(1+k)^2} + \cdots + \frac{D_{T-1}(1+g_T)}{(1+k)^T}}_{\text{PV dividend during non-constant growth}} + \underbrace{\frac{D_T(1+g_c)}{(k-g_c)}\frac{1}{(1+k)^T}}_{\text{PV of constant growth dividend}}$$

Example

Company RST is a young company that is just going into operation. It expects to experience supernormal growth in the first 3 years of 20%, 50%, and 25% respectively, thereafter it expects a normal growth rate of 8% indefinitely. The last dividend paid was SR1.00 and its required rate of return is 15%. Calculate the value of its shares.

Answer

For this problem, we cannot use the above short-cut formula during the non-constant growth period, but instead we have to calculate the present values of each dividend payment. Then when dividend growth become constant, that is, beginning from year 4, we will apply the constant growth formula to obtain the price at the end of year 3 (P_3) and then discount the P_3 to the present value.

$P_0 = pv(d_1) + pv(d_2) + pv(d_3) + PV(P_3)$

$= 1.0(1.2)/1.15 + 1.0(1.2)(1.5)/1.15^2 + 1.0(1.2)(1.5)(1.25)/1.15^3 +$

$1.0(1.2)(1.5)(1.25)(1.08)/(.15\text{-}.08)(1/1.15^3)$

$= 1.043 + 1.361 + 1.480 + 22.827$

$= 26.71$

5.2.3 Price-Earnings Ratio (Pe Ratio)

Learning Objective 5.2.3(a) – *Know* the meaning of price-earnings ratio. **Learning Objective 5.2.3(b) –** *Know* how to use the PE ratio in valuing shares and using it for investment decision.

The price-earnings ratio or the PE Ratio or PER is the ratio obtained by dividing the current share price with earnings per share. This is also known as a relative valuation model. But, theoretically PER is not a valuation model; it is just a relative measure on how "expensive" the firms' earnings are. Sometimes this ratio is referred to as "earnings multiple" because it measures how many times earnings per share is multiplied to obtain the current share price. The ratio is as follows:

$$PER = \frac{P_0}{EPS}$$

In the above formula, P_0 is the current market price, *EPS* is the last announced earnings per share. PER can also be taken as the "price" the market is willing to pay for $1 of earnings of the company. A high PER company means people are willing to pay a high price for the firms earnings, compared to a low PER company. Why would some company's earnings be more expensive than others? The answer lies in future earnings. Investors are willing to pay a high price for the expectation that future earnings will increase.

For valuation purposes, an analyst will calculate PER based on current earnings and current market price and then multiply the PER with expected earnings. For example, if the expected earnings next year is e_1, the the expected price would be P_1 in the following equation, assuming the current PER is the correct multiple for the stock.

$$P_1 = PER_0 \; x \; e_1$$

Most investors use PER to determine investment timing (to buy, sell, hold) decision. Usually analysis is done on the PER over time to trace if the ratio is declining (a buy decision) or otherwise. PER of one stock may also be compared with PER of other stocks in the same business (for stock selection).

Example

A research analyst provides the following report on the current and projected PER on three automobile companies and also on the industry average. Future PER are obtained by dividing the current price with projected earnings per share. (Note that we are not really forecasting future PER using future prices, rather we are holding the current price constant and see what happens to PER with changes in future earnings). Based on the PER numbers, what would be your recommendation to your clients?

Company Name	Current year	20x2	20x3	20x4	20x5
Comfort Motor	15.5	14.0	12.0	10.0	6.0
Elite Motor	12.5	12.0	11.5	10.0	8.0
Prestige Auto	8.0	8.5	10.0	12.0	15.0
Industry average	12.0	11.5	11.2	10.7	9.7

Answer

Comfort auto and Elite auto are good 'buy' candidates because the declining PER means increase in future earnings. Between the two, Comfort auto has a greater potential because its rate of earnings growth is greater than Elite motor. Although Prestige Auto is currently 'cheaper' in terms of its PER, its future profits seem to be declining; therefore this is a potential 'sell' candidate.

5.2.4 Cash Flow Valuation

Learning Objective 5.2.4 - *Know* the basic principles of valuation using the free cash flows generated by the company.

Cash flow valuation or 'free cash flow' valuation is the most sophisticated of the three methods discussed in this chapter. Free cash flow represents the cash that a company is able to generate after laying out the money required to maintain or expand its asset base. Free cash flow is important because it allows a company to pursue opportunities that enhance shareholder value. This model is the closest to the asset valuation principle because it uses cash flows as the basis of evaluating companies as opposed to using earnings numbers. Essentially the model involves estimating future operating free cash flows of the company, then discounting the cash flows to the present value using the appropriate required rate of return to obtain the total value of the company. After deducting the current value of debt, the remaining amount is the value attributed to equity.

Operating free cash flow (OFCF) is the cash generated by operations, which is attributed to all providers of capital in the firm's capital structure. This includes debt providers as well as equity. Calculating the OFCF is done by taking earnings before interest and taxes and adjusting for the tax rate, then adding depreciation and taking away capital expenditure, changes in working capital, and changes in other assets. Here is the actual formula:

$$OFCF = EBIT(1-T) + Depreciation - CAPEX - \Delta WC - \Delta \text{ Other assets}$$

Where:

EBIT = earnings before interest and taxes
T = corporate tax rate
CAPEX = capital expenditure
ΔWC = changes in working capital

After obtaining the operating free cash flow for the current year, the next task is to make projections of the cash flows. This is a similar process to making cash dividend projections when we were working on the dividend valuation model. To make the model solvable, we have to make certain assumption on future cash flow growth, such as a constant growth or a variable growth period followed by a constant growth. When the cash flow projections are obtained, we can then apply the discounting process to obtain the present value of the company.

$$V_o = \sum \frac{(NCF_t)}{(1+k)^t}$$

Example - Cash flow valuation with a two-stage growth period

Company XYZ is in operation for two years and currently experiencing a high growth of 10% per year. Management expects the high growth will continue for another 4 years, after which it will grow at a normal industry rate of about 5% per year into the foreseeable future. The current year operating free cash flows have been calculated to be SR100 million. The company has 50 million shares outstanding. The company has total debt outstanding of SR500 million. The weighted-average cost of capital (to be taken as the required rate of return) is estimated to be 12%. Calculate the value per share of this company.

Answer

This problem is more or less similar to the non-constant growth dividend model. We have to calculate the present values of the cash flows individually for the first 3 years, and then apply the constant growth model in the fourth year. To avoid confusion the calculation is best done in a table.

Year	Symbol	$(1+g)^t$	$OFCF^t$	PV Factor	PV of Cash Flow
1	OFCF1	1.10	110.00	1.12	98.21
2	OFCF2	1.21	121.00	1.25	96.46
3	OFCF3	1.33	133.10	1.40	94.74
4	OFCF4	1.46	146.41	1.57	93.05
	PV of constant growth CF		$\frac{153.73}{(.12-.05)}$ = 2196.15	1.57	1395.69
Total PV of cash flows			1778.15		

Our calculations above show that the aggregate value of the company is SR1,778.15 million. Deducting the SR500 million amount of debt, we are left with SR1,278.15 million equity value that translates into SR25.56 per share.

Review Questions

1. What are fixed income securities? Describe its general features.
2. Describe the various terminologies related to bond pricing.
3. Know how to calculate the value of a bond.
4. Describe the various bond pricing relationships.
5. What is meant by the term structure of interest rates? What are the different possible behaviors of interest rates over time?
6. What is the intrinsic value of a security?
7. Describe the dividend discounting models used in estimating share value?
8. How to estimate the required rate of return for a common stock?
9. What is meant by 'price-earnings ratio'? Describe how it is used for investment decisions.
10. Describe the basic methods of valuation using free cash flows generated by the company.

Sample Multiple Choice Questions

1. Which of the following are features of corporate bonds?
   I. There is no fixed maturity date.
   II. They provide regular income to investors.
   III. Their cash flows are fixed.
   IV. They are exposed to default risks.
   A. I, II and III only
   B. I, II and IV only
   C. II, III and IV only
   D. I, II, III and IV

2. Bond A is a 5-year bond with coupon interest of 7%. Bond B is a 10-year bond with coupon interest of 9%. Both bonds have the same yield to maturity, but bond A is currently selling at a discount while bond B is selling at a premium. Which of the following is true regarding the yield to maturity of the bonds?
   A. The yield to maturity is less than 7%
   B. The yield to maturity is between 7% and 9%.
   C. The yield to maturity is greater than 9%
   D. None of the above.

3. In the context of the term structure of interest rates, a downward sloping yield curve means:
   A. Long-term rates are higher than short-term rates
   B. Long-term rates are lower than short-term rates
   C. Long-term rates are the same as short-term rates
   D. None of the above

4. Calculate the intrinsic value of a stock whose dividend is growing at a constant rate of 5% per year and the last dividend paid was SR1, with the required rate of return of 10% and a riskless rate of 4%?
   A. SR21.00
   B. SR20.00
   C. SR17.50
   D. SR16.67

5. Which of the following statements about price-earnings ratio (PER) is INCORRECT?
   A. It measures the number of multiples over earnings the market is willing to pay for the stock.
   B. A stock with high PER is considered to be more “expensive” than one with a low PER.
   C. Fundamental investors generally expect a low PER stock to provide greater returns than a high PER stock in the long-run.
   D. A stock that shows an increasing PER into future years is considered a good buy because earnings are rising.

Stock Analysis

6

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

6.1 What Is Stock Analysis?

6.2 Fundamental Analysis

6.2.1 Top – Down Approach

6.2.2 Bottom – Up Approach

6.3 Technical Analysis

6.4 Tools For Technical Analysis

6.4.1 Trends

6.4.2 Support And Resistance

6.4.3 Volume Analysis

6.4.4 Charting

6.4.5 Charts Patterns

6.5 Fundamental Analysis Versus Technical Analysis

6.5.1 Differences Between Fundamental And Technical Analysis

6.5.2 Superiority Of Fundamental Analysis (Fundamental Analysts View)

6.5.3 Superiority Of Technical Analysis (Technical Analysts View)

Introduction

Stock analysis (or sometimes called company analysis) needs to be done by any serious investors in the course of their investment. This analysis is also a major part of the research activities in a broker-dealer organization. It is tremendously important for a broker-dealer to understand how company analyses are made in order to understand the basis of valuation and recommendation of the research reports. In this chapter we explain the two approaches to performing stock analysis and valuation: the 'fundamental analysis' and 'technical analysis'. Fundamental analysis derive firm values from profits and cash flows that are projected based on the analyses of fundamental firm factors, such as firm's market-product strength, firm's financial situation and the prevailing economic situations. Technical analysis, on the other hand, makes their investment decision based on various rules by studying stock price changes. There is an unending dispute as to which of the two approaches is superior. Nonetheless, each has its own merits in assisting investors in their investment decisions.

6.1 What Is Stock Analysis?

Learning Objective 6.1 - *Understand* the meaning of stock analysis and its purpose and general approaches.

Stock analysis refers to the process of evaluating a particular stock for trading or for investment purposes. The end result of stock analysis is to provide recommendations to investors regarding stocks that are being analyzed. Sometimes clear recommendations are provided, such as to sell or to buy certain stocks, while at other times the recommendations are quite subjective and it is left to investors to make their own interpretations and decisions.

There are two basic approaches of stock analysis: fundamental analysis and technical analysis. The two types of analysis are very different in their philosophies and approaches although they both have a common objective of providing advice to investors. The fundamental analysts attempt to determine the intrinsic value of the stock based on fundamental factors. These factors include firm's profitability and cash flows. To evaluate firm's profitability and cash flows fundamental analysis takes into account the influence and impact of economic factors, industry factors in addition to company's strengths and weaknesses that include product-market analysis and financial analysis.

The technical analysis, on the other hands, focuses on studying past market prices in order to predict future direction of share price. Technical analysts use various tools and techniques in order to form an opinion on the future price directions of companies being analyzed. These tools include mainly price charts and moving averages. Technical analysts do not evaluate shares hence they are not concerned if a stock is under-priced or over-priced. They are concerned only about price movements and directions.

6.2 Fundamental Analysis

Learning Objective 6.2(a) - *Understand* the meaning of fundamental analysis of securities (stocks).

Learning Objective 6.2(b) - *Understand* the methods of conducting fundamental analysis of securities.

Fundamental analysis is a method of evaluating a stock by measuring its intrinsic value through a systematic analysis of economic, industry and company specific factors. The end goal of performing fundamental analysis is to produce an estimated value of the security that an investor can compare with the security's current market value to determine if the security is underpriced, overpriced or correctly priced by the market.

There are two approaches to perform a fundamental analysis: a "top down" approach and a "bottom up" approach. These approaches are explained below.

6.2.1 Top-Down Approach

The top-down approach begins by looking at the big picture (global and national economic analysis), then to a smaller picture (industry analysis), then on the particular company (company and security analysis). The top-down fundamental analysis is done in three steps. It starts from the broad economic analysis, followed by analysis of the industry a particular company belongs to, and then zero-in to analyze the company itself. The steps may be shown graphically in Figure 6.1.

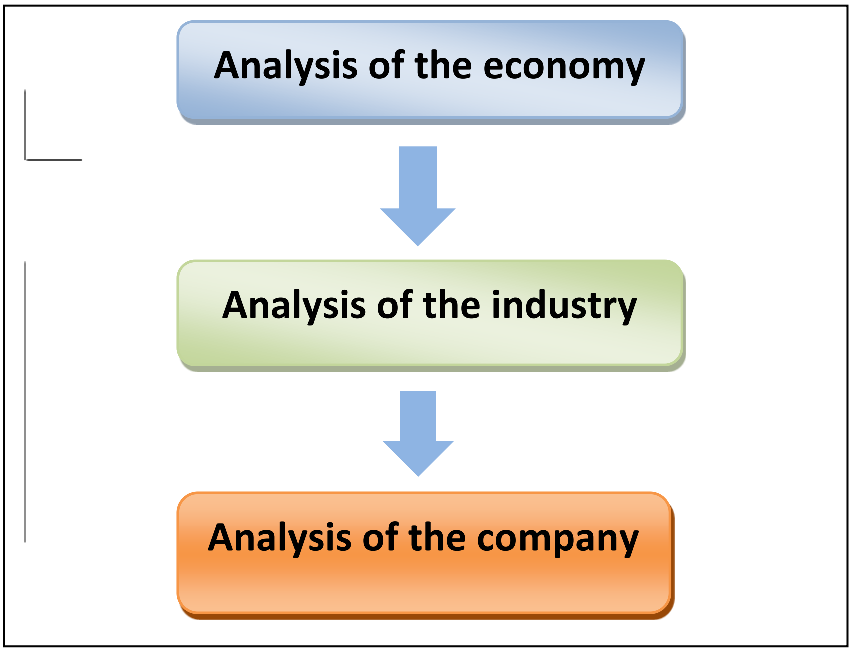


Figure 6.1 Top-down fundamental analysis

Step 1: Analysis of the Economy

Global Economy: Beginning at the global level, the analyst looks at major world events that have implications to global and regional economy. For example, the analyst may begin with the U.S. economy and discuss its impact on other markets, by asking questions like: Is there a change in U.S. interest rates? Is there some policies leading towards expansion of consumer spending? Since U.S. and European economies are also the largest world importing countries, their economic expansion or contraction will have direct impact on the exporting countries.

Local Economy: From the global economy the analyst will look at the local economy that includes regional and national economies. He/she analyzes factors such as regional cooperation, regional politics, economic cycles, government policies, government spending, inflation and interest rates, employment, consumption, imports and exports data, and so forth. Their general impacts on various industries are also assessed.

It is important for the analyst to relate the economic conditions to the specific industries and companies that will be analyzed. Some trend analysis may be done over the past years in order to make a good projection of future direction. The gross domestic product (GDP) figures for example may be used as an indicator of business cycle and how it relates to industry and company performance.

Step 2: Analysis of the Industry

Sector Level: Not every industrial sector will be performing or responding in similar fashion to changes in the economy. Certain factors will have greater impact on certain industries and less on others. For example, increase in import duties on automobiles will have negative impact on the automobile companies, but it is welcome by local automobile manufacturers. Tariff reduction on construction materials may lead to expansion of the construction industries, which in turn means increased business in construction suppliers and more employment for manual labors. If the government decides to lower the interest rates, more consumers can borrow money, and this may lead to increase demand in consumer durables and real-estate. Government may also provide certain incentives to technology sector that will give a boost to hi-tech companies.

Industry Level: A broad sector may consist of several specific industries. Taking a step closer, we may find that different industries in a certain sector will be affected in different ways by an economic stimulus. For example, consumer durables sector consists of industries making and selling furniture, automobiles, sports equipment, toys, household appliances, kitchen wares, etc. A reduction in interest rates, for example, will impact different consumer durables differently.

In conducting the industry analysis, the analyst may focus on the following aspects: technology transfer, foreign direct investments, nature of competition in the industry, internal and external markets, availability of skilled labor and expertise, government policies and regulations and also the sensitivity of the industry to various economic conditions.

Step 3: Analysis of the Company

Company Level. At the company level, the analyst will zero in on the individual companies within that industry. If there are too many companies operating in the industry, the analyst will choose several for analysis, e.g. a few industry leaders. The question of interest is: Which of these companies would be more attractive for investment? The analyst will take a closer look at how each company performs and expectations of future performance. Thus, at company level, the analyst focuses on the two areas: the product-market analysis, and the financial analysis.

In product-market analysis, the analyst may focus on the market shares, competition, product strengths, consumer preferences, management strengths, government policies, etc. The product-market analysis is especially important in situations of imperfect competition, in which case companies need to differentiate their products from their competitors.

In financial analysis, the analyst will take a closer look at the company's performance in managing its financial resources. This may be done by performing financial analysis that typically includes: ratio analysis, cash-flow analysis and common size analysis. Information needed for financial analysis would normally be available from the company annual reports. Financial analysis will tell us the strengths and weaknesses of the company's financial position. The analyst may also make projections on variables for valuation purposes, such as earnings, dividends, growth rates, cash flow projections and cost of capital.

Stock Level: This is the final step in the top-down approach of stock valuation. This step will estimate the valuation of the company and stock to arrive at the intrinsic value of the company. For this purpose different valuation models may be used, such as: dividend discount model, free cash flow model, PE ratio model, etc. At this level the analyst will conclude with investment advice and recommendations to investors on the companies being analyzed.

6.2.2 Bottom-Up Approach

A bottom-up approach is the opposite of a top-down approach. In this approach the analysis starts at the company level and move upwards to industry and economic levels. But the focus is really on the company and sometime the industry and economic levels are overlooked. A bottom-up analyst search for stocks based on some attributes such as, company's earnings, price-earnings ratio, market-to-book value ratio, dividends, economic value added, long-term strategies, etc.

Which attributes to choose depends on the individual performing the analysis. Some investors believe that stocks with low price-earnings ratio (PER) is a good investment, so they select stocks based on their PER. Other investors, who may be more risk-averse, will choose large and stable companies with good dividend yields. Yet others may use the market-to-book (MTB) ratio as their selection basis. There are also investors who use multiple rules and choose only those companies that pass all of the stated filters. A bottom-up analyst will compare companies based on these fundamental criteria; as long as the companies are strong on these criteria, the business cycle or broader industry conditions are not of major concern.

To augment the financial criteria analysis, a bottom-up analyst will also analyze the product-market strength of companies. Analysis of information such as company's products, its competitive position, and its financial status leads to an estimate of the company's earnings potential, and ultimately, its intrinsic value.

6.3 Technical Analysis

Learning Objective 6.3(a) – *Understand* the meaning of technical analysis and some of the tools used by technical analysts.

Learning Objective 6.3(b) – *Know* the philosophies and assumptions of technical analysis.

Technical analysis has an entirely different approach for investments compared to fundamental analysis. In stock trading, technical analysis is the study of various indicators in an attempt to predict future movements of stock prices. When performing technical analysis, figures, charts and moving average lines are used with technical indicators to look for patterns in price movements and to detect and confirm the patterns at the earliest possible stage. Technical analysts believe strongly that history repeats itself, and whatever patterns shown in the past for the stock, the pattern will show again in the future. The challenge is to train their eyes to be able to spot a certain pattern which may not be perfectly formed at times.

Technical analysis uses published market data that include mainly stock price, market index and trading volume. Technical analysts believe that the best source of information is the market data and past prices contain much useful information about its future direction. By studying the price movements and trading volume, technical analysts make inferences about the strength of demand for and supply of the stock.

Technical analysts believe that prices adjust to new information gradually. As the stock adjusts from its old equilibrium level to its new level, the price tends to move in a trend. So those who are able to detect the trend as it begins can trade profitably in the market. The technicians are not keen on the reasons for the changes in stock prices; they are more interested in the nature and behavior of the prices.

6.4 Tools For Technical Analysis

Learning Objective 6.4 – *Know* some of the common tools used by technical analysts for stock trading.

There are many different types of tools used in technical analysis. The most important types are chart analysis that study price trends, support and resistance lines, volume analysis, chart patterns, moving averages and indicators and oscillators. Chart analysis seems to be the most popular and interesting form of technical analysis. Those who perform chart analysis are commonly referred to as ‘chartists’. We provide below a brief discussion of chart analysis.

6.4.1 Trends

To a technical analyst, 'trends are friends'. A trend in stock prices refers to a stretch of price movement in a certain direction. A trend has two elements: direction and length. The direction refers to whether it is going upward (increasing prices), downward (declining prices) or horizontal (stable prices). The length of the trend refers to the time element. The trend can be classified as short-term, medium-term and long-term (major) trend. A short-term trend is generally considered to be less than a month, while a medium-term trend may last from one to six months. A long-term trend may last from six months to longer than a year.

In price trends, a long-term trend may be composed of several medium trends, which often move against the direction of the major trend. If the major trend is upward, there may be downward corrections in price movements followed by a continuation of the uptrend, the corrections are considered to be an intermediate or short-term trend. Correction refers to the price behavior to correct itself of a possible overreaction, either upwards or downwards. The short-term trends are components of both major and intermediate trends (see Figure 6.2).

Identifying trends can be difficult and tricky. It is also possible that different analysts may see different trends in the same price chart. Most of the time, prices do not move smoothly in following a trend, rather they move in a series of highs and lows. These highs and lows put together may form a trend. For example, an uptrend is classified as a series of higher highs and higher lows, while a downtrend is one of lower lows and lower highs.

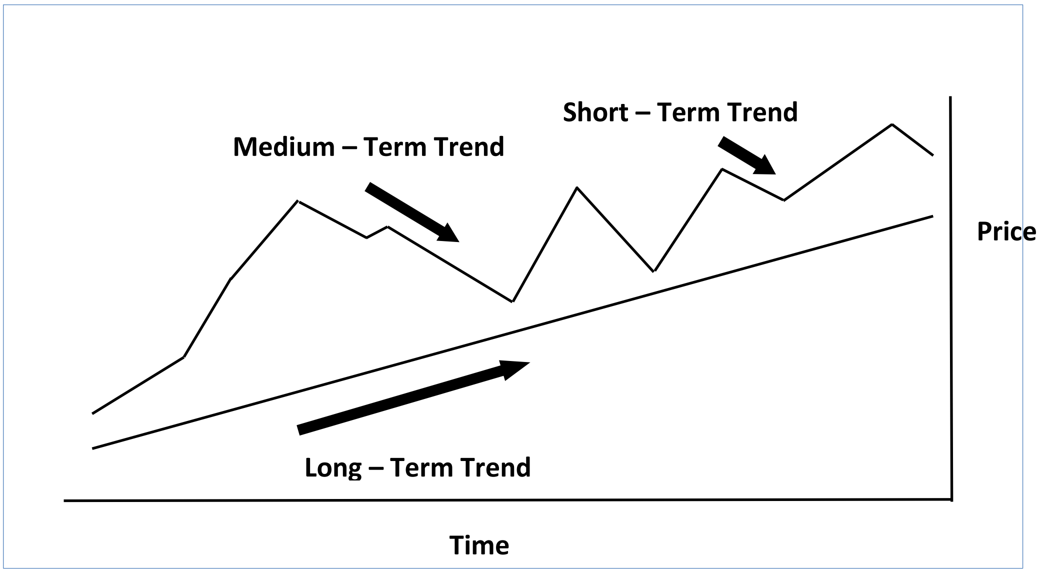


Figure 6.2: Trend lengths

It is important to be able to understand and identify trends so that you can trade with rather than against them. Two important sayings in technical analysis are "trend is friend" and "don't buck the trend" illustrating the importance of trend analysis for technical traders.

6.4.2 Support And Resistance

Support and resistance are imaginary horizontal lines that define the lower and upper limits respectively of price movements. Imagine that over a certain period of time, say a week or a month or several months, the price of a certain stock moves up and down within a certain maximum and minimum levels. The minimum level is called the support line while the maximum level is the resistance line. The support line is a price level below which the price seldom falls, while a resistance line is the price level above which the price seldom surpasses (see Figure 6.3).

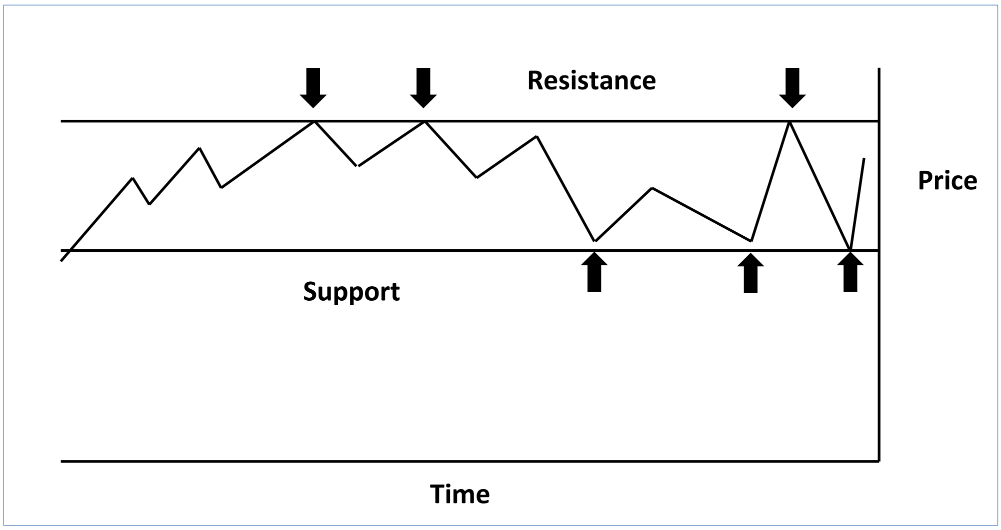


Figure 6.3: Support and resistance

The support and resistance levels have important implications for the market behavior. When prices are close to the support level, traders believe the prices are low enough and move in to buy the stock, believing it will change direction from downwards to upwards. Hence there will be more buyers than sellers, and the market seems to be 'supporting' the price, preventing it from further decline. With the increased demand, there is a great possibility that the price will reverse to an upward trend. Conversely, when prices approach the resistance level, traders begin to sell and take profits. There will be more sellers than buyers and the market seems to be 'resisting' the trend, preventing it from going further up. With the increased selling pressure, there is a great possibility that the price will reverse to a downward trend.

Sometimes, when the prices are near the trend lines, traders rally and push the prices beyond the lines. When this happens the psychology behind the stock's movements is thought to have shifted, in which case new levels of support and resistance will likely be established. Figure 6.4 shows an example of the support level changes to become a new resistance level. This happens when a fundamental shift in the supply and demand forces the price to break through the support level. Technical traders can benefit from their ability to identify these price trends because the trends can help to identify the reversal points. Also, knowing the limits of the price movements can help them to time their trading in an optimum manner. However, if they misinterpret the forces behind the trend, their predictions may be wrong.

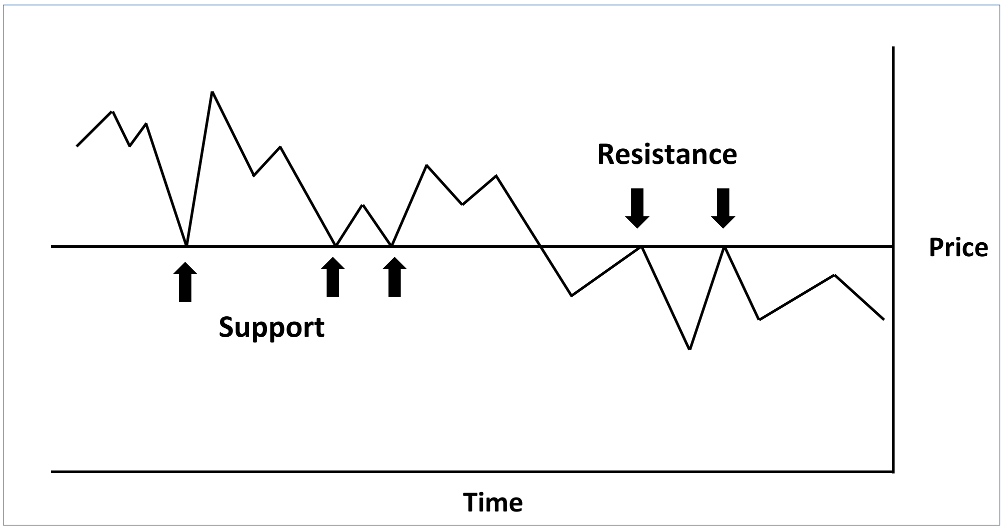


Figure 6.4: Support level changes to become resistance level

6.4.3 Volume Analysis

Volume is the number of shares traded in a day, or any period of time. It reflects the market interest in the particular stock; whether there are many buyers and sellers participating in the stock. The information on trading volume is normally shown at the bottom of a price chart in the form of vertical bars as shown in Figure 6.5.

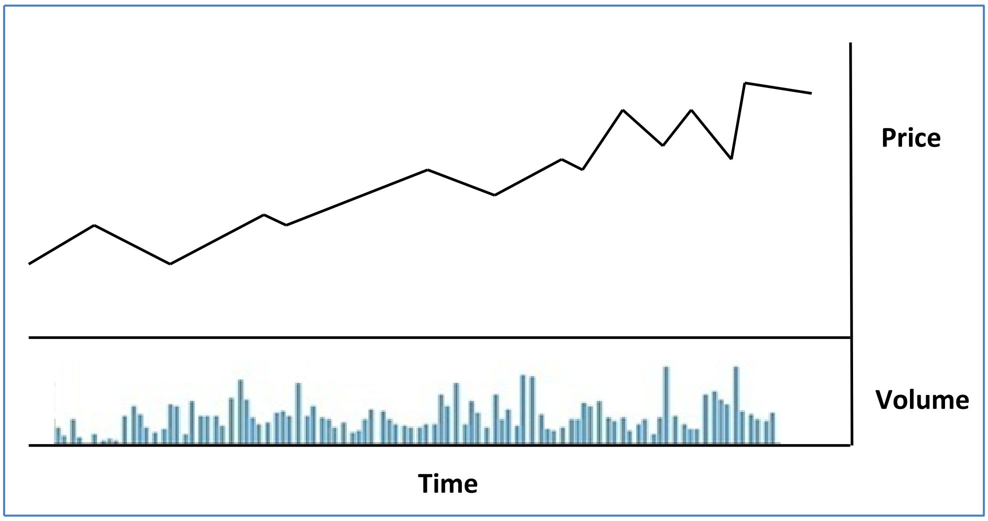


Figure 6.5: Price and volume

Volume information plays a supporting role in technical analysis. A price movement with high volume is more reliable than the same movement with low volume. Price changes that lead to certain trends or chart formation will become more reliable if the trading volumes are high. This is because the price changes are the results of active participation of many traders, hence making the market transactions more reliable. The sustainability of the trading volume is also an important consideration for the reliability of price movements. Therefore, in addition to looking for a large price movement, a technician would also study the trading volume to check the credibility of the movement.

6.4.4 Charting

A chart is a drawing using lines, bars or other symbols to convey information. In technical stock analysis, a chart is simply a graphical presentation of a series of prices over a certain period of time. For example, we can draw a chart showing daily closing prices of a certain stock over a one-year period, along with its corresponding daily trading volume. From the chart we may be able to examine the nature of price movements, trends and formation, if any.

There are three aspects of a chart one needs to know before starting the analysis: the time scale, the 'amount' scale and the price point. The time scale is usually along the horizontal axis and should state clearly if it is by trading hours, daily, weekly, monthly, quarterly, etc. The 'amount' scale is on the vertical axis and will normally state the price of the stock. The price point refers to what type of prices is being charted. Most of the time it is the closing price. However, it is now very common to find charts with four prices for the day, plus the trading volume. The four prices are: opening and closing prices, the day high and low prices.

There are four main types of charts commonly used by technical analysts, depending on the information that they are seeking and their individual skill levels. The chart types are: the *line chart*, the *bar chart*, the *candlestick chart* and the *point and figure* chart. Each of these is explained below.

- **Line Chart**

The line chart is the most basic of the four charts. It is constructed by drawing straight lines to connect one price to the next price, say from one day closing price to the next day closing price, and so on, over a certain time period. From this chart, one can try to detect trends and formation, if any. Almost all line charts use closing prices and do not contain information on opening prices and daily highs and lows. Closing prices are considered to be the most important prices compared to the opening, or the high and low for the day and this is why it is the only value used in line charts. Figure 6.6 shows a basic line chart.

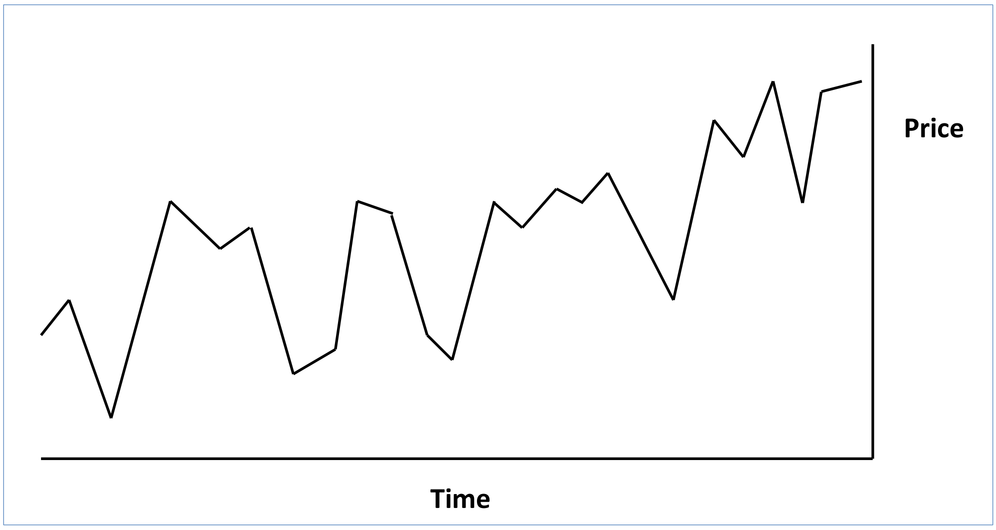


Figure 6.6: A line chart

▪ **Bar Charts**

The bar charts provide more information than the line charts. Each day is represented by a vertical bar. The daily bars are plotted on the chart to trace price movement on a day to day basis. Figure 6.7(a) shows an expanded version of a daily bar. The daily bar carries the following information:

- The height of the bar tells the high and the low prices for the day.
- The opening price is represented by a short horizontal dash on the left of the bar.
- The closing price is represented by a short horizontal dash on the right of the bar.

Colors may be used to increase the visual impact of the chart. A black bar means there is a price increase for the day, that is, the closing price is higher than the opening price. A red bar means there is a price drop for the day, that is, the closing price is lower than the opening price. Figure 6.7(b) shows an example of a bar chart.

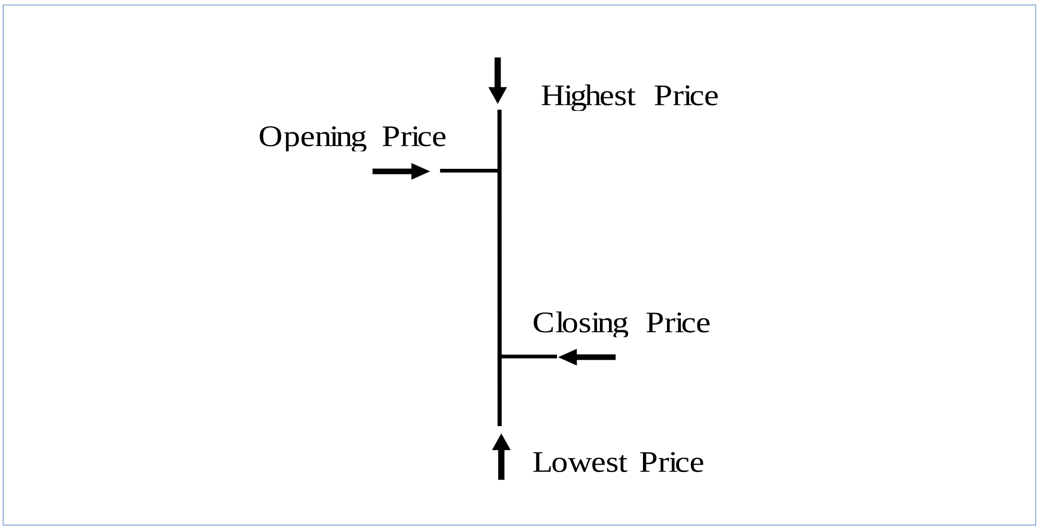


Figure 6.7(a): The “bar” as used in a bar chart.

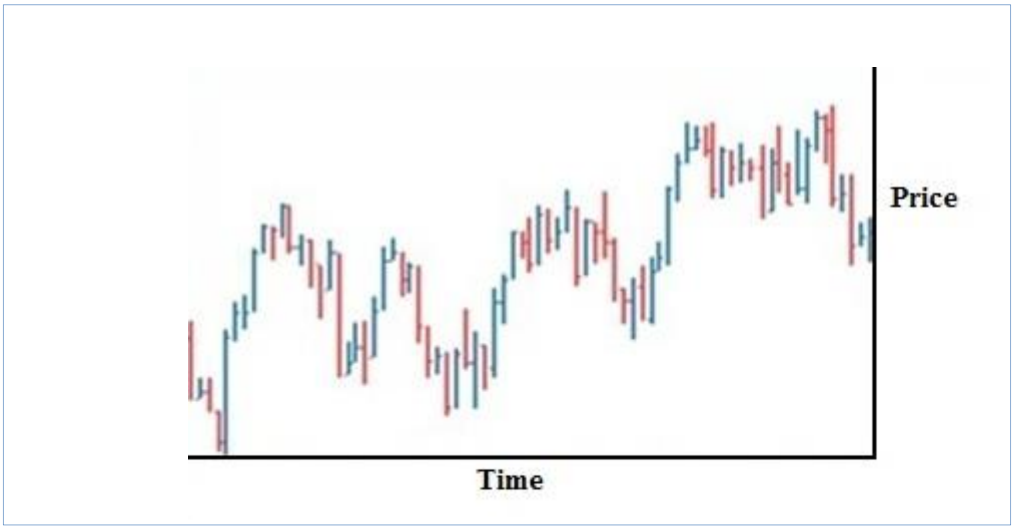


Figure 6.7(b): A bar chart

- ### Candlestick Charts

The candlestick chart is very similar to a bar chart in terms of the information carried, but the visual impact is greater and clearer. Instead of a vertical bar, a candle is drawn to convey the daily price information. The height of the candle stick shows the difference between the opening and closing prices for the day. If the closing is higher than the opening price, the candle stick will be shaded black, but if the closing is lower, it will be un-shaded. If colors are used, price increases will be colored blue while price decreases will be in red. The highs and lows are represented by thin lines at the top and bottom of the bar, which are referred to as 'shadows'. Figure 6.8(a) shows an example of a daily candlestick while Figure 6.8(b) shows an example of a candlestick chart.

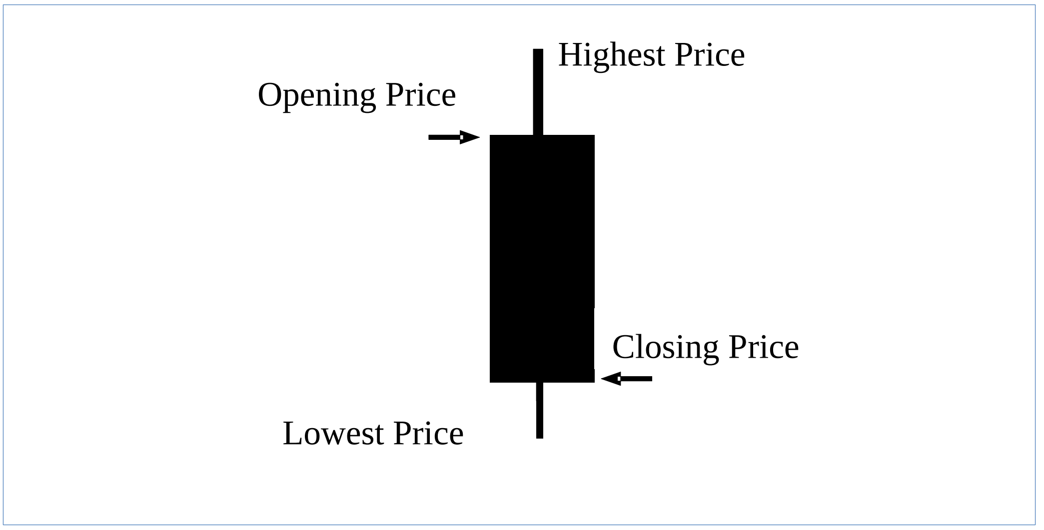


Figure 6.8(a): The 'candlestick' used in the candlestick chart.

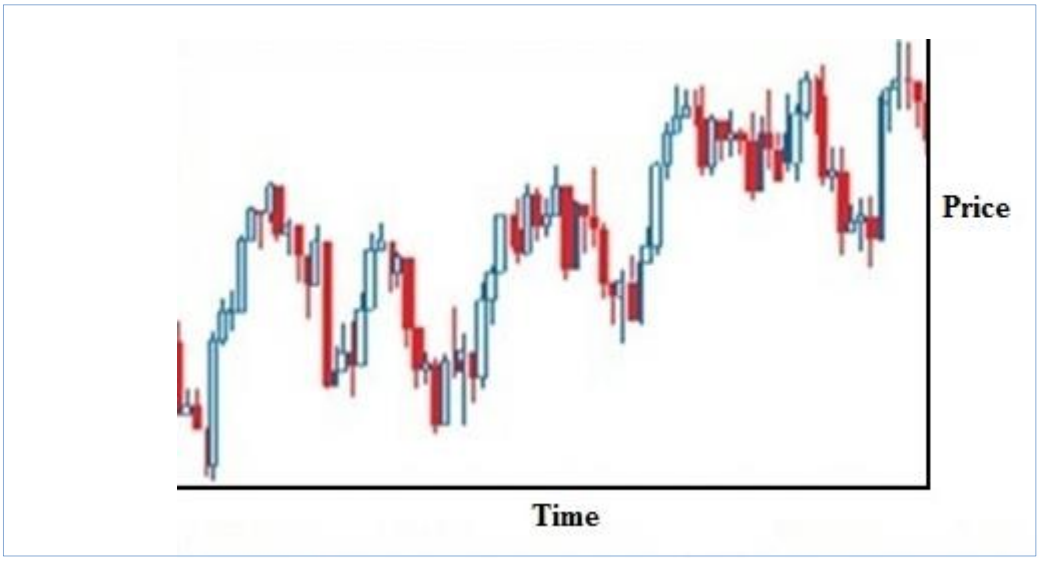


Figure 6.8(b): A candlestick chart

- **Point and Figure Charts**

The point and figure chart was developed more than a hundred years ago and was one of the earliest technical analysis techniques. It is quite complicated and leaves much to the personal rules and interpretation. The time factor is not adequately captured and volume is ignored. Basically price movements are indicated by an “o” for price increase or an “x” for price decrease. Not all price changes are captured. The chartist decides how many consecutive Os or Xs will represent a reversal, in which case a new series will be formed. Figure 6.9 shows an example of the point and figure chart.

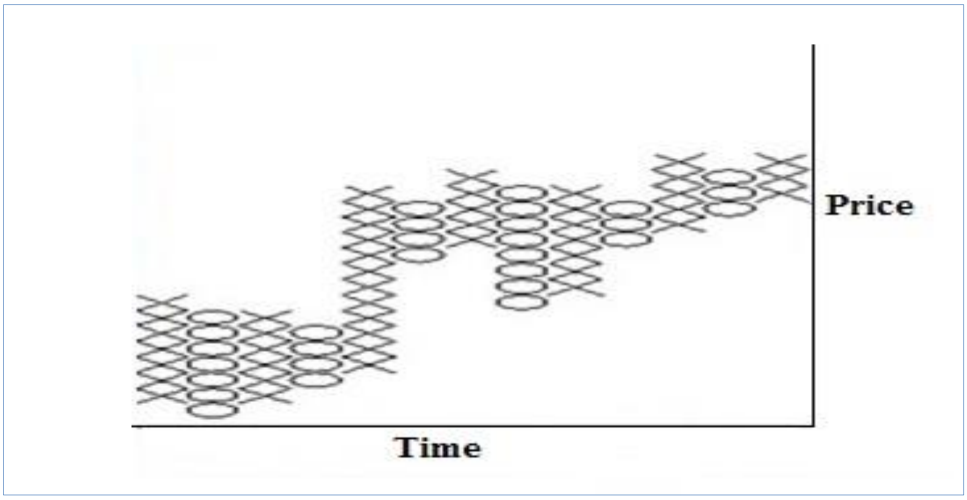


Figure 6.9: A point and figure chart

6.4.5 Charts Patterns

When charts are drawn showing price movements over time, people begin to see patterns formed by the charts. Technicians believe that these patterns repeat themselves over time. Some patterns seem to be quite reliable in their formation and this leads the analyst to have confidence in using the pattern for trading strategies. The challenge is then to detect the pattern and to confirm the pattern in a timely manner to trigger the buy and sell signals. However, caution has to be made that the existence of patterns is uncertain, and the identification of the patterns depends much on the subjective judgments and imagination of the chartist.

Chartists work with two major patterns: *reversal* and *continuation*. A reversal pattern signals that a prior trend will reverse upon completion of the pattern. A continuation pattern, on the other hand, signals that a trend will continue once the pattern is completed. These patterns can be found over charts of any timeframe. In this section, we will review some of the more popular chart patterns that technicians are straining their eyes for, such as: *head and shoulders, double tops and bottoms, triple tops and bottoms,* ***r****ounding bottom* and *cup and handle*. All of these except the last are reversal patterns; the cup and handle is a continuation pattern.

- **Head and Shoulders**

This may be considered to be one of the most popular and reliable chart patterns in technical analysis. It is a reversal pattern. The head and shoulders pattern has four main parts: two shoulders, a head and a neckline. This pattern is more reliable in an uptrend (head and shoulders top or bearish head and shoulders) than a downward trend. In a downward trend it is called the 'head and shoulders bottom' or an 'inverted head and shoulders' or 'bullish head and shoulders' pattern.

For a head and shoulders top pattern the heights of the shoulders represent the intermediate resistance levels and the neckline represents the support level. Since this is a reversal pattern, a head and shoulders top is preceded by a long-term upward trend and the head and shoulders as a whole represents the formation that triggers a long downward trend. To confirm this pattern, the long-term upward trend has to take place and reaches the left shoulder, which is the first resistance point. The price then moves down to the neckline support level before bounces up to the head and back down to the right neckline support and back up to the right shoulder and back downwards towards the neckline support level. The confirmation comes when the neckline is broken after the right shoulder. If this is accompanied by heavy trading volume, the trend becomes more reliable.

The opposite happens in an inverted head and shoulders pattern. This pattern is preceded by a long-term downward trend and a reversal is due, just waiting to happen. An upward trend is confirmed once the head and shoulders, in the inverted form, are completed and the neckline is tested with heavy volume. The head and shoulders top and bottom are shown in Figures 6.10(a) and (b) respectively.

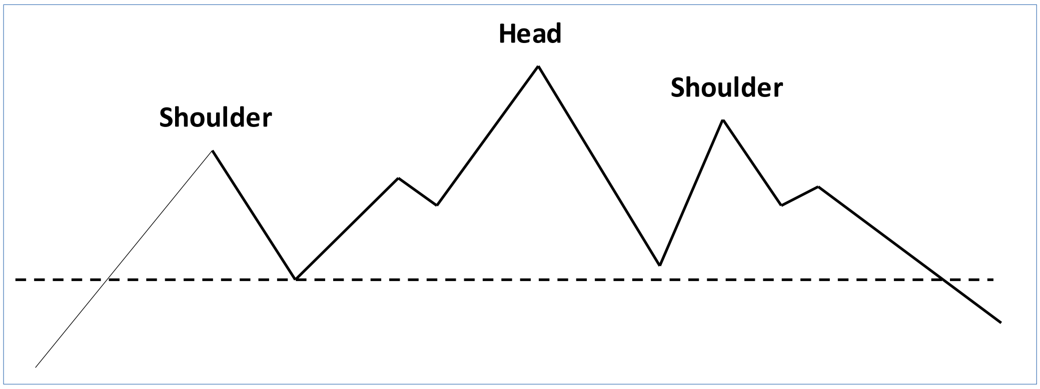


Figure 6.10 (a): Head and shoulders top

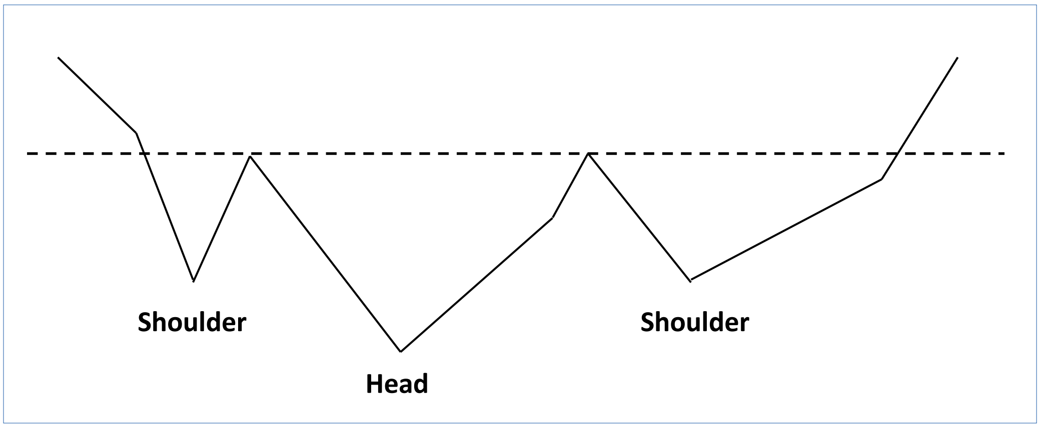


Figure 6.10 (b): Head and shoulders bottom

- **Double Tops and Bottoms**

The double tops and double bottoms are a well-known reversal pattern in price charts. The double tops consist of two highs of almost equal height with an intermediate low point. The condition for a double tops or bottoms pattern is that it has to be preceded with a long-term trend. For a double bottom pattern, it is preceded with a long downward trend, which indicates that a reversal is due. At some point this trend will experience a support level and reverses itself to an intermediate high where a resistance will take place and pushes the price downwards. Once it reaches the support level, the trend will reverse upwards. At this point, if the reversal is accompanied by heavy trading volume, the upward trend will likely go for a long haul.

A double top pattern is analyzed in a similar manner. It is first preceded by a long-term upward trend and checks two resistance points. After two unsuccessful attempts at pushing the price higher, the trend reverses and the price heads downwards. The double tops and double bottom patterns are shown in Figures 6.11(a) and (b) respectively.

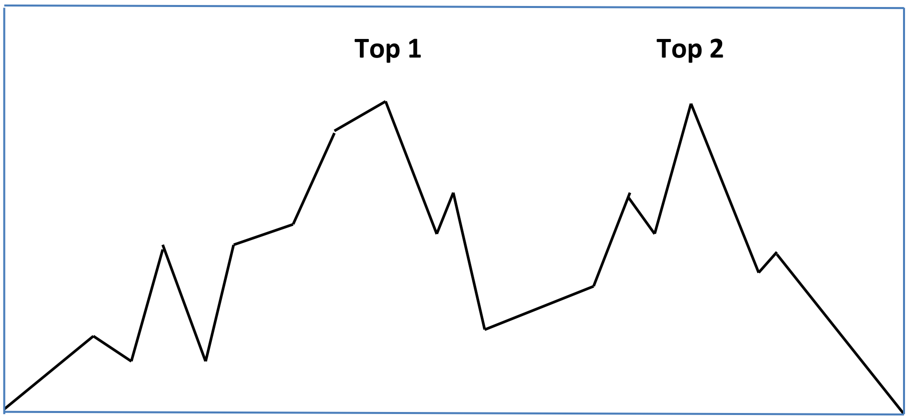


Figure 6.11 (a) : A double top pattern

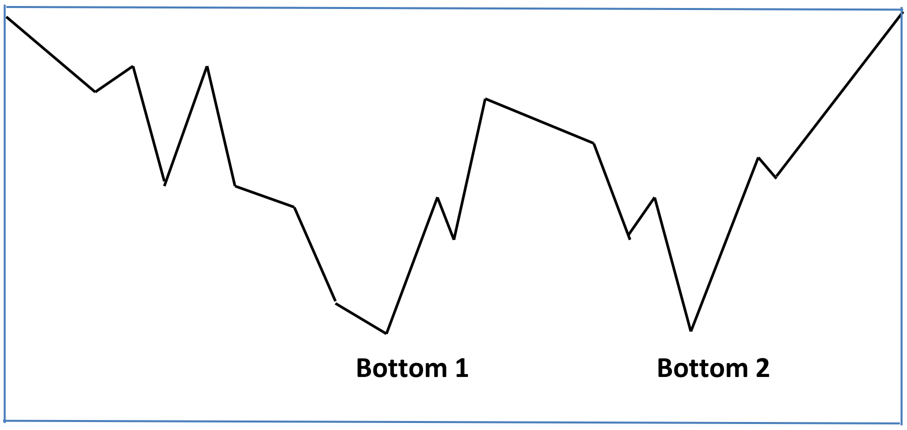


Figure 6.11 (b) : A double bottom pattern

- **Triple Tops and Bottoms**

Triple tops and triple bottoms are another type of reversal chart patterns. This formation resembles the head and shoulders pattern, but the middle peak or trough is not higher or lower than the left or right peaks or troughs. If an analyst mistaken (which is rather unlikely) the triple tops to be a head and shoulders, there will be no serious errors in trading because both patterns, upon confirmation, will lead to similar trading strategies.

However, the triple tops and bottoms can also be easily mistaken for a more commonly found double tops and double bottom formations. This confusion can be costly, because the trader would be taking wrong positions believing it was a double top or bottom and suddenly finds him/her confronted with an immediate price reversal. To avoid this mistake the trader must pay closer attention to the trend after the second peak or trough to see if there will be another reversal at the support or the resistance lines. The triple tops and bottoms patterns are shown in Figures 6.12(a) and (b) respectively.

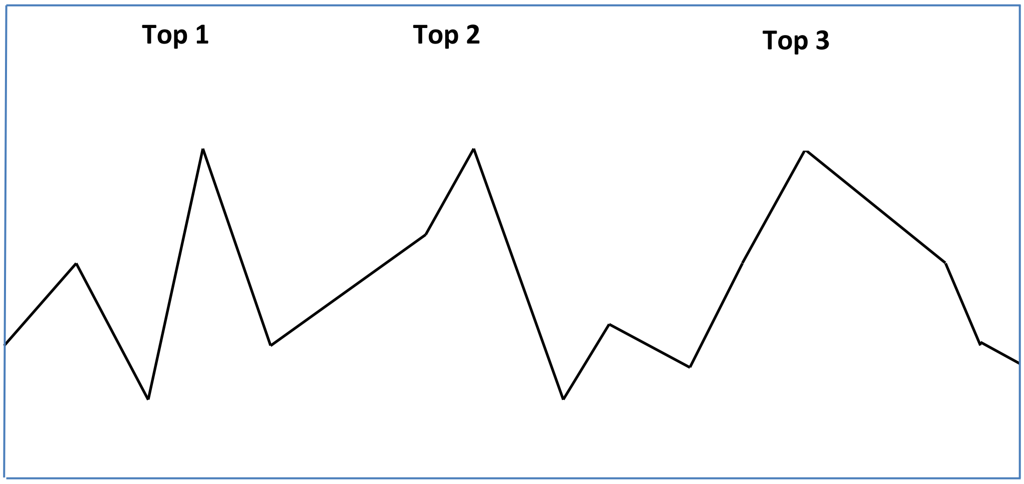


Figure 6.12(a) : Triple top

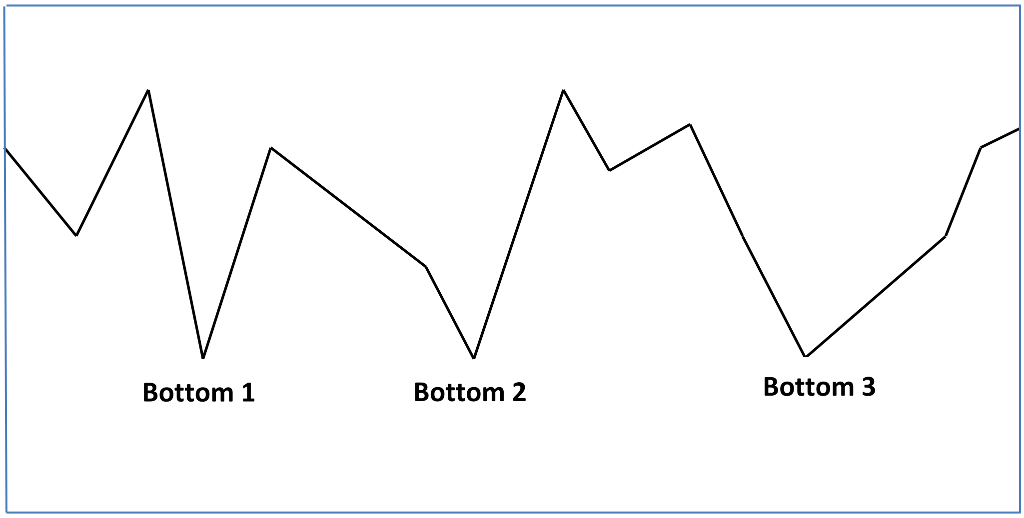


Figure 6.12(b) : Triple bottom

- **Rounding Bottom**

A rounding bottom or a saucer bottom is a long-term reversal pattern in price trend. This pattern is more suitable for long-term price analysis, for example, by using weekly data. This pattern is traditionally thought to last anywhere from several months to several years. The pattern consists of two elements: the downward side of the saucer and the upward side. As with all reversal pattern, the rounding bottom needs to be preceded by a long-term price decline followed by a saucer bottom pattern that takes a while to form. The trend then goes upwards to the right side of the saucer. The confirmation takes place when the saucer form is completed. At the top right of the saucer there could be some consolidation, before the price heads upwards. Again, if the break-up is accompanied by active trading, the upward trend will be more reliable. However, the long-term nature of this pattern and the lack of a clear confirmation trigger, such as the handle in the cup and handle pattern (see below), make it a difficult pattern to trade.

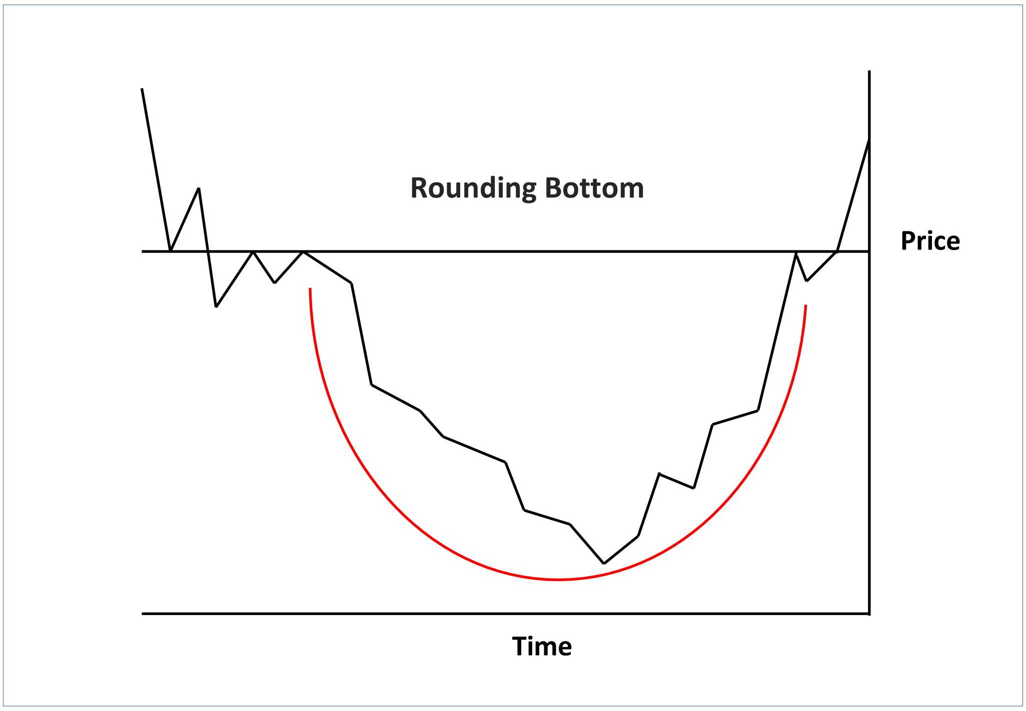


Figure 6.13: Rounding bottom

- **Cup and Handle**

A cup and handle is a bullish continuation pattern and happens on an upward price trend. The reason it is called cup and handle is that the general shape of the price movement resembles a cup with its handle on the right. This pattern has to be preceded by a long-term uptrend before experiencing a correction at some point. This correction takes the form of a round bottom by slowly moving downwards and then upwards. A trader must ensure that the cup is adequately formed with a rounded bottom, as this signifies consolidation of the supply and demand forces to gather an upward momentum. Then at the top of the cup, there has to be the 'handle' that represents a short break in the upward trend. Once the cup and its handle are confirmed, the trader can start trading to take advantage of the continuing upward pattern. However, because of the long-term nature of this pattern it may be subject to a greater uncertainty. The cup and handle pattern is shown in Figures 6.14 below.

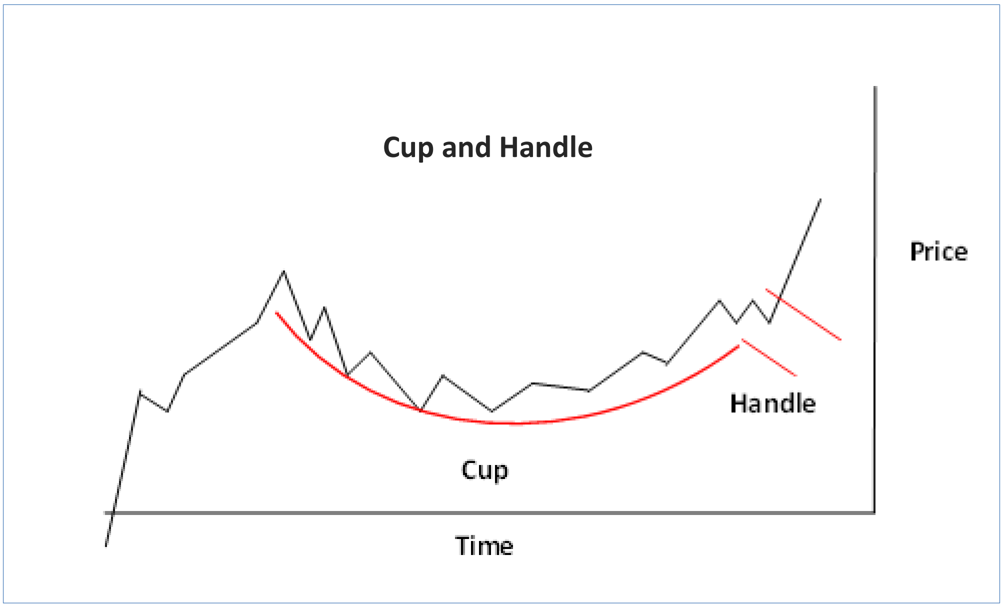


Figure 6.14: Cup and Handle

6.5 Fundamental Analysis Versus Technical Analysis

6.5.1 Differences Between Fundamental And Technical Analysis

Learning Objective 6.5.1 - *Understand* the differences between fundamental and technical stock analyses.

Fundamental analysts believe in market efficiency and that market prices are generally correct in reflecting the fundamental values of firms. But they believe that short-run deviations exist due to arrival of new information that alters the balance between supply and demand. Profits can be made by quickly taking the opportunities of the short-run aberrations before the market finds a new equilibrium. Technical analysis, on the other hand, believes that past prices contain much information about future prices. They believe that investors are largely influenced by emotions and by the actions of other investors, and these are reflected in market price movements. Technical analysts generally do not consider the value of the stock. Their concern is rather the price direction.

Fundamental analysts believe that all new information are instantaneously and correctly reflected in the market prices, whereas technical analysts believe that the information take time to be reflected in share prices. Technical analysts believe that new information take time before it is fully incorporated in prices, because some investors receive the information earlier than others. Therefore, it takes time for the market to fully incorporate the new information. Because of this, technical analysts believe that prices move in trends that can last over long periods.

Fundamental analysts make investment decisions by estimating the fundamental value or intrinsic value of the stock through analysis of the economy, the industry and the company. They then compare the intrinsic value with the market price and take appropriate actions. Technical analysts make investment decisions by examining past market data to predict price trends. They identify trends and patterns in price movements and take appropriate actions to profit from these trends and patterns.

6.5.2 Superiority Of Fundamental Analysis (Fundamental Analysts View)

Learning Objective 6.5.2 - *Know* why fundamental analysts believe that fundamental analysis is superior to technical analysis.

Fundamentalists believe that their analysis is based on sound financial theory and economic reasons. The value of a stock is dependent on the company’s profits and its cash flows. If profits and cash flows are expected to increase, the stock price will increase.

Fundamentalists believe that the market is rational and efficient. If there is new information, this will be quickly reflected in market prices. Because information comes to the market in random fashion, prices should move randomly and there should not be a trend in market price. Any trend claimed by the technician is just an illusion.

6.5.3 Superiority Of Technical Analysis (Technical Analysts View)

Learning Objective 6.5.3 - *Know why* technical analysts believe that technical analysis is superior to fundamental analysis.

According to technical analysts, fundamentalists may obtain superior profits if they have the opportunity to reach new information before others, and are able to process the information quickly and correctly. Technical analysts do not believe that many investors have this ability. Technical analysts also believe that fundamental analysts may find it difficult to time their actions even if they have correctly identified the under-valued or over-valued stocks.

Technical analysts believe that making a fundamental analysis is not an easy task, and its accuracy is not guaranteed. Economic and industry information are quite subjective and financial statement are not sufficiently accurate. Technical analysts consider themselves advantageous not to depend on these sources of information.

Technical analysts need only to recognize a movement to a new equilibrium value for whatever reason (they need not know the reason). In addition, because they do not invest until a specific trend or pattern is confirmed, they contend that they have an edge in terms of timing and predicting price directions, and these are all that matters to make a profit in stock trading.

Review Questions

1. What does it mean by stock analysis? What are its purposes and general approaches?
2. What is meant by fundamental approach in stock analysis?
3. Describe the top-down and bottom-up methods of conducting a fundamental stock analysis.
4. What is meant by technical analysis?
5. Describe the various tools used by technical analysts.
6. What are some of the philosophies and assumptions that are generally used by technical analysts?
7. What are the significant differences between fundamental and technical analysis?
8. How do the fundamental and technical analysts defend and justify their respective approaches?

Sample Multiple Choice Questions

1. A top-down fundamental analysis is carried out in three basic steps: analysis of the economy, analysis of the industry and _________________.

   A. Analysis of the company
   B. Analysis of the market
   C. Analysis of the security
   D. Analysis of the competition

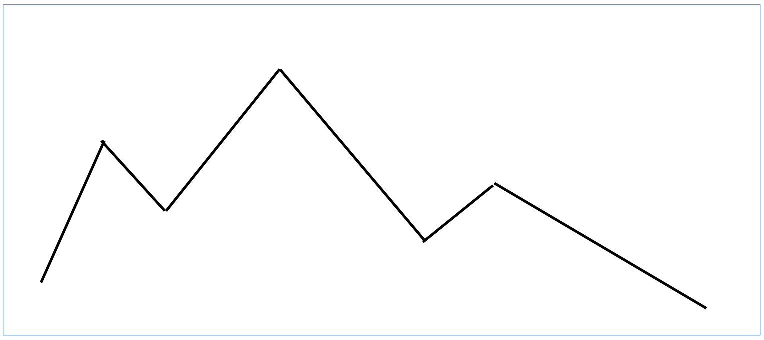
2. Which of the following is NOT one of the tools used by technical analysts?

   A. Equations
   B. Trends
   C. Charts
   D. Patterns

3. Which of the following is NOT related to the "support and resistance" in the context of technical stock analysis?

   A. Support is the lower limit and resistance is the upper limit of price movements.
   B. Support is the price level below which a stock price seldom falls
   C. Resistance is the price level above which a stock seldom rises
   D. Support levels are the levels at which a lot of traders are willing to sell the stock.

4. In the context of technical stock analysis, what is the type of pattern shown by the following chart?



   A. Double top
   B. Triple top
   C. Head and shoulder
   D. Rounding top

5. Which of the following may be considered as justifications for using fundamental stock analysis as opposed to technical analysis?

   I. Fundamentalists believe that their analysis is based on sound financial theory and economic reasons.
   II. The value of a security is dependent on its cash flows; if cash flows are expected to increase in the future, its present value increases, and vice-versa.
   III. Due to much accounting flexibility, financial statements are not sufficiently accurate to depend on for a reliable stock analysis.
   IV. Because information comes to the market in random fashion, price changes are random and there should not be a trend in the market price.

   A. I, II and III only
   B. I, II and IV only
   C. I, III and IV only
   D. I, II, III and IV.

Corporate Actions 7

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

7.1 Dividend

7.1.1 What Is Dividend?
7.1.2 The Effect Of Dividend On Share Price
7.1.3 Dividend As A Signaling Device
7.1.4 To Pay Or Not To Pay Dividend?

7.2 Capital Changes

7.2.1 Rights Issue
7.2.2 Bonus Issue
7.2.3 Stock Split

7.3 Mergers And Acquisitions

7.3.1 What Are Mergers And Acquisitions?
7.3.2 Sources Of Synergy
7.3.3 Types Of Mergers
7.3.4 Corporate Break - Ups

7.4 Initial Public Offering

7.4.1 What Is An Initial Public Offering?
7.4.2 Benefits Of Going Public
7.4.3 IPO Process
7.4.4 IPO Process In Saudi Market
7.4.5 The Aftermarket

Introduction

Corporate actions may be defined as events that bring material changes to companies and affect their values. Corporate actions are board's decisions on key corporate issues that generally need shareholders' approval in a general meeting. Dividends, rights issue, bonus issue, mergers and acquisitions and spin-offs are some of the examples of corporate actions. This chapter discusses various corporate actions and their implications to share values and investors' investment decisions. The chapter is important to broker-dealers as they need to know the meaning of these actions and how the market is supposed to be reacting to them. The first section of this chapter discusses issues relating to dividend payment, which is a very important corporate decision for some types of investors. This is followed by discussions on capital changes decisions, such as: rights issue, bonus issue and share splits. The next section discusses mergers and acquisition and related issues. The last section discusses the initial public offerings, which is an important process for companies that want to go for public listing.

7.1 Dividends

7.1.1 What Are Dividends?

Learning Objective 7.1.1(a) – *Know* the meaning of dividends and the difference between cash and stock dividends

Learning Objective 7.1.1(b) – *Understand* the meaning of various dividend terminologies

When we discuss about dividends and dividend policy, we are really talking about dividends on common shares; preferred dividends are not much of an issue because of its fixed and guaranteed nature. Dividends are a distribution of a company's earnings to its shareholders. However, dividend payment to common shareholders is not mandatory; rather management has the discretion to pay or not to pay dividends. Dividend decision needs shareholder approval in a general meeting. Most secure and stable companies pay dividends to their stockholders. High-growth companies seldom pay dividends because all of their profits are reinvested to help sustain higher-than-average growth.

There are two types of dividends: cash dividends and stock dividends. A cash dividend is straightforward. For each share owned, a certain amount of money is distributed to each shareholder. Thus, if an investor owns 100 shares and the cash dividend is SR0.50 per share, the owner will receive a check for SR50. When a cash dividend is declared and issued, the equity of a company is affected because the aggregate value of firm's equity is reduced.

A stock dividend is a distribution of company's stock instead of cash. A stock dividend of 10%, for example, means that for every 10 shares owned, the shareholder receives an additional share. If the company has 1,000,000 shares outstanding, the stock dividend would increase the company's outstanding shares to a total of 1,100,000.

Dividend Terminologies

The following are various terminologies relating to dividend that are commonly used in the market place.

Declaration date: This is the day the board of directors announces the company's decision to pay a certain amount of dividends. On this date, the board will also announce a date of record, ex-dividend date and a payment date.

Cum-dividend: Cum dividend means "with dividend". A buyer who buys a stock cum-dividend is entitled to the dividend distribution. A stock trades cum-dividend up until the ex-dividend date when it is traded without dividends entitlement.

*Ex-dividend***:** Ex-dividend means without dividends. This refers to the stock that is traded without entitlement to the current dividends. When dividends are declared the ex-dividend date will be specified. On this date the stock will be traded without the dividend right. In other words, this is the date the stock goes ex-dividend. Existing holders of the stock will receive the dividends even if they now sell the stock, whereas anyone who now buys the stock will not receive the dividends.

Record date: To receive dividends, shareholders must be listed in the companies registered shareholder on or before the date of record. This date is typically two trading days after the ex-dividend date. Shareholders who are not registered as of this date will not receive the dividends.

Payment date: This is the day when the dividend checks will be issued and mailed to the registered shareholders of a company as of record date.

*Dividend-yield***:** Dividend yield is obtained by dividing dividend per share by the current market price of the stock. Dividend yield is one form of return to shareholders, in addition to capital gains that are obtained from price appreciation when the shares are sold.

Dividend payout ratio: This is commonly referred to as the dividend policy of the company. Dividend payout ratio is the percentage of earnings paid to shareholders as dividends. This is calculated by dividing the yearly dividend per share with the earnings per share or equivalently by dividing total amount of dividends paid with total net income.

*Stock dividend***:** Instead of distributing cash dividends to its shareholders, a firm may instead declare a stock dividends, in which case shares are distributed to shareholders for free. Shareholders will receive additional shares, not cash

7.1.2 The Effect Of Dividends On Share Prices

Learning Objective 7.1.2 – *Know* the impact of dividends on stock prices

What happen to share prices when the company pays cash dividends? When dividends are paid, share prices should drop on the ex-date. If cash dividends are paid, firm's equity will be reduced, and value per share will be reduced accordingly. In a no tax situation, the share prices should drop on the ex-dividend day by exactly the same amount of dividend per share paid. If the cum-dividend price of the share is SR20 and it pays a dividend of SR0.50 per share, the price should drop to SR19.50 at the opening of the trading day when it goes ex-dividend. This price adjustment is not made by the firm; it is determined by market forces. Due to various market factors, the price drop may not be exactly the same as the dividend amount. There are also arguments that market price will drop by less than the dividend amount in a taxable market because shareholders are factoring the tax effect on dividends.

For stock dividends, the share price will also drop because the firm's equity is now divided by an increased number of shares. The extent of price drop will be roughly proportionate to the stock dividend declared. However there are arguments that price drop will be less than proportional due to tax on capital gains that need to be paid if shareholders sell their shares.

7.1.3 Dividends As A Signaling Device

Learning Objective 7.1.3(a) –*Understand* that firms may use dividend declaration as a signal to the market regarding the firm's future profitability.

Learning Objective 7.1.3(b) – *Understand* the perceived impact of dividend changes on stock prices.

The announcement of cash dividends can be used as a signal to the market. To understand the signaling feature of dividends, consider these two observations. First, the management of the company should have more information about the company than investors in the market. Therefore it is reasonable to assume that the management is more knowledgeable regarding the firm's future profitability than the public. Second, studies have shown that most managers prefer a stable dividend policy, and they will normally not change dividend policy unless fundamental changes take place in the company that affect its long-term profitability.

Given the above observations, when a firm announces a dividend increase, the market will interpret this as a signal from the management that firm's future performance will improve. Because of this expectation, the market will push up the stock prices. On the other hand, if the firm announces a dividend decrease, this will be taken as a negative signal, and stock price will adjust downward. However, it should be cautioned that the dividend and share price relationship explained in this section is just a hypothesis or a probable prediction. There may be exception to this relationship. But many studies, in developed as well as developing markets show results that are consistent with the signaling theory.

7.1.4 To Pay Or Not To Pay Dividends?

Learning Objective 7.1.4(a) – *Know* the basic theories of paying dividends.

Learning Objective 7.1.4(b) – *Know* the reasons for firms paying or not paying dividends.

Learning Objective 5.1.4(c) – *Know* the arguments for and against paying dividends.

Should a firm pay or not pay dividends? This has been an unsolved issue since man invented dividends. There are three schools of thought on this matter. The first is the proponents of dividends who maintain that dividends are desirable and companies that pay dividends will show greater market values than otherwise similar firms that do not pay dividends. The second school of thought is a stark opposite of the first; using tax arguments, it says that dividends are undesirable and lead to value deterioration. Since dividends are taxable, shareholders are better off letting earnings retained by firms for business expansion that will lead to an increase in firm values. The third school, led by the eminent Professors Modigliani and Miller (both are Nobel laureates), showed that under certain conditions dividends are not related to firm value.

Given the above controversies, it is difficult to prescribe a suitable dividend policy for companies. It is therefore not surprising to find that in practice, some companies pay dividends, while others do not. Investment analysts argue that growth companies do not normally pay dividends because they need the earnings to finance their rapid growth. But for stable companies that face a normal growth situation, and possibly lacking good investment opportunities, it would be best for the shareholders to be paid dividends. However, this may seem just a logical argument and not based on rigorous economic justification.

Let us move over to shareholders and ask the question: do they prefer dividends? Based on the traditional economic theory on factors of production, shareholders, playing the roles of capital providers and entrepreneurs are entitled to two forms of reward. The first is reward to capital in the form of interests or dividends. The second is reward to entrepreneurship for taking risk, which are profits that may or may not be distributed as dividends. Considering that real investors are those who want to keep their shareholding on long-term basis, the only income from their investment would be in the form of cash dividends. But it may be argued that an increase in firm's value is also a reward to shareholders. So in theory, there is really no clear answer as to whether investors prefer dividends or otherwise.

Arguments For Dividends

- Dividends are earnings or profits obtained from running a business. Earnings belong to the capital providers for undertaking the business. Dividends are therefore the right of the shareholders.
- Regular and "high" dividend payments are considered a resolution of uncertainty. This is the argument that "a bird in the hand is worth two in the bush". If dividends are not paid, it will become part of the firm equity used to finance business expansion that is subject to uncertainty in returns.

- Dividends are also attractive for investors looking to secure current income.
- There are many studies that find that share prices are affected by management's decision to increase or decrease a dividend distribution. Companies that have a long-standing history of stable dividend payouts would be negatively affected by lowering or omitting dividend distributions; these companies would be positively affected by increasing dividend payouts or making additional payouts of the same dividends. Furthermore, companies without a dividend history are generally viewed favorably when they declare dividends.

Arguments Against Dividends

- Some financial analysts feel that the consideration of a dividend policy is irrelevant because investors have the ability to create "homemade" dividends. Homemade dividends simply mean that if companies are not paying dividends, its shareholder can sell part of their shares to get the income they desire.
- Those investing in shares make their investment with full knowledge that income (dividends) are not guaranteed. Had they preferred an investment that provides a steady stream of income, they would go for bonds instead of shares.
- Due to the fact that in most countries, there are taxes on dividend income, it is argued that shareholders are better off not receiving dividend. Let the firm reinvest the earnings for further expansion, and this will result in an increase in the firm value.
- Rather than paying out cash dividends, a company may pay shareholders in different forms, such as repurchasing the company's shares, undertaking more profitable projects, acquiring new companies and reinvesting in financial assets.

7.2 Capital Changes

7.2.1 Rights Issue

Learning Objective 7.2.1(a) – *Understand* the meaning of a rights issue and its purpose.

Learning Objective 7.2.1(b) – *Know* what needs to be done by shareholders receiving a rights offer.

Learning Objective 7.2.1(c) – *Know* what might happen to the share prices when the shares go ex-rights.

What is a rights issue?

A rights issue is an offering of new shares to existing shareholders, for the purpose of raising additional capital. A rights issue will increase the number of shares outstanding and the paid-up capital of the firm. It is called a 'right' because it is the right of the shareholders as per companies' charter, to be entitled to any new issues of common stocks in order to preserve their proportionate ownership of the firm.

This right is called ‘pre-emptive right’. The new issues are normally offered at a discount to the market price. The new issues are called ‘seasoned equity offerings’, which is to be differentiated from an ‘initial offering’. A seasoned offering is the offer for sale of new shares by a listed company whose shares are already publicly traded, whereas an initial offering is an offer for sale of new shares by firms that are going public.

Shareholders’ rights

When there is a rights issue, existing shareholders have the right to buy a specified number of new shares from the firm at a specified price. If the number of new shares is 20% of the existing shares, all shareholders will be entitled to an increase of 20% of their shares held. Therefore a shareholder with 1,000 shares will be entitled to buy 200 new shares. When offered the new shares, the shareholder has the option either to take the offer to buy the new shares, or not to take the offer and let the rights expire. Under normal circumstances, it is wise for the shareholder to buy the new shares because they are offered at a discounted price. In some markets, the rights may be detached from the mother share and sold separately. Because the company receives the cash proceed from its shareholders, a rights issue is often referred to as a ‘cash call’.

Rights issues may be underwritten. The role of the underwriter is to guarantee that the funds sought by the company will be raised. Typical terms of an underwriting require the underwriter to subscribe for any shares offered but not taken up by shareholders.

The effect of a rights issue on stock prices

When a rights issue is announced, the company will also announce the offer price, the entitlement ratio and the ex-right date. Many studies in different markets document a price increase on the announcement date of the rights issue. The price increase may be due to the fact that the new capital will be put to good use that will increase earnings per share. However, on the ex-rights date, there should be a slight downward adjustment of the share prices because the new shares are offered at a discounted price.

7.2.2 Bonus Issue

Learning Objective 7.2.2(a) –*Understand* the meaning of a bonus issue and its similarities and differences with a stock dividend.

Learning Objective 7.2.2(b) -*Understand* the possible market reaction to the announcement of a bonus issue and on the bonus ex-date.

What is a bonus issue?

Bonus issue is an offer of free new shares to existing shareholders. It is sometimes known as a ‘scrip issue’ or ‘capitalization issue’. New shares are issued to shareholders in proportion to their holdings. For example, the company may give one bonus share for every five shares held. Since these are free shares given to shareholders without any cash involved, it has no effect on total shareholder wealth. In this sense, a bonus issue is similar to a stock dividend. But there is a difference in the accounting treatment of the capitalization accounts: a bonus issue is capitalization of the share reserve account, whereas a stock dividend results in a transfer from retained earnings account to capital accounts.

A company may decide to declare a bonus issue when there are sizeable accumulations in the reserve accounts as a result of asset revaluation. Hence, by issuing the bonus, the company capitalizes the accumulated reserves. Although the issuance of bonus increases the paid up capital of the company, it does not represent an increase in shareholders' funds as it is only a transfer of funds from reserves to the share capital account.

The effect of bonus issue on share prices

A bonus issue is a distribution of free additional shares to the existing shareholders. A bonus issue will increase the number of shares outstanding, but the total equity of the company and shareholder wealth remains unchanged. A bonus issue is usually mentioned in ratio form, like 1:2, which means one new share for every two shares held. This will increase the number of shares outstanding by 50%. There will be a price drop on the ex-day due to the increased number of shares. For a 1:2 bonus issue, share price should drop by about 33% on the ex-day. For a 1:3 bonus issue, the ex-day price will be 25% less than the cum-bonus price.

Theoretically, a bonus issue, like a stock dividend, is not a thing of value to shareholders. Bonus issues are done in order for the company to capitalize its accumulated capital reserve account. However, many empirical studies found positive market reaction to a bonus issue announcement. It is rationalized that the price increase may be due to the market expectation that total dividend will increase in the future due to the increase in the number of shares. Investors expect future dividend per share to remain the same, or even if it is reduced, it will not be proportionate to the number of shares increased.

7.2.3 Stock Split

Learning Objective 7.2.3(a) - *Know* the meaning of stock split and the reasons for making a stock split.

Learning Objective 7.2.3(b) - *Know* the possible effect of stock split announcement on share prices and the theoretical price adjustment on the ex-day.

Learning Objective 7.2.3(c) - *Know* the meaning of a reverse stock split and its purpose.

What is a stock split?

As the name implies, a stock split divides each of the outstanding shares of a company. When a company splits shares there is nothing meaningful happening except the number of shares outstanding and their par value. A 2:1 split (2-for-1) for example means a shareholder will now have two new shares in place of one old share held. Each share now will have its par value halved. There is no cash involved. Total shareholder value remains the same, but price per share will be halved as well. A stock split is actually a non-event, meaning that it does not affect a company's equity, or its market capitalization.

The purpose of stock split

What is the reason for a firm to split its share? It is for liquidity reasons. The rationale for splitting shares is simply to reduce its trading price in order to promote more active trading on the stock. For companies whose stock is trading at an extremely high market price, which is beyond reach of many investors, the management may resort to share split to reduce the price to a more affordable trading range.

The result of the 2-for-1 stock split in our example above is two-fold: (1) the drop in share price will make the stock more attractive to a wider pool of investors, and (2) the increase in available shares outstanding on the stock exchange will increase the size of 'free-float', that is, more shares are available to interested buyers. Although, in theory firm's market capitalization does not change, the greater liquidity and higher demand on the share will typically drive the share price up.

A reverse stock split

A company whose share price is too low may want to increase the price to a popular trading range by making a 'reverse share split', which is the opposite of a normal share split. If a $1 per share stock had a reverse split of 1 for 10 (1:10), holders would have to trade in 10 of their old shares for one new share, and the stock price increases say from $1 to $10 per share. A company may decide to use a reverse split to avoid being labeled as a 'penny stock'. At other times companies may use a reverse split to drive out small investors.

7.3 Mergers And Acquisitions

7.3.1 What Are Mergers And Acquisitions?

Learning Objective 7.3.1 - *Understand* the meaning of mergers and acquisitions and the differences between them.

Mergers and Acquisitions or famously known it its abbreviation as 'M&A' are combination of companies. A merger takes place when two firms agree to combine together and go forward as a single new company rather than remain separately owned and operated. The stocks of both companies are exchanged for the stock of the new company.

Acquisition is when one company takes over or buys-over another and clearly established itself as the new owner. The target company ceases to exist, the buyer 'swallows' the business and the buyer's stocks continue to be traded. Acquisitions can be friendly, where all parties feel satisfied with the deal, or can also be 'unfriendly' or even 'hostile', in which case it is usually known as a takeover. In an acquisition a company can buy another company with cash, stock or a combination of the two.

In a 'reverse acquisition' a strong and profitable private company merges with or acquires a listed company usually one with limited business or assets. Together they become a new company with listed shares. They can then issue new shares to raise additional capital. This short-cut route to financial market may be taken by a private company that has strong prospects and is eager to raise new financing from the capital market, but does not have the patience to wait and fulfills the required listing criteria.

Regardless of their category or structure, all mergers and acquisitions have one common goal: they are all meant to create synergy that makes the value of the combined companies greater than the sum of the two parts. The success of a merger or acquisition depends on whether this synergy is achieved.

7.3.2 Sources Of Synergy

Learning Objective 7.3.2 - *Understand* the meaning of synergy and its sources in mergers and acquisitions.

Synergy is a concept that refers to the idea that the combined value of two companies is greater than the sum of their respective values in separation. Some expressions put it as 2+2=5, or AB>(A+B). The key principle behind mergers or acquisitions is to create shareholder value over and above that of the sum of the original two companies. Common sources of synergy are as follows:

- *Operational efficiency.* After the merger, there is no need to have two CEOs and two sets of senior management and two sets of workers as before. Only relevant and most productive workers will be selected in the new company. There will be a considerable saving in human resource expenses. In addition those retained are selected based on merits, which means productivity will be enhanced.
- *Economies of scale.* Fixed costs such as operating system, IT system, some fixed assets, etc. are now better utilized. There will be less excess capacity. When making purchases, placing bigger orders can save costs, and also when placing larger orders, companies have a greater negotiating power.
- *Acquiring new technology.* To stay competitive, companies need to stay on top of technological developments and their business applications. By buying a smaller company with unique technologies, a large company can maintain or develop its competitive edge.
- *Improved market reach and industry visibility.* Sometimes it is easier and faster to go into a new market by acquiring a company already operating in the area. A merger may expand two companies' marketing and distribution, giving them new sales opportunities. A merger can also improve a company's standing in the investment community, making it easier to raise funds for expansion.

7.3.3 Types Of Mergers

Learning Objective 7.3.3 - *Know* the various types of mergers.

There are various types of mergers such as:

- *Horizontal merger*. Two companies that are in direct competition and share the same product lines and markets. This is an important source of scale economies. In some countries, there are anti-trust laws that prevent this form of merger, because it reduces competition.
- *Vertical merger*. This is a merger between a customer and company or a supplier and company, for example a cone supplier merging with an ice cream maker, or a construction firm merging with a cement manufacturer. These are mergers along a product chain and lead to cost savings and operational efficiency.
- *Market-extension merger*. This is a merger between two companies that sell the same products in different markets. The merger will expand the market share of the companies and benefits will be in the form of overheads sharing and market control.
- *Product-extension merger*. This is a merger of two companies selling different but related products in the same market.
- *Conglomeration*. This is a merger of two companies that have no common business areas. This merger may have some elements of cost savings and scale economies, but may face difficulties due to differences in product-market strategies.

7.3.4 Corporate Break-Ups

Learning Objective 7.3.4(a) - *Know* the different ways of corporate reorganization through break-ups.

Learning Objective 7.3.4(b) - *Understand* various method of corporate break-ups: sell-offs, equity carve-outs and spin-offs.

Learning Objective 7.3.4(c) - *Understand* the various advantages and disadvantages of corporate break-ups.

As mergers and acquisitions capture the imagination of many investors and companies, the idea of getting smaller might seem counterintuitive. But corporate break-ups, like sell-offs, equity carve-outs and spin-offs can be very attractive options for companies and their shareholders.

Sell-Offs. A sell-off is the outright sale of a company's subsidiary. It is also known as a divestiture. When a parent company finds that one of its subsidiaries that is operating in another line of business has the ability to operate independently, the parent may sell-off this subsidiary in order to focus on the original core of business. The parent can also benefit from the proceeds of selling the subsidiary.

Equity Carve-Outs. In this case, a parent company transforms a subsidiary into a public listed company through an initial public offering (IPO) of shares and keeps a controlling stake in the new company. This strategy may be taken when a parent company finds that one of its subsidiaries is growing faster and carrying higher valuations than other businesses owned by the parent. A carve-out generates cash because shares in the subsidiary are sold to the public.

Spin-offs

A spinoff occurs when a subsidiary is transformed into an independent company, but not through selling shares, but through distributing free shares in the form of stock dividend. No cash is raised and so raising money is not the objective of spin-offs. Like the carve-out, the subsidiary becomes a separate legal entity with a distinct management and board. Spinoffs are usually healthy subsidiaries.

Advantages of Corporate Break-ups

- The rationale behind a break-up is that "the parts are greater than the whole". It can help a parent company to raise additional equity capital. A break-up can also improve the respective companies' valuation because both the parent and the subsidiary are now more focused in their respective businesses.
- When operating as independent entities, shareholders will get better information about these business units because they now issues separate announcements and financial statements. This is particularly useful when a company's traditional line of business differs from the separated business unit. With separate financial disclosure, investors are able to better evaluate the parent and the new company separately.
- Separating a subsidiary from its parent can reduce internal competition for corporate funds.
- For employees of the new separate entity, there is a publicly traded stock to motivate and reward them. Stock options in the parent often provide little incentive to subsidiary managers and employees, because their efforts are often buried in the firm's overall performance.

Disadvantages of Corporate Break-ups

- After the break-up the firms will become smaller. Being small firms, they may face difficulty in raising funds in the capital market, especially for the subsidiary firm.
- The parent now becomes smaller and risk being eliminated from a major index portfolio. Also being small, both the parent and the new company may find it difficult to attract institutional investors.
- Operating as separate companies means duplication of overhead costs, which is the opposite effect of merger. In other words, the synergy that was enjoyed earlier is now lost.

7.4 Initial Public Offering (Ipo)

7.4.1 What Is An Initial Public Offering?

Learning Objective 7.4.1 - *Understand* what is an initial public offering (IPO) and its purpose.

Initial public offering or IPO refers to the first sale of stock by a company to the public. If the company has never issued equity to the public, and this is the first time it is doing so, it's known as an IPO. It is also known as an ‘unseasoned new issue’, to be differentiated from a ‘seasoned new issue’ which means an offering of new shares by a company already listed on an exchange.

Companies fall into two broad categories: *private and public*. A company is usually first formed as a private company by its founding members. The shares of this private company are normally closely held by a few shareholders who are family members or close associates. Most small businesses are privately held, although there are some large companies that are privately held. Private companies are not listed in a stock exchange and their shares are not sold to the public.

When a private company grows larger it may come a time when the company needs to be transformed into a public company in order to raise more capital from the capital market. In the process of becoming a public company, new shares need to be issued. This offering of the new shares, in addition to offering a portion of the shares belonging to the founding members, to the public is called an ‘initial public offering’. Upon successful offering of the IPO, the shares of the company will normally be listed on stock exchange for public trading. This is why doing an IPO is also referred to as ‘going public’.

Public companies have thousands or millions of shareholders and are subject to strict rules and regulations. They must have a board of directors and they must comply with strict reporting and disclosure rules. Their performance and activities are closely watched, monitored and analyzed by the regulatory authorities as well as investors. From an investor's standpoint, the most exciting thing about a public company is that the stock is traded in the open market. Any eligible person with cash can buy the shares and become one of the owners of the company.

7.4.2 Benefits Of Going Public

Learning Objective 7.4.2 - *Know* the various benefits of a private company becoming a public listed company.

The main reason for a private company to become a public company is to raise funds in the capital market. A company can increase its capital through borrowing (from banks or from issuing private debts) or through issuing equities (shares). However, there may be limits to bank borrowing. Therefore issuing securities to the public, in the form of bonds and equities are the most common way of raising capital. This is accomplished by first becoming a public company and has its shares listed in a stock exchange. Being publicly traded also opens many financial doors:

- Public companies can usually get better rates when they issue debt.
- As long as there is market demand, a public company can always issue more stock.
- Thus, mergers and acquisitions are easier to do because stock can be issued as part of the deal.
- Trading in the open markets means liquidity. This makes it possible to implement things like employee stock ownership plans, which help to attract top talent.

In addition, being listed on a stock exchange carries a considerable amount of prestige. This is because the companies must fulfill various requirements and listing criteria before it is approved for listing. When listed, it will be subject to a continuous scrutiny by the authorities and the investing public.

7.4.3 IPO Process

Learning Objective 7.4.3 - *Understand* the general IPO process.

When a company wants to go public, the first thing it does is hire an investment bank to manage the new share issue. The process of undertaking the task of managing the new share issue is called 'underwriting' and this is normally done by an investment bank. An underwriter is a middleman between companies and the investing public. The underwriter will take the tasks of making the registration process, determining the offer price, preparing a prospectus, marketing the new shares, managing the applications for subscriptions and registration of the shareholders.

The underwriting agreement between the company (the issuer) and the investment bank (underwriter) is normally structured on the basis of a 'firm commitment' or a 'best effort'. In a firm commitment, the underwriter guarantees that the required amount of capital will be raised by buying the entire offer and then reselling to the public. In this method, the underwriter assumes all inventory risk and is responsible for any unsold inventory.

In a best efforts agreement, the underwriter acts as an agent for the issuing company and does not guarantee the amount sold. The underwriter undertakes to try its best to sell the new issues, but if the underwriter is unable to sell all the issue, it will not take responsibility for the unsold portion.

If a single underwriter is unable to shoulder all the risk of an offering, may be because the amount is too large, it can form a syndicate consisting of several of underwriters. One underwriter leads the syndicate and the others sell a part of the issue.

7.4.4 IPO Process In Saudi Market

Learning Objective 7.4.4 - *Understand* the IPO process for stock listing on the Saudi Stock Exchange.

This section discusses the process of initial public offering of new common shares for companies going for public listing in the Saudi stock exchange.

A company that wants to go public will engage an investment banker to manage the IPO. The investments bank function is within the authorized person, performing the *arranging* function and become the Financial Advisor to the issuing company. The Financial Advisor will perform the necessary process as required by the laws and regulations governing the offering of new shares. Approval of the Authority need to be secured before the new shares can be offered to the public.

The financial advisor puts together an 'application for registration and admission to listing' and the necessary supporting documents as required by the Listing Rules, to be filed with the Authority. These documents include, among others, a financial and legal due diligence report, past audited financial reports of the company (usually for a minimum of three-year period) and a prospectus. The prospectus contains information about the offering as well as company information such as historical background of the company, business activities, management team, uses of the offering proceeds, board of directors and major shareholders.

Once the application is approved, the Financial Advisor prepares the 'red herring' prospectus in anticipation of the road show and book-building. The red-herring prospectus is the same as the normal prospectus, but without the offer price. With the red herring in hand, the Financial Advisor goes on a road-show, targeting institutional investors to begin the book-building process. The Authority requires a minimum of 100% coverage of the offering shares in the book building process. The highest price that results in the 100% coverage will determine the public offer price. In terms of the number of shares offered, the Listing Rules require that at least 30% of the issued share of the company must be offered to the public (retail investors).

Once the book-building process is completed and vetted by the Authority, the Financial Advisor will announce the institutional coverage to the public by stating the offer price, minimum and maximum amount of the application and the list of receiving entities which are participating authorized persons and commercial banks. The retail subscription can be made through ATMs in addition to phone and internet banking facilities or through filling in a physical form. The application is normally open for 7 calendar days. The new shares will be listed for public trading in about 7 days after the allocation.

7.4.5 The Aftermarket

Learning Objective 7.4.5(a) - *Know* the reasons why IPOs are in general underpriced.

Learning Objective 7.4.5(b) - *Understand* that IPOs are good investments in most cases.

Almost in all stock market, IPOs are offered at a discounted price. This 'underpricing' is deemed necessary as a form of compensation to investors for taking additional risks because the company is an unknown company at that time. Further, underpricing is also necessary in order to ensure a successful public offering, that is, to ensure all the shares are fully subscribed. Because of this underpricing, it comes as no surprise that the stock price will fetch a premium once it is publicly traded on the stock exchange. Those who were successful in purchasing the stock during the IPO stage will stand to gain abnormal returns on the listing day and many of them will indeed cash out on the first day itself.

To prevent a mass selling that will have a negative impact on the new share price, the underwriters sometimes make company officials and employees sign a lock-up agreement. Lock-up agreements are legally binding contracts between the underwriters and insiders of the company, prohibiting them from selling any shares of stock for a specified period of time. The period can range anywhere from three to 24 months. Ninety days is the minimum period stated under Rule 144 of the U.S. law, but the lock-up specified by the underwriters can be longer. When lockups expire all the insiders are permitted to sell their stock.

Note that in the local market, usually there is no moratorium applied to any type of shareholders who are allocated IPO shares. Individuals and institutional shareholders of the newly issued shares can sell their shares on the first listing day or any other day as they please. However, selling of shares by founding shareholders is subject to certain restrictions.

Review Questions

1. What is dividend? What is the difference between cash dividends and stock dividends? What are the impacts of dividend on stock prices?

2. Describe the various terminologies associated with dividend? What are the basic theories relating to the payment of dividend policy?

3. What is a rights issue? Why do companies make rights issues? What action may be taken by a shareholder when receiving a rights offer?

4. What is a bonus issue? Describe its similarities and differences with a stock dividend.

5. What is a stock split? Why company make stock split? What would be the possible effect of stock split announcement on share prices?

6. Explain what may happen to the share prices when the shares go ex-dividend, ex-rights, ex-bonus, and ex-splits?

7. What is a merger and what is an acquisition? Describe the key differences between the two exercises.

8. What is the meaning of ‘synergy’ in the context of mergers and acquisitions? What are the common sources of synergy?

9. Describe the different types of mergers and their synergy implications.

10. Describe various method of corporate break-ups such as sell-offs, equity carve-outs and spin-offs. What are the advantages and disadvantages of corporate break-ups?

11. What is an initial public offering (IPO)? Describe some key benefits of a private company becoming a public listed company?

12. Describe the general IPO process. Describe the IPO process in the Saudi market?

13. Why are IPO usually under-priced?

Sample Multiple Choice Questions

1. When a company pays cash dividend, what happens to its share price on the ex-dividend date?

   A. The price should remain unchanged because dividend is paid out of profit.
   B. The price should drop equal to the amount of dividend paid.
   C. The price should increase because investors prefer dividend.
   D. Depends on the amount of dividend paid, share price may drop, increase or remain unchanged.

2. You have 100 shares of ABC Company. If the company makes a 1:4 bonus issue, how many shares of ABC Company will you own after the distribution?

   A. 20
   B. 25
   C. 120
   D. 125

3. Which of the following is NOT likely to be a source of synergy in mergers and acquisition?

   A. Having the best work culture from the two companies.
   B. Economies of scale in operations.
   C. Combining new expertise and resources.
   D. Elimination of waiting time in the supply chain.

4. Corporate break-ups are the opposite of mergers and acquisitions. The major disadvantages of corporate break-ups include:

   I. Dividing into smaller units may be losing the synergy that it had as a larger entity
   II. The firms after break-up are likely to be smaller and may face difficulties in tapping financing from the market.
   III. The smaller size of the firm may mean it has less representation on major indexes, making it more difficult to attract interest from institutional investors.

   A. I and II only
   B. I and III only
   C. II and III only
   D. I, II and III.

5. Which of the following is NOT a feature of a public listed company?

   A. Needs a large capital base that can be raised through the capital market.
   B. Performance and activities are closely watched and monitored by the regulatory authorities.
   C. The shares may be completely held by families of the founding members or their close associates.
   D. The shares are normally listed on stock exchange for public trading.

Section 2: Broker–Dealer Regulations

Capital Market Law 8

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

Introduction

This chapter deals with the law in relation to capital market transactions in Saudi Arabia. The Capital Market Law introduced and established the Capital Market Authority (CMA), the stock exchange (the Market) and the Committee for the Resolution of Securities Market Disputes (the Committee).

8.1 Securities

8.1.1 Investments That Are 'Securities'

Learning Objective 8.1.1 – *Know* the types of investments specifically covered by the CML and referred to as 'securities' therein (Chapter 1, Article 2).

According to the Saudi Arabian Capital Market Law (CML), all of the following are defined as securities:

- Negotiable shares of companies, including convertible shares.
- Bonds and other negotiable instruments of debt issued by companies, the government, public institutions or public organizations.
- Investment units issued by investment funds.
- Any instruments representing profit participation rights, and/or any rights in the distribution of assets.
- Any other rights or instruments which the Board of the Capital Market Authority determines should be treated as securities, if the Board believes that this would further the safety of the Exchange or the protection of investors.

8.1.2 Investments That Are Not 'Securities'

Learning Objective 8.1.2 – *Know* the types of investment specifically excluded from the definition of 'securities' and therefore not covered by the CML (Chapter 1, Article 3).

Certain instruments are excluded from the definition of securities:

- Commercial bills, such as cheques, bills of exchange, order notes, documentary credits and money transfers.
- Instruments exclusively traded amongst banks.
- Insurance policies.
- Any other rights or instruments which the Board of the Capital Market Authority determines should not be treated as securities, if the Board believes that it is not necessary to treat them as securities in order to further the safety of the Exchange or the protection of investors.

8.2 Capital Market Authority (CMA)

8.2.1 CMA Objectives

Learning Objective 8.2.1 –*Understand* the extent of the Authority's responsibilities under the CML and the functions that it may employ to achieve those objectives (Chapter 2, Article 5).

The Capital Market Authority (the Authority) has been established under Capital Market Law. The Authority is responsible for issuing rules and regulations (implementing regulations, like the Market Conduct Regulations, Listing Rules, Authorized Persons Regulations, Securities Business Regulations, etc), directives and other instructions, and implementing the provisions of the CML regulations

In order to achieve these objectives, the Authority has been given the following responsibilities:

- To regulate and develop the Exchange, seeking to develop and improve methods of systems and entities trading in securities, and develop the procedures that would reduce the risks related to securities transactions.
- To regulate the issuance of securities, and subsequently monitor those securities and their trading.
- To regulate and monitor the works and activities of the parties subject to the control and supervision of the Authority.
- To protect citizens and investors in securities from unfair and unsound practices involving fraud, deceit, cheating or manipulation.
- To seek to achieve fairness, efficiency and transparency in securities transactions.
- To regulate and monitor the full disclosure of information regarding securities and their issuers, the dealing of informed persons and major shareholders and investors, and define and make available information that the participants in the market should provide and disclose to shareholders and the public.
- To regulate proxy requests and purchase request, and public offers of shares.

8.3 Other Saudi Arabian Institutions

8.3.1 The Saudi Arabian Securities Exchange (Tadawul)

Learning Objective 8.3.1 – *Know* the objective of the Exchange (Chapter 3, Article 20)

The market established in the Kingdom of Saudi Arabia for the trading of securities (the Saudi Securities Exchange, or just the Exchange) is the sole entity authorized to carry out trading in securities in the Kingdom. The objectives of the Exchange include the following:

- Ensuring fair, efficient and transparent listing requirements, trading ru1es, technical mechanisms and information relating to securities listed on the Exchange.
- Providing reliable and rapid settlement and clearance rules and procedures through its Securities Depository Center.
- Establishing and enforcing professional standards for brokers and their agents.
- Ensuring the financial strength and soundness of brokers through the periodic review of their compliance with capital adequacy requirements, and setting such arrangements to protect the funds and securities in the custody of brokerage companies.

8.3.2 The Committee For The Resolution Of Securities Disputes

Learning Objective 8.3.2 – *Understand* the functionality of the Committee for the Resolution of Securities Disputes (Chapter 3, Article 25).

The Committee for the Resolution of Securities Disputes has been established by the Authority. As its name suggests, its function is to settle disputes and complaints falling within the regulations issued by the Authority and the Exchange. The Committee for the Resolution of Securities Disputes has the power to issue subpoenas, issue orders, impose sanctions and issue orders to produce evidence and documents in order to settle disputes and complaints.

As well as disputes, the Committee's jurisdiction also includes claims against decisions and actions taken by the Authority or the Exchange. The Committee has the right to issue a decision awarding damages and/or requests to revert to the original status or another appropriate decision if felt appropriate, to guarantee the rights of the aggrieved.

The Committee consists of legal advisors specialized in securities and exchanges, and experts in commercial and financial affairs. The members of the Committee are appointed by the Board for a renewable, three-year term. In relation to each dispute brought before them, the members of the Committee must not have any direct or indirect financial or commercial interests with the parties to the dispute, nor a family relationship up to the fourth degree with either party. The fourth degree is beyond the level of first cousin. All forms of evidence are admissible to the Committee, including electronic or computer data, telephone recordings, fax messages and e-mail.

The final decision reached by the Committee is enforceable at the Authority’s or Exchange's request through the government agency responsible for the enforcement of judicial judgments. If the decision requires compensation or damages to be paid to another party, such parties can enforce their claims in the same way as any other judicial judgment in civil proceedings. There is a possibility of appeal against the

Committee's decisions within 30 days of the notification of that decision. The appeal is made to an Appeal Panel.

8.3.3 The Securities Depository Center 'The Center' (Tadawul)

Learning Objective 8.3.3 – *Understand* the functionality of the Securities Depository Center (Chapter 4, Articles 26 & 27).

The Securities Depository Center (or the Center) is a department established within the Exchange. It is the sole authority in the Kingdom authorized to settle, clear and register ownership of securities traded on the Exchange. To perform these functions the Center holds securities on deposit and transfers the registration between the parties to an Exchange transaction.

As the sole authority registering the property rights of securities traded on the Exchange, the registered ownership recorded by the Center is conclusive evidence of ownership, together with the encumbrances and rights associated with those securities. The Center will provide a certificate of registration if the investor requests it. The Center will also provide periodic reports to all owners of securities regarding the registered securities held within the Center.

Confidentiality of holdings at the Center is paramount, with employees of both the Center and the Exchange, their auditors, advisors and consultants only able to disclose information about owners of securities as set out in the operating rules of the Center.

8.4 Broker Regulations

8.4.1 Requirements Of Brokers

Learning Objective 8.4.1 – *Know* the requirements of a person wishing to undertake brokerage business (Chapter 5, Articles 31&32).

Acting as a broker is not open to anyone. Normally both the broker and the company for whom the broker acts must be licensed before undertaking brokerage business. Brokerage business is restricted to persons holding a valid license and acting as agent for a joint stock company that is licensed to perform brokerage activities, unless the person is exempted from the requirements.

8.4.2 Activities Of A Broker

Learning Objective 8.4.2 – *Know* the activities that may be carried on by a Broker (Chapter 5, Article 32).

Capital Market Law provides the definition of a "broker". Broadly, a broker includes any joint stock company commercially carrying out one or more of the five activities as outlined below:

- Acting as an intermediary in the trading of securities, including as custodian.
- Opening accounts for others to enable them to effect transactions in securities.
- Dealing in order to make a market in securities.
- Acquiring or placing securities for issuers, or their agents.
- Acting as an intermediary in arranging currency or securities swaps.

Specifically excluded from the definition of a broker are persons acting as portfolio managers.

8.4.3 The Exchange's Power

Learning Objective 8.4.3 – *Understand* the Exchange's power to carry out investigations and inspections of licensed brokers or brokers' agents (Chapter5, Article 35).

The Exchange has the power to carry out investigations and inspections in connection with any licensed broker or broker's agent, in order to verify whether he has violated, is violating or is about to violate the rules and instructions of the Exchange.

The Exchange is given the power to require the production of any person's testimony, papers, books, or other documents that the Exchange deems necessary or relevant to its inquiry. The Exchange may also require the attendance of witnesses, and is able to inspect records wherever the records are situated The Exchange exercises its powers to carry out investigations and inspections by obtaining subpoenas and orders from the Committee for Resolution of Securities Disputes. The Committee is required to accept requests for subpoenas and orders unless the Committee establishes that the Exchange's request is arbitrary or involves the abuse of power.

8.5 Disclosure

8.5.1 Prospectus Disclosures

Learning Objective 8.5.1 – *Know* what information and statements must be contained in a prospectus relating to the issue of securities (Chapter 7, Article 42)

Issues of securities must be accompanied by a prospectus approved by the Capital Market Authority. The Authority requires the prospectus to contain the following information and statements:

- An adequate description of the issuer, its business activities, the individuals managing the business (members of the board of directors, executive officers and senior staff members) and its major shareholders.

- An adequate description of the securities to be issued, their number, price and the related rights, privileges and preferences of the issuer's other securities (if any).The description will also detail how the issue proceeds will be spent, and the commissions levied by persons connected with the issue.

- A statement of the financial position of the issuer and any significant financial data including the audited balance sheet, profit and loss account and cash flow statement.

- Any other information required or authorized by the Authority which it believes necessary to assist investors and their advisers in making a decision about investing in the securities.

8.6 Regulations Of Restricted Purchases And Restricted Offers

Learning Objective 8.6.1 – *Understand* what is meant by a Restricted Purchase of Shares (Chapter 9, Articles 52 & 54).

Learning Objective 8.6.2 – *Understand* what is meant by a Restricted Offer for Shares (Chapter 9, Articles 52 & 54).

The Authority has the power to issue rules to regulate purchases, or offers to purchase, a substantial proportion of the voting shares of a company listed on the Exchange. These rules specify that where shares are purchased through restricted purchases or restricted offers, certain provision may apply.

A restricted purchase is a purchase of shares that results in 10% or more of that class of shares being beneficially owned, or under the control of the purchaser (or others acting in cooperation with the purchaser).

A restricted offer for shares refers to a public announcement offering to purchase voting shares if the amount sought would increase the ownership of the offering party to 10% or more of that class of shares. The restrictions also encompass shares held by others either controlled by the offering company or acting in concert with the offering company.

Certain provisions apply when any person uses a restricted purchase or restricted offer to increase his/her ownership, such that 50% or more of that class of the voting shares listed on the Exchange are owned by him/her and/or any others acting in concert. In such circumstances, the Board of the Capital Market Authority has the right, within 60 days, to require the person to offer to purchase all of the remaining shares of that class. The Board determines the terms and conditions of the offer, although it will not compel the prospective purchaser to offer more than the highest price he/she paid for the shares in the previous 12 months.

8.7 Sanctions And Penalties For Violations (General)

Learning Objective 8.7 – *Know* the sanctions that the Authority may seek from the Committee for a violation of any provisions of the regulations, The Authority's rules or those of the Exchange (Chapter 10, Article 59**).**

In addition to the sanctions and penalties, relating to manipulation and insider trading, if it appears to the Authority that a person has engaged in, or is about to engage in, acts or practices in violation of the regulations of the Authority or the Exchange, it has the right to bring a legal action before the Committee to seek an appropriate sanction. These sanctions include:

- Warning the person concerned.
- Obliging the person to cease or refrain from carrying out the act.
- Obliging the person to take the steps necessary to avert the violation, or correct the violation.
- Indemnifying those who have suffered as a result of the violation, or paying the gains realized to the Authority.
- Suspending the trading of the security.
- Barring the violating person from acting as a broker, portfolio manager or investment adviser for such period as is necessary for the safety of the Exchange and the protection of investors.
- Seizing property.
- Banning the violating person from travelling abroad.
- Barring the violator from working with companies whose securities are traded on the Exchange.

In addition, the Authority may also request that the Committee imposes a financial fine upon those who deliberately violated the provisions. As an alternative to all of the foregoing, the Board of Authority could avoid the need to involve the Committee and simply impose a financial fine. In both cases the financial fine cannot be less than SR10.000 and not exceeding SR100,000 for each violation committed.

Review Questions

1. What are the types of investments which are referred to as 'securities' in the Capital Market Law?

2. What are the key responsibilities of the Capital Market Authority (CMA)?

3. What are the key objectives of the Saudi Arabian Securities Exchange? Describe the Exchange's power to carry out investigations and inspections of licensed brokers or brokers' agents.

4. What are the functions of the Committee for Resolution of Securities Disputes?

5. Describe the functions of the Securities Depository Center?

6. What are the requirements of a person wishing to undertake brokerage business?

7. Describe the activities that would be carried on by a Broker.

8. What are the information and statements that must be included in a prospectus relating to the issue of securities?

9. What is meant by a 'Restricted Purchase of Shares' and 'Restricted Offer for Shares'?

Sample Multiple Choice Questions

1. According to the Saudi Arabian Capital Market Law (CML), all of the following are defined as securities:

I. Shares of companies
II. Corporate and Government bonds
III. Investment units issued by investment funds
IV. Rights issues

A. I only
B. I and II only
C. I, II and III only
D. I, II, III and IV.

2. Which of the following is NOT one of the responsibilities of the Capital Market Authority (the Authority) as provided by the Capital Market Law?

A. To regulate and develop the Exchange.
B. To protect citizens and investors in securities from unfair and unsound practices.
C. To seek to achieve fairness, efficiency and transparency in economic activities of Saudi Arabia.
D. To regulate and monitor corporate disclosure practices of listed companies.

3. The Capital Market Law provides for the establishment of “Saudi Stock Exchange” as the sole entity authorized to carry out securities trading in the country. Which of the following are the specific objectives of the Exchange as provided by the Capital Market Law?

I. Ensuring fair, efficient and transparent listing requirements and trading rules.
II. Providing reliable and rapid settlement and clearance procedures.
III. Establishing and enforcing professional standards for brokers and their agents.
IV. Ensuring the financial strength and soundness of the institutional investors.

A. I, II and III only
B. I, II and IV only
C. II, III and IV only
D. I, II, III and IV.

4. Brokers are defined in the Capital Market Law as any joint stock company commercially carrying out certain specific activities. Which of the following is NOT one of the activities?

A. Acting as a custodian for securities
B. Managing portfolios for clients
C. Opening of accounts for securities trading
D. Dealing in securities for own account for profits

5. The Capital Market Law provides that an issuer of a security must provide a prospectus, approved by the Authority. Which of the following is NOT a required content of the prospectus?

A. An adequate description of the securities to be issued, their number, price and the related rights and privileges.
B. A statement of the financial position of the issuer and any significant financial data including the audited balance sheet, profit and loss account and cash flow statement.
C. A statement containing projections of company’s financial performance including expected returns to investors.
D. An adequate description of the issuer, its business activities, senior management and its major shareholders.

Securities Business Regulations

9

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

INTRODUCTION

9.1. Carrying On Securities Business

9.1.1 Securities Business
9.1.2 Securities Business In The Kingdom
9.1.3 Persons Who May Carry On Seecurities Business In The Kingdom

9.2 Securities Advertisements

9.2.1 Securities Advertisements Defined
9.2.2 The Authorized Person's Role

Introduction

The Securities Business Regulations have been produced by the Board of the Capital Market Authority and expand on the rules laid down within Capital Market Law, covered in Chapter 8 of this manual. Because these regulations expand on the outline rules in the Capital Market Law, they are often referred to as implementing regulations for the Capital Market Law.

9.1 Carrying On Securities Business

9.1.1 Securities Business

Learning Objective 9.1.1 –*Understand* the five Securities activities that constitute Securities Business (Part 2, Articles 2 & 3).

Securities business is defined as any of the following activities:

- *Dealing:* this could be as principal or agent and includes selling, buying or underwriting securities.
- *Arranging:* this includes persons introducing parties in relation to securities business, advising on corporate finance business or otherwise acting to bring about deals in securities.
- *Managing:* this is persons managing the securities that belong to others, but only in circumstances involving the exercise of discretion.
- *Advising:* persons advising others on the merits of particular securities or on whether to exercise any right or deal conferred by the securities.
- *Custody:* this is safeguarding the assets of others that include securities and providing the necessary administration.

Persons doing any of the above are deemed to be performing securities business, unless they are subject to a specific exclusion.

9.1.2 Securities Business In The Kingdom

Learning Objective 9.1.2 –*Understand* the criteria that must be present if a person is to be regarded as carrying on Securities Business in the Kingdom of Saudi Arabia (Part 2, Article 4).

A person is regarded as carrying on securities business in the Kingdom of Saudi Arabia if he or she engages in securities activities from a permanent place of business in the Kingdom. This is presumed in the following two situations:

- the person engages in the relevant activity, or securities business generally, in the Kingdom; or

- the person engages in the relevant activity with, or for, a person in the Kingdom

9.1.3 Persons Who May Carry On Securities Business In The Kingdom

Learning Objective 9.1.3 – *Understand* the categories of persons who may carry on Securities Business in the Kingdom of Saudi Arabia (Part 2, Article 5 Annex 1).

The only persons permitted to carry on securities business in the Kingdom are those that are either authorized by the Capital Market Authority (commonly referred to as authorized persons) and exempt persons. An exempt person is one of the following:

- The Government of the Kingdom.
- The Saudi Arabian Monetary Agency (SAMA).
- The Saudi Arabian Stock Exchange and any other Exchange approved by the Capital Markets Authority.
- The Depositary Center.
- A supranational agency recognized by the Capital Market Authority.

Additionally, an insolvency practitioner is exempt in relation to activities undertaken as an insolvency practitioner, an insurance company is exempt in relation to insurance activities regulated by SAMA, and the Capital Market Authority has the ability to exempt others.

9.2 Securities Advertisements

9.2.1 Securities Advertisements Defined

Learning Objective 9.2.1 – *Understand* the criteria that must be present for a communication to be regarded as a Securities Advertisement (Part 3, Article 16).

A securities advertisement is any form of verbal, electronic, broadcast or written communication made in the course of business for the purpose of inviting or inducing a person to engage in securities activity. Making or communicating a securities advertisement includes causing securities advertisement to be made or communicated, except when acting as a mere conduit for information with no editorial control over its content.

9.2.2 The Authorized Person's Role

Learning Objective 9.2.2 – *Know* the Authorized Person's role in the making or communicating of Securities Advertisements (Part 3, Article 17).

Securities advertisements must not be made or communicated to any person in the Kingdom unless the person making the advertisement is an authorized person, or an authorized person has approved the contents of the advertisement.

Review Questions

1. Describe the five activities that constitute 'securities business'.

2. Describe the criteria that must be present if a person is to be regarded as carrying on Securities Business in the Kingdom of Saudi Arabia.

3. What are the criteria that must be present for a communication to be regarded as a Securities Advertisement?

Sample Multiple Choice Questions

1. The Securities Business Regulations define five specific activities as securities business. These activities are (1) dealing in securities as principal and agents, (2) managing securities, (3) providing custodian services in securities, (4) advising clients on securities including shareholders' rights and (5)_______________.

   A. Settlement in securities transaction.
   B. Arranging corporate finance deals.
   C. Lending of securities.
   D. Providing loans for margin transactions.

2. A securities advertisement is any form of verbal, electronic, broadcast or written communication made in the course of business for the purpose of _________________________.

   A. inviting a person to use the services of the Authority.
   B. promoting the services of the Exchange.
   C. inviting a person to use the services of the authorized person.
   D. inviting a person to engage in securities activities.

Authorized Persons Regulations: The Authorization Process

10

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

10.1 The Principles

10.1.1 The Eleven Principles

10.2 Authorization

10.2.1 Requirements For Authorization
10.2.2 Fit And Proper Criteria
10.2.3 Record Keeping Requirements

10.3 Registered Persons

10.3.1 Registrable Functions
10.3.2 Requirements For Registration
10.3.3 Responsibilities Of Registered Person
10.3.4 Cancellation Of Registration

10.1 The Principles For Authorized Persons

10.1.1 The Principles

Learning Objective 10.1.1– *Know* the Principles that provide a general statement of the fundamental obligations of Authorized Persons (Part 2, Article 5).

The Authorized Persons Regulations issued by the Capital Market Authority outline the principles that provide a general statement of the fundamental obligations of authorized persons. The principles are intended to form a universal statement of the standards of conduct expected of authorized persons. The principles are as follows:

1) **Integrity.** Authorized persons are expected to conduct their business with integrity.

2) **Skill, care and diligence.** Authorized persons are expected to conduct their business with due skill, care and diligence.

3) **Efficiency of management and control.** Authorized persons are expected to take reasonable care to organize their affairs responsibly and effectively, with adequate risk management policies and systems.

4) **Financial prudence.** Authorized persons must maintain adequate financial resources in accordance with the rules issued by the Capital Market Authority.

5) **Proper market conduct.** Authorized persons should observe proper standards of market conduct.

6) **Protection of clients' assets.** Authorized persons must arrange for adequate protection of its clients' assets when it is responsible for them.

7) **Co-operation with regulators.** This includes the disclosure of any material event or change in the authorized person's business operations or organizations to the Capital Markets Authority.

8) **Communication with clients.** Authorized persons must pay due regard to the information needs of the clients, and communicate information to them in a way that is clear, fair and not misleading.

9) **Paying proper regard to customers' interests.** Authorized persons are expected to treat the customers fairly; paying due regard to their interests.

10) **No conflicts of interest.** Authorized persons should manage conflicts of interest fairly, both between itself and its customers and between a customer and another client.

11) **Customers' suitability.** Authorized persons should take reasonable care to ensure the suitability of its advice and discretionary decisions for any customer to whom it provides those services.

10.2 Authorization

10.2.1 Requirements For Authorization

Learning Objective 10.2.1 – *Know* the requirements that an applicant must fulfill when applying for an authorization to conduct investment business (Part 3, Article 6).

An applicant for authorization is the person that is applying for authorization to carry on securities business. An application for authorization may be submitted by the founders or controlling shareholders of an applicant if the applicant is not yet established. Each application for authorization must be made on the application form prescribed by the Authority and be accompanied by certain required information and documents.

Each applicant must demonstrate to the Authority that:

- it is fit and proper to carry on securities business of the kind and scale for which it seeks authorization in accordance with the rules prescribed by the Authority;
- it has adequate resources for the kind of securities business that it proposes to carry on in accordance with the rules prescribed by the Authority;
- it has managerial expertise, financial systems, risk management policies and systems, technological resources and operational procedures and systems that are sufficient to fulfill its business and regulatory obligations and to conduct the kind of securities business that it proposes to carry on; and
- its directors, officers, employees and agents who will be involved in the applicant's securities business have the necessary qualifications, skills, experience and integrity to carry on the kind of securities business that it proposes to carry on.

In order to engage in dealing, custody and managing business, an applicant must be established in the Kingdom and must be one of the following:

- a subsidiary of a local bank;
- a joint stock company;
- a subsidiary of a Saudi joint stock company that is engaged in financial services business;
- a subsidiary of a foreign financial institution that is licensed under the Banking Control Law.

The applicant must also have its management and head office in the Kingdom. The paid up capital of the applicant must not be less than the following:

- Dealing and Custody: SR 50 million;
- Managing: SR 20 million for managing investment fund and client portfolios; and SR 5 million for managing private non-real-estate investment funds and sophisticated

investor portfolios;

- Arranging : SR 2 million; and
- Advising: SR 400,000

If the applicant has close links with another person, the Authority must be satisfied with the integrity, regulatory status, business record and financial soundness of any such person, and that such close links will not impair the effective supervision of the applicant, or its operations and compliance with these Regulations. Finally, the applicant should submit the amount specified by the Authority.

10.2.2 Fit And Proper Criteria

Learning Objective 10.2.2 – *Know* the criteria against which an authorized person's employees, officers and agents will be assessed in determining whether the Authorized Person is Fit and Proper to carry out the Securities Business for which it is authorized (Part 3, Article 9).

After gaining authorization from the Authority, authorized persons must continue to be fit and proper to carry out the securities business for which they are authorized. This is required for the firms to maintain their authorization.

The skills, experience, competence and integrity of an authorized person's employees, officers and agents are an important factor in assessing whether the firm is fit and proper; Such skills, experience, competence and integrity are assessed against the following criteria:

1) Possession of adequate qualifications and professional experience to carry out their responsibilities, including appropriate technical knowledge and skills.
2) Having the probity and soundness of judgment commensurate with their positions.
3) Fulfilling their responsibilities with diligence and to protect customers' interests in accordance with the Authority's implementing regulations.
4) Not having committed an offence involving fraud or dishonesty.
5) Not having contravened or broken any laws or regulations governing securities business or aimed at protecting investors.

10.2.3 Record Keeping Requirements

Learning Objective 10.2.3 – *Know* the record keeping requirements applicable to an Authorized Person (Part 3, Article 16).

An authorized person must record and retain sufficient information about its securities business to demonstrate compliance with the Authorized Persons Regulations, and the records must be retained for a period of ten years, unless the Authority specifies a different period. The records may be kept in any form, but they must be able to be reproduced in hard printed form. The Capital Markets Authority may inspect the records directly, or through a person appointed for that purpose.

When a client (or former client) requests records kept during the regulatory record-keeping period, the authorized person must make the following available within a reasonable period:

- Any written material or records that relate to that client and which the authorized person has sent, or is required to send, to that client under the Authorized Persons Regulations.

- Copies of any correspondence received from, or sent to, that client relating to securities business.

10.3 Registered Persons

10.3.1 Registrable Functions

Learning Objective 10.3.1 – *Know* the registerable functions that shall be performed by registered persons (Part 4 Article 19).

The Authority has prescribed certain key positions in authorized persons that need to be filled by registered persons. As a result these positions are known as registerable functions. The following functions are registerables:

- CEO or Managing Director
- Finance Manager.
- Directors or partners.
- Senior Officers or Managers.
- Compliance Officer
- Money Laundering Reporting Officer
- Client Functions, including sales representatives, investment advisors, portfolio managers and corporate finance professionals, including brokers/dealers who execute orders on the local or international markets.

10.3.2 Requirements For Registration

Learning Objective 10.3.2 – *Know* the general registration requirements, procedures and powers of the Authority in handling the registration applications (Part 4, Article 21& 22).

It is required that the applicant for registration must have passed the qualification examinations required by the Authority, or secured an exemption from the Authority from such requirement. The Authority will specify the examination requirements associated with the registrable functions, together with guidance on eligible qualifications and criteria for an exemption from the required examination.

In considering an application for registration, the Authority may take any of the following actions:

- carry out any enquiries which it considers appropriate;
- require the authorized person or the applicant for registration to appear before the Authority to answer any questions and explain any matter it considers relevant to the application;
- require that additional information be provided;
- verify the accuracy of any information furnished by the applicant for registration;

The Authority will process an application for registration and may base on its consideration, approve the registration, or approve subject to certain conditions or refuse to register the application, stating the reasons for doing so.

10.3.3 Responsibilities Of Registered Persons

Learning Objective 10.3.3 – *Know* the responsibilities of a registered person. (Part 4 Article 24).

A registered person must comply with the principles stated in Part 2, Article 5 of the Authorized Persons Regulations (Please refer to 10.1.1 of this manual).

The registered person should be a resident in the Kingdom for the performance of the registerable function at an authorized person, unless exempted from that by the Authority.

10.3.4 Cancellation Of Registration

Learning Objective 10.3.4 – *Know* the provisions for cancellation of registration (Part 4, Article 25).

If a registered person's registration is cancelled, the authorized person must ensure that the person immediately ceases to perform a registrable function.

A registered person who is cancelled from the register by the Authority has a right of appeal to the Committee for the Resolution of Securities Disputes. Nevertheless, a registered person whose registration has been cancelled will continue to be subject to the jurisdiction of the Authority in respect of any act or omission that occurred before the cancellation of his registration and for two years thereafter.

Review Questions

1. Describe the principles governing the general conduct of the authorized persons.

2. What are the requirements for authorization?

3. What is the information required for authorization application?

4. What are the criteria of determining if an authorized person is 'fit and proper' to carry out securities business?

5. What are the conditions for the withdrawal and cancellation of securities business authorization?

6. Describe various notification requirements that need to be complied with by an authorized person.

7. Explain the application process to become a 'registered person'.

8. What is meant by 'registrable functions'? What are the registrable functions in an authorized person organization?

9. Describe the key responsibilities of a registered person.

Sample Multiple Choice Questions

1. Which of the following is NOT one of the eleven principles outlined by the Authorized Persons Regulations to be complied with by an authorized person?

   A. Conducting business activities with integrity.
   B. Compliance with clients requirements.
   C. Conducting business with skill, care and diligence.
   D. Observing proper market conduct.

2. One of the eleven principles provided by the Authorized Person Regulations for authorized persons in conducting securities business is 'no conflicts of interest'. The conflicts of interest herein refer to:

   I. The conflict between one authorized person and another authorized person.
   II. The conflict between the authorized person and its clients.
   III. The conflict between one client and another client of the same authorized person.

   A. I and II only
   B. I and III only
   C. II and III only
   D. I, II and III.

3. One of the requirements imposed by the regulations for an authorized person to maintain authorization to carry on securities business is that it has to fulfill the 'fit and proper' criteria that include the following:

I. Possession of adequate qualifications and professional experience.
II. Fulfilling responsibilities with diligence to protect customers' interests.
III. Not having committed an offence involving fraud or dishonesty.
IV. Having the probity and soundness of judgment.

A. I, II and III only
B. I, II and IV only
C. I, III and IV only
D. I, II, III and IV.

4. The Authorized Persons Regulations prescribes that 'client functions' is a registrable function that must be performed by a registered person. In this context, 'client functions' include sales representatives, investment advisors, portfolio managers, corporate finance professionals and ___________.

A. brokers and dealers
B. finance manager
C. marketing manager
D. Money Laundering Reporting Officer (MLRO)

Authorized Persons Regulations: Conduct Of Business

11

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

11.1 CONDUCT OF BUSINESS

11.1.1 Gifts And Inducements
11.1.2 Special Commission Arrangements
11.1.3 Confidential Duty
11.1.4 Chinese Walls

11.2 Accepting Clients

11.2.1 Client Classification
11.2.2 Anti – Money Laundering Law
11.2.3 Terms Of Business
11.2.4 Know Your Customer Requirements

11.3 Client Relations

11.3.1 Fiduciary Duties
11.3.2 Conflicts Of Interests
11.3.3 Understanding Risk
11.3.4 Lending Money To Customers
11.3.5 Margin

11.4 Reporting To Clients

11.4.1 Contract Notes
11.4.2 Periodic Valuations
11.4.3 Transaction Record Keeping Requirements
11.4.4 Employeeys' Personal Dealings
11.4.5 Telephone Communications

11.1 Conduct Of Business

11.1.1 Gifts And Inducements

Learning Objective 11.1.1 – *Understand* the limitations on the giving and receipt of gifts or inducements (Part 5, Article 27).

The authorized persons must not induce a client to engage in any transaction by offering or giving gifts or inducements. Similarly, authorized persons must not accept gifts or inducements if doing so would conflict to a material extent with any duty that it owes to a client.

The regulations regard gifts or inducements given or received by an affiliate of an authorized person, or by a third party at the direction of an authorized person, as being given or received by the authorized person itself for the purpose of this regulation. Due to the conflicts it would potentially create, the regulations also prevent an authorized person from participating (or offering to participate) in any losses made by a client.

11.1.2 Special Commission Arrangements

Learning Objective 11.1.2 – *Understand* the circumstances in which an Authorized Person may enter into a special commission arrangement (Part 5, Article 28).

A special commission arrangement is an arrangement where an authorized person receives goods or services in addition to trade execution services from an intermediary in return for the commission paid on transactions executed through that intermediary.

Such special commission arrangements can only be entered into by an authorized person if the following conditions are met:

- The intermediary provides best execution for the authorized person.
- The goods or services received by the authorized person would reasonably be regarded as being for the benefit of the authorized person's clients.
- The authorized person has disclosed in its terms of business with its clients that it may receive special commission.
- The amount of any fees or commission paid to the provider of the goods or services is reasonable in the circumstances.

11.1.3 Confidentiality Duty

Learning Objective 11.1.3 – *Understand* the exceptions to the Authorized Person's duty of confidentiality in respect of client information (Part 5, Article 29).

Normally an authorized person is required to keep information obtained from clients confidential. However, there are four circumstances where disclosure can be made.

- where the client has consented to its disclosure;
- where the disclosure is required by the Capital Market Law, its implementing regulations or the applicable laws of the Kingdom;
- where disclosure is reasonably necessary to perform a particular service for the client;
- where the information is no longer confidential.

11.1.4 Chinese Walls

Learning Objective 11.1.4 – *Understand* the characteristics and uses or Chinese Wall Arrangements (Part 5, Article 30).

Inevitably, certain departments that may exist within an authorized firm, such as corporate finance, will obtain confidential or inside information in the course of their business. Chinese wall arrangements are written policies and procedures that are designed to ensure that such information is known only to employees authorized to receive it and not to other parts of the firm, such as the dealers and investment advisors.

The Authorized Persons Regulations require firms that provide corporate finance services, and also provide other services such as dealing, advising or managing securities, to have Chinese wall arrangements. Furthermore the Authorized Persons Regulations state that an authorized person is not violating the Market Conduct Regulations if it deals or advises in a security whilst another department is in possession of inside information, as long as the following conditions are met:

1) The authorized person has established Chinese wall arrangements, appropriate to the nature and size of its securities business.

2) The authorized person has effectively implemented and maintained its Chinese wall arrangements.

3) None of the individuals involved in the dealing or advising activity has knowledge of the inside information or has received advice on the dealing or advising activity from an individual who has knowledge of the inside information.

11.2 Accepting Clients

11.2.1 Client Classification

Learning Objective 11.2.1 – *Understand* the three different types of clients (Part 5, Article 36).

Before conducting securities business with or for any client, an authorized person must classify the client as one of the following:

- a customer;
- an execution only customer; or
- a counterparty.

An execution only customer is where the firm is restricted to dealing as agent, in accordance with the instructions received from the customer, and the firm provides no advice. The authorized person must not classify a client in more than one of the three categories and must record the classification, including sufficient information, to support that classification.

11.2.2 Anti – Money Laundering Law

Learning Objective 11.2.2 – *Know* that an Authorized Person must comply with all obligations under the Anti-Money Laundering Law and associated rules and regulations. (Part 5, Article 37).

Before conducting securities business with or for any client, an authorized person must ensure that it complies with all obligations under the Anti-Money Laundering Law and the rules and regulations on anti-money laundering and terrorism financing as in force in the Kingdom.

11.2.3 Terms Of Business

Learning Objective 11.2.3 – *Know* the requirement that an Authorized Person must provide a client with its terms of business, the basic purpose of doing so and its record keeping requirements (Part 5, Article 38).

Before an authorized person conducts any securities business with or for a client, the firm must provide the client with terms of business. The terms of business set out, in adequate detail, the basis on which securities business is to be conducted with or for the client.

The terms of business take effect once the client has returned a properly executed copy of the terms of business. The required contents of the terms of business are laid down in an annex to the Authorized Persons Regulations. The authorized person is required to retain a record of the terms of business it provides to the client, and any subsequent amendments.

11.2.4 Know Your Customer Requirements

Learning Objective 11.2.4 – *Know* the requirement to Know Your Customer and basic details of the information that should be retained (Part 5, Article 39).

Before an authorized person deals, advises or manages for a customer, it must obtain information from the customer. This information will cover the customer's financial situation, investment experience and investment objectives relevant to the services to be provided. Certain minimum information, laid down in an appendix to the regulations, must be obtained as a precondition to providing services to the customer. If the customer refuses to provide the information, the authorized person may not deal, advise or manage for that customer.

Because the customer's circumstances can change, the authorized person must request an update of such information from the customer at least once every three years. The authorized person must also retain a record of all the information obtained from the customer when performing the 'know your customer' process.

11.3 Client Relations

11.3.1 Fiduciary Duties

Learning Objective 11.3.1 – *Know* basic details of the fiduciary duties that an Authorized Person owes to its customers (Part 5, Article 40 & Annex 5.4).

An authorized person owes the following statutory fiduciary duties to its customers:

- **Loyalty**. An authorized person must act in all cases in good faith and in the interests of the customer.

- **Conflict of interest**. An authorized person must follow principle for managing conflicts of interest fairly both between itself and its customers and between a customer and another client

- **No secret profits**. An authorized person must not use the customer's property, information or opportunities for its own or anyone else's benefit unless the authorized person makes full disclosure of such usage to the customer, and obtains his/her consent

- **Care, skill and diligence.** An authorized person owes the customer a duty to exercise the care, skill and diligence that would be exercised in the same circumstances by another firm having the level of skill and experience reasonably expected.

11.3.2 Conflicts Of Interests

Learning Objective 11.3.2 – *Understand* an Authorized Person's responsibilities regarding any conflict of interest between itself and its customers (Part 5, Article 41).

In addition to the statutory fiduciary duties outlined above, the Authorized Persons Regulations provide further detail on conflicts of interest. An authorized person must ensure that it safeguards the interests of its customers at all times, and that no conflict of interest between the firm and the customer affects the transactions or services that the authorized firm carries out for its customer.

Where an authorized person has an actual or potential conflict of interest in relation to a customer transaction, it shall disclose the conflict to the customer in writing. An authorized person is not required to disclose a conflict of interest if this information would constitute the provision of inside information. In such instances, the authorized person shall take reasonable steps to ensure fair treatment for the customer. If there was a conflict of interest between an authorized person and the customer in any transaction, the authorized person must pay to the customer the value of any loss incurred by the customer as a result of the conflict, unless:

- the authorized person has disclosed the conflict of interest to the customer; and
- the customer has agreed in writing that the authorized person can proceed notwithstanding the conflict.

11.3.3 Understanding Risk

Learning Objective 11.3.3 – *Understand* the restrictions placed on an authorized person's dealings with its customers (Part 5, Article 42).

An authorized person must not deal, advise or manage for a customer, or take collateral for its own account from a customer, unless it has taken reasonable steps to enable the customer to understand the nature of the risks involved in the type of transaction to be undertaken.

Furthermore, when dealing, advising or managing for a customer there are particular requirements regarding risk disclosures for two groups of securities:

- for derivatives, contingent liability securities or non-retail investment funds the customer must be informed of the nature and extent of the risks involved in such securities; and
- for illiquid or speculative securities, the customer must be informed of the nature and extent of the risks involved in such securities, including any difficulties in determining their value.

11.3.4 Lending Money To Customers

Learning Objective 11.3.4 – *Understand* the circumstances under which an authorized person may lend money or extend credit to a customer (Part 5, Article 44).

An authorized person is not permitted to lend money or extend credit to a customer in relation to securities business, nor should an authorized person arrange for any other person to lend money, except in the following situations:

- made and recorded an assessment of the customer's financial standing, based on information provided by the customer;
- satisfied itself that the amount and arrangements for the loan or credit are suitable for the customer;
- the customer has given his prior written consent to the lending or credit facility, specifying the maximum amount of the loan or credit together with details of any charges to be levied.

The restrictions on lending do not apply where an authorized person settles a transaction in the event of a default or late payment by the customer, or the firm pays an amount to cover a margin call for a customer for a period no longer than five days.

11.3.5 Margin

Learning Objective 11.3.5 – *Understand* the conditions under which an authorized person may effect a margined transaction or the granting of a loan or credit to cover margin payments (Part 5, Article 45).

Authorized persons are not permitted to effect a margined transaction with or for a client unless the client has entered into terms of business specifying the following:

- the circumstances under which the client may be required to provide margin;
- particulars of the form in which the margin may be provided;
- particulars of the steps that the authorized person can take if the client fails to provide the required margin, including the communication methods by which the margin call will be made on the client;
- that failure by the client to meet a margin call may lead to the authorized person closing out the client's position, after the time limit specified by the authorized person. The authorized person is entitled to close out the position in any event after a period of five days from such a failure;
- any circumstances, other than failure to provide margin, which may lead to the client's position being closed without prior reference to him/her.

Loans or credit can only be extended to clients for margin purposes if a credit assessment has been performed (by someone independent of the trading or marketing functions) and the client has given prior written consent.

Furthermore, the authorized person must require a minimum of 25% of the value of the transaction prior to effecting that transaction, take reasonable steps to satisfy itself that the client is aware of the risks of margined transactions and monitor the margin daily, ensuring it is maintained at a minimum level of 25% of the current value of the position.

The Authority reserves the right to prescribe a higher rate of margin in any security or group of securities. Such higher rates must be required from the clients by the authorized persons. Similarly, the Capital Markets Authority is able to prohibit margined transactions in relation to any security or group of securities as it sees fit.

Margin payable by the client regarding margined transactions on a regulated exchange must be at least the amount or value of the margin requirements of that exchange, market or clearing house. Margin must be in the form of cash, fully-paid securities positions or other acceptable collateral.

11.4 Reporting To Clients

11.4.1 Contract Notes

Learning Objective 11.4.1 – *Know* the requirements that an authorized person must send a contract note when it has effected a sale or purchase of a Security for a customer (Part 5, Article 47).

Authorized persons effecting a sale or purchase of a security with or for a client must send that client a contract note forthwith. The contract note has to include certain information detailed in an annex to the Authorized Persons Regulations.
A contract note is not required to be sent where the authorized person is acting as manager, and the client has confirmed in writing that he will not require such contract notes to be provided in writing.

11.4.2 Periodic Valuations

Learning Objective 11.4.2 – *Know* the requirement that an authorized person who acts as manager for a client must send periodic valuations to that client (Part 5, Article 48).

Authorized persons acting as manager for a client must send a valuation report at least every three months in respect of securities or securities-related cash balances contained in the client's account. Valuation reports must provide certain minimum information detailed in an annex to the Authorized Persons Regulations.

11.4.3 Transaction Record Keeping Requirements

Learning Objective 11.4.3 – *Understand* the record keeping requirements in respect of transactions effected by an authorized person for its clients and its clients' accounts (Part 5, Article 49).

An authorized person must keep and maintain proper records of each transaction it effects. Such records must be current at all times and be sufficient to demonstrate compliance with the Authorized Persons Regulations.

For its client accounts, such records are required to:

- Accurately record the assets and the liabilities of each client at all times, and the assets and liabilities of all clients collectively;
- Contain such information as is necessary to enable the authorized person to prepare a statement of each client's assets and liabilities, and details of transactions effected for the client;
- Identify all client money and client assets that the authorized person, or its custodian, are responsible for.

The records of the authorized person must contain the following:

- Details of all orders in a security entered by a client;
- Details of all purchases and sales of a security made by the authorized person for a client, or by the authorized person for its own account;
- Records of all income and expenses for each client, explaining their nature;
- Details of all receipts and payments of client money and client assets;
- Records of the cash and securities held in each client account;
- Records of client money and client assets.

11.4.4 Employees' Personal Dealings

Learning Objective 11.4.4 – *Understand* Employees' Personal Dealings as they affect the employee and the Authorized Person (Part 5, Article 50).

The Authorized Persons Regulations place restrictions on employees of an authorized person dealing for their own account. Such employees must not knowingly:

- be a party to any transaction in a security where a client of the authorized person is a party;
- establish a trading account at another authorized person, except where the employee's authorized person does not offer the same service.

Additionally, an employee of an authorized person must disclose to the compliance officer all transactions entered into via another authorized person.

The compliance officer must establish procedures to monitor employees' personal dealings in securities, to ensure compliance with the Capital Market Law and the implementing regulations. The procedures are required to be consistent with certain provisions laid down in an annex to the Authorized Persons Regulations.

11.4.5 Telephone Communications

Learning Objective 11.4.5 – *Know* an Authorized Person's obligations if it wishes to make or accept telephone communications to or from its clients in relation to Securities Business (Part 5, Article 51).

If an authorized person wishes to accept telephone instructions from clients in relation to securities business, it must record the telephone communications. It must also disclose to its clients and prospective clients that telephone communications will be recorded.

The recordings of a telephone communication must be retained for a period of three years from the date of the communication. If the telephone communication relates to a dispute with a client, or a regulatory enquiry, the recording must be retained until the dispute is fully resolved or the enquiry is complete.

Review Questions

1. What are the limitations on the giving and receiving of gifts or inducements between an authorized person and its clients?

2. What is meant by special commission? What are the conditions which allow an authorized person to enter into a special commission arrangement with its clients?

3. What are some of exceptions to the authorized person's duty of confidentiality in respect of client information?

4. What are some key obligations under the Anti-Money Laundering Rules and regulations in relation to conducting securities business with a client?

5. What is meant by ‘Chinese wall’ arrangements? How is it related to the prevention of insider trading in an authorized person organization?

6. What are the three different types of client’s classification? What is meant by a ‘counterparty’?

7. What are some of the relevant terms and conditions which should be incorporated into the agreement between the authorized person and its clients?

8. What are some of the basic information which should be requested from clients as part of 'Know Your Customer' process?

9. What is the meaning of the term 'fiduciary'? What are the four fiduciary duties that an authorized person owes to its clients?

10. Describe an authorized person's responsibilities regarding any conflict of interest between itself and its customers.

11. What are the factors to be considered by an authorized person in determining the suitability of advice or a transaction for a customer?

12. Under what conditions an authorized person is allowed to lend money or extend credit to its customers?

13. What are the terms that should be agreed upon between the authorized person and its clients prior to any margin transaction?

14. How often should the portfolio valuation statements be sent to clients? What are the required contents of such statement?

15. What are the main rules regarding personal dealings of authorized person's employees?

Sample Multiple Choice Questions

1. The Authorized Persons Regulations state that authorized persons must not induce a client to engage in any transaction by:
   I. Offering gifts to the client.
   II. Instructing someone else to offer gifts to the client.
   III. Offering to participate in the clients losses and gains.
   A. I only
   B. I and II only
   C. I and III only
   D. I, II and III.

2. An authorized person must always keep information obtained from clients

confidential, except where:

I. The client has consented to its disclosure.
II. The disclosure is required by the Authority under the Capital Market Law.
III. Its disclosure is reasonably necessary to perform a particular service for the client.
IV. There is no conflict of interest arising from the disclosure of the information.

A. I, II and III only
B. I, III and IV only
C. II, III and IV only
D. I, II, III and IV.

3. The Authorized Persons Regulations state that an authorized person is not violating the regulations if it deals or advises in a security whilst a department within the same authorized person is in possession of inside information, if:

I. There is no potential conflict of interest arising from the inside information.
II. The authorized person has established Chinese wall arrangements.
III. The authorized person has effectively implemented and maintained its Chinese wall arrangements.
IV. Dealing or advising officers do not receive any advice from those having inside information.

A. I, II and III only
B. I, III and IV only
C. II, III and IV only
D. I, II, III and IV.

4. If there was a conflict of interest between an authorized person and the customer in any transaction, the authorized person must pay to the customer the value of any loss incurred by the customer as a result of the conflict, unless:

I. The authorized person has disclosed the conflict of interest to the customer before the transaction.
II. The customer has agreed in writing that the authorized person can proceed notwithstanding the conflict.
III. The authorized person has obtained the consent of the Authority to proceed with the transaction.

A. I only
B. I and II only
C. I and III only
D. I, II and III.

5. The Authorized Persons Regulations state that for margin transactions, the authorized person must require an initial minimum margin of ______ and ensure a minimum maintenance margin of __________.

A. 25%; 25%
B. 40%; 30%
C. 50%; 50%
D. None of the above.

Authorized Persons Regulations: System And Controls Requirements

12

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

12.1 SYSTEM AND CONTROLS

12.1.1 Division Of Responsibilities
12.1.2 Establishment And Maintenance Of Systems And Controls
12.1.3 Review By Governing Body
12.1.4 Compliance
12.1.5 Outsourcing
12.1.6 Audit And Inspection
12.1.7 Resolution Of Complaints
12.1.8 Employees
12.1.9 Business Continuity
12.1.10 Record Retrieval

12.2 Client Money And Assets

12.2.1 Segregation Requirement
12.2.2 Client Money
12.2.3 Client's Money To Be Held With A Bank
12.2.4 Paying In And Withdrawing Client Money
12.2.5 Money Ceasing To Be Client Money
12.2.6 Commission
12.2.7 Records And Auditor's Report
12.2.8 Confirmation On Client Account Balances
12.2.9 Reconciliations Of Client Accounts

12.3 Client Asset Rules

12.3.1 Client Assets And Segregation

12.3.2 Client Assets Account Titles

12.3.3 Holding And Registration Of Client Assets

12.3.4 Lending Of Client Securities

12.3.5 Assessment Of Custodian

12.1 System And Controls

12.1.1 Division Of Responsibilities

Learning Objective 12.1.1 – *Know* the appropriate measures that should be taken by an authorized person to maintain a clear and appropriate division of the principal responsibilities among its directors or partners and senior management (Part 6, Article 53).

An authorized person must take appropriate measures to maintain a clear and appropriate division of principal responsibilities among its directors or partners and senior management.

The CEO of the authorized person is responsible for overseeing the establishment and implementation of the authorized person's systems and controls. In other words, there should be a proper organization chart of the authorized person that clearly shows lines of authority and responsibility, and that important functions are headed by senior managers, partners or directors.

12.1.2 Establishment And Maintenance Of Systems And Controls

Learning Objective 12.1.2 – *Know* the requirement for an authorized person to establish and maintain systems and controls that are appropriate to its business. (Part 6, Article 54 & 55).

The authorized person should establish and maintain systems and controls that are appropriate to its business. The establishment of systems and controls shall be based on the nature, scale and complexity of the authorized person's business, diversity of operations, number and value of transactions and degree of risk associated with each area of operations. Such systems and controls should cover, at a minimum, areas such as:

- The division of responsibilities and reporting lines within the organization;
- Risk management policies and systems;
- Anti-money laundering and terrorism financing;
- Compliance and compliance monitoring programs;
- Code of conduct;
- Operational procedures manual; and
- Business continuity manuals and plans.

12.1.3 Review By The Governing Body

Learning Objective 12.1.3 – *Know* the requirement for the authorized person's governing body to carry out regular review of division of responsibilities, systems and controls (Part 6, Article 56).

Regular review of the division of responsibilities, systems and controls shall be carried out regularly by the authorized person's governing body at least annually.

Further, an authorized person's governing body must expeditiously monitor the actions arising as a result of the review. Each review conducted should be recorded and the records must be maintained for a period of ten years.

12.1.4 Compliance

Learning Objective 12.1.4 – *Know* the requirement for the establishment of compliance function within an authorized person (Part 6, Article 57).

To ensure the effectiveness of the compliance functions within an authorized person, the governing body of the authorized person is responsible for supervising the following:

a) Ensuring that appropriate policies and procedures are in place to enable the authorized person to comply with the Capital Market Law, the Implementing Regulations and all other applicable regulatory requirements;

b) Ensuring that the compliance officer and his department are appropriately resourced and have access to all of the authorized person's records;

c) The establishment, implementation, enforcement and maintenance of the compliance manual and the compliance monitoring program;

d) The establishment of and ensuring compliance with the code of conduct;

e) The preparation of reports and notifications to be filed with the Authority; and the procedures for reporting to the governing body on compliance matters.

It should be mentioned that the Authority may review the appropriateness of an authorized person's compliance arrangements at any time.

12.1.5 Outsourcing

Learning Objective 12.1.5– *Understand* the extent of functions which could be delegated by an authorized person to external party and the supervisory controls required over this outsourcing arrangement (Part 6, Article 59).

An authorized person is allowed to delegate specific compliance or other functions to an external party, after the exercise of due diligence in the selection of such an external party to perform specific functions.

The outsourcing of any function by the authorized person will not derogate from the authorized person's, compliance officer's or the compliance committee's regulatory obligations.

12.1.6 Audit And Inspections

Learning Objective 12.1.6 – *Know* the requirements for regular review of authorized person's books, accounts and other records related to securities business (Part 6, Article 62).

An authorized person's internal and external auditors must review books, accounts and other records related to securities business at least annually. All accounts, records, terms of business and other agreements to which an authorized person is a party must be retained for the required period of ten years and be made available to the internal and external auditors.

12.1.7 Resolution Of Complaints

Learning Objective 12.1.7 – *Understand* the importance of proper customer's complaint handling process (Part 6, Article 63).

An authorized person must have written procedures to ensure timely and proper handling of complaints from clients, and promptly take the appropriate remedial action in respect of complaints. Where a complaint arises from the conduct of a third party employed or recommended by an authorized person, the authorized person shall intercede on behalf of the client, making best efforts to resolve the complaint.

The authorized person must design adequate procedures to resolve complaints to ensure that each employee working with clients is aware of them. Any complaint should be investigated promptly and fully by an officer of the authorized person who was not originally involved in the matter giving rise to the complaint. The authorized person should make records of the written complaints and any action taken on the complaint.

12.1.8 Employees

Learning Objective 12.1.8 – *Know* the requirement for an authorized person to establish adequate procedures for the recruitment, training, supervision and discipline of its employees (Part 6, Article 65).

An authorized person must establish adequate procedures for recruitment, training, supervision and discipline of employees to ensure that it recruits employees who are honest and appropriately qualified for the job.

An authorized person is required to maintain records of disciplinary actions that are taken in connection with any breach of the Capital Market Law or its Implementing Regulations or any other conduct which may affect the conduct of the authorized person's securities business.

An authorized person must train its employees periodically and such training must cover updates to the Capital Market Law, its Implementing Regulations and any other laws relevant to the business of the authorized person. Such training should occur at least annually.

It is also a requirement for an authorized person to retain appropriate records relating to its employees in connection with their recruitment procedure, experience and qualifications for a period of ten years from the date of recruitment of the employee.

12.1.9 Business Continuity

Learning Objective 12.1.9 – *Know* the requirement for an authorized person to ensure that it can continue to operate and meet its regulatory obligations in the event of an unforeseen interruption to its activities (Part 6, Article 66).

The regulations place great importance on the continuity of the authorized person's business operations. An authorized person should have in place appropriate arrangements, having regard to the nature, scale and complexity of its business, to ensure that it can continue to operate and meet its regulatory obligations in the event of an unforeseen interruption to its activities. These arrangements should be documented and regularly updated and tested to ensure their effectiveness. Appropriate records relating to the arrangements in connection with business continuity must be retained for a period of ten years after it ceases to be used or amended.

12.1.10 Record Retrieval

Learning Objective 12.1.10 – *Know* the importance of efficient record retrieval and ability to produce such document for Authority's inspection when requested (Part 6, Article 67).

All records required to be maintained by an authorized person under the Capital Market Law or its Implementing Regulations must be available for inspection by the Authority.

12.2 Client Money And Asset

12.2.1 Segregation Requirements

Learning Objective 12.2.1 – *Understand* the segregation requirements in respect of authorized person's own assets and those of its clients and the effect of segregation (Part 7, Article 69 & 70).

An authorized person must segregate its own money and assets from client money and client assets. In addition, client money and assets must only be used for the benefits of the authorized person's clients. Client money and client assets which are segregated are deemed to be held by the authorized person for its clients and are not deemed to be assets of the authorized person. Creditors of an authorized person do not have any claim or entitlement to segregated money or assets.

12.2.2 Client Money

Learning Objective 12.2.2 – *Understand* what constitutes Client Money and when money is not Client Money (Part 7, Article 71 & 72).

All money, except those immediately due and payable to the authorized person for its own account (including, fees and commissions which are lawfully due to the authorized person), that an authorized person receives from or on behalf of a client in the course of carrying on securities business is considered as client money.

It is a requirement for client money to be segregated and held in a client account, separate from the assets of an authorized person. All money paid into a client account by an authorized person will be treated as client money.

Only client money should be held in a client account unless it is required to open or keep open the account or it is temporarily in the account. An authorized person may transfer client money to another person for the purpose of settling a securities transaction with or through that other person or to provide collateral for a client.

Further, money is not considered client money if it is immediately due and payable to the authorized person such as, fees and commissions which are lawfully due to the authorized person.

12.2.3 Client's Money To Be Held With A Bank

Learning Objective 12.2.3 – *Know* the requirement that Client Money is held in a local bank and the regulations concerning risk assessment, overseas banks and specific acknowledgement from the bank (Part 7, Article 73 & 74).

An authorized person must hold client money in a client account with a local bank. Prior to opening of such client account, an authorized person must assess the risk of the local bank, and should also consider whether it is necessary to open client accounts with more than one bank. However, an authorized person may open a client account with a local bank in its own group, provided it notifies its client of its intention and the client has not objected.

Client money may be held with an overseas bank but only if this is necessary for the settlement of a transaction in securities outside the Kingdom. Dividends or other income received outside the Kingdom for an authorized person's client may be paid into an account with an overseas bank in the authorized person's name, provided that the funds in question are either transferred to a client account or paid to the client no later than three days after notification of receipt. An authorized person must notify its client of its intention to hold client money with a bank outside the Kingdom. The same conditions applicable to local banks are equally applicable to an account with overseas banks.

An authorized person must within 20 days of opening a client account obtain a written acknowledgement from the local bank with which the client account has been opened stating that:

- The client account will only hold client money and not money belonging to the authorized person; and
- The local bank will not enforce any right or claim that it may have against the authorized person, against the funds held in the client account, and that the bank will not combine the client account with any other account.

If an authorized person does not receive the said acknowledgement from the bank within 20 days, the authorized person must withdraw all money in the account and deposit it into the client account with another local bank.

12.2.4 Paying In And Withdrawing Client Money

Learning Objective 5.2.4 – *Understand* the obligations of the authorized person when paying in, withdrawing and maintenance of money in a Client Money Account (Part 7, Article 75).

Except as otherwise stated, when an authorized person receives client money, it must deposit the money into the client account no later than the next day after receipt of the money. If a remittance comprises part client money and part other money it must be paid in full into a client account. The part of the remittance that is not client money should then be transferred out of the client account as soon as possible. Client money may be held in a client account in a different currency from that received by the authorized person.

12.2.5 Money Ceasing To Be Client Money

Learning Objective 12.2.5 – *Understand* what is not Client Money (Part 7, Article 76).

Money ceases to be client money for which the authorized person is responsible for, if it is paid:

- to the client;
- to a third party on the instructions of the client;
- into a bank account in the name of the client; or
- to the authorized person itself, where it is lawfully due and payable to him.

12.2.6 Commission

Learning Objective 12.2.6 – *Know* that no commission is payable to a client in respect of client money held in a client account (Part 7, Article 77).

An Authorized Persons Regulations prohibit commission to be payable to a client in respect of client money held in a client account.

12.2.7 Records And Auditor's Report

Learning Objective 12.2.7 – *Know* that an authorized person must keep records which are sufficient to demonstrate compliance with the Client Money Rules of this Regulation (Part 7, Article 78).

An authorized person must keep records which are sufficient to demonstrate compliance with the Client Money Rules of this Regulation. An authorized person's auditors shall annually review the authorized person's compliance with the Client Money Rules and shall report on this review as part of its audit of the authorized person.

12.2.8 Confirmation On Client Account Balances

Learning Objective 12.2.8 – *Understand* the authorized person's obligations concerning the confirmation of balances in its Client Accounts(Part 7, Article 79).

An authorized person must confirm on a daily basis that the aggregate balance of all its client accounts as at the close of the preceding business day was at least equal to the "client money requirement" calculated in the manner prescribed by the

Authority. The authorized person must also ensure that any shortfall is paid into a client account by the close of business on the day the calculation is performed, and any excess is withdrawn within the same time period.

12.2.9 Reconciliations Of Client Accounts

Learning Objective 12.2.9 – *Understand* the authorized person's obligations concerning the reconciliation of each client account against the balances held at the bank (Part 7, Article 80)

An authorized person must, at least once in every 7 days, reconcile:

- The balance on each client account as recorded by the authorized person with the balance on that account as recorded on the statement issued by the local bank;
- The balance on each client transaction account with exchanges, clearing houses, intermediate brokers, settlement agents and counterparties as recorded by the authorized person with the balance as recorded in the statement issued by the person with whom the account is held; and
- The records of collateral received from clients with the statement of collateral or other form of confirmation issued by the person with whom that collateral is located.

An authorized person must perform the above reconciliations within 10 days of the date to which the reconciliation relates. Where any difference arises on any of the said reconciliations, the authorized person must correct it as soon as possible and in any event within 3 days. Notification to the Authority should be made as soon as possible whenever an authorized person is unable to perform any of the above required reconciliations. However, where an authorized person is unable to resolve a difference arising from a reconciliation, the authorized person must assume, until the matter is finally resolved, that those records are accurate and pay the difference from its own money into a client account and the amount paid will be client money.

12.3 Client Asset Rules

12.3.1 Client Assets And Segregation

Learning Objective 12.3.1 – *Understand* what constitutes Client Assets and the need for segregation (Part 7, Article 82 & 83).

Client assets are all assets, which include or may include securities that the Authorized Person holds on behalf of its clients, except cash or collateral to which Article 83(b) of these regulations applies. In a similar way to client money, client assets have to be segregated. An authorized person must not hold client assets unless it is authorized by the Authority to provide custody services.

An authorized person must segregate the client assets that it holds from its own assets and must not use client assets for its own account or the account of another client unless it has obtained the prior consent of the client to whom the assets belong. Client assets shall include collateral taken by way of pledge to satisfy an obligation arising from that pledge until applied to satisfy that obligation.

12.3.2 Client Asset Account Titles

Learning Objective 12.3.2 – *Understand* the requirement that the titles of accounts used to record Client Assets make it clear that the assets belong to the client (Part 7, Article 84).

If client assets are recorded in an account with an authorized person, the authorized person must ensure that the title to the account makes it clear that such assets belong to the client. The authorized person must also make sure that the client assets are segregated from its own assets. Where a client's asset is recorded in an account with a custodian, local or overseas, the authorized person must require the custodian to make it clear in the title of the account that the client's assets belong to one or more clients of the authorized person and that the assets are segregated.

12.3.3 Holding And Registration Of Client Assets

Learning Objective 12.3.3 – *Understand* the regulations concerning the holding and registration of Client Assets (Part 7, Article 85).

Securities that are eligible for the Depositary Centre must be held in an account in the relevant client's name with the Depositary Centre. An authorized person must hold a document of title to a client asset in its physical possession, or with a custodian in an account designated for client assets.

Where an authorized person registers or records title to a client assets it must ensure that it is registered or recorded in the name of the client, unless the client is an authorized person acting on behalf of its own client, in which case the assets must be registered in the name of that client. Where the asset concerned is a security acquired overseas, title to the assets may be registered or recorded in the name of an overseas custodian or in the name of the authorized person, provided that the authorized person has satisfied itself that it is not feasible for the assets to be registered or recorded in the client's name. An authorized person must obtain a prior written agreement from the client to its assets being recorded or registered in the name of an overseas custodian or in the name of the authorized person. The authorized person then must notify the client in writing of any adverse consequences of the assets being registered or recorded other than in its name.

12.3.4 Lending Of Client Securities

Learning Objective 12.3.4 – *Understand* the circumstances under which an authorized person may lend a client's securities (Part 7, Article 86).

An authorized person must not lend securities belonging to a client or engage in such lending activities with a client except after obtaining the client's written consent. Any securities lending activity must be subject to appropriate terms and conditions as agreed in the 'terms of business' agreement between the authorized person and the client.

12.3.5 Assessment Of Custodian

Learning Objective 12.3.5 – *Understand* the requirement to perform assessment of custodian (Part 7, Article 87).

An authorized person owes a duty of care to a client in deciding or recommending where to hold the client assets. An authorized person must undertake a risk assessment prior to recommending or deciding to hold client assets with a custodian to ensure that the custodian has in place adequate arrangements to safeguard the assets, and is subject to appropriate standards of regulatory oversight. An authorized person must conduct a risk assessment of custodians holding client assets as frequently as required to be satisfied of the above matters on a continuing basis.

Review Questions

1. Why is a clear and appropriate division of the principal responsibilities among an authorized person's directors, partners and senior management important?
2. What are the minimum areas which should be covered when an authorized person establishes system and controls?
3. What are the responsibilities of an authorized person's governing body relating to compliance?
4. Who should be the member of an authorized person's compliance committee? How often the committee should meet?
5. How often should an authorized person's books, accounts and other records related to its securities business be reviewed by its internal and external auditors?
6. What are the steps that need to be taken by an authorized person in handling customers' complaints?
7. What is 'Client Money' and what is not 'Client Money'?
8. Explain the process of conducting client account reconciliation. What is the time frame allowed to perform reconciliations of a client account?
9. What are clients' assets?
10. What are the appropriate terms and conditions to be incorporated in the 'terms of business' for a securities lending activity?

Sample Multiple Choice Questions

1. Which of the following statements is INCORRECT with regard to resolution of complaints provision of the Authorized Persons Regulations?

   A. An authorized person must have written procedures to ensure timely and proper handling of complaints from clients.
   B. The authorized person must design adequate procedures to resolve complaints to ensure that each employee working with clients is aware of them.
   C. The authorized person should make records of the written complaints and any action taken on the complaints.
   D. A complaint should be investigated promptly and fully by an officer of the authorized person who was originally involved in the matter giving rise to the complaint.

2. Money ceases to be client money for which the authorized person is responsible for under the following circumstances, EXCEPT?

   A. The money is paid to the client.
   B. The money is paid to a third party on the instructions of the authorized person.
   C. The money is paid into a bank account in the name of the client.

D. The money is paid to the authorized person itself, where it is lawfully due.

3. The Authorized Persons Regulations require an authorized person to prepare reconciliations of the following on weekly basis, EXCEPT:

   A. The balance on each client account as recorded by the authorized person with the balance on that account as recorded by the client.
   B. The balance on each client account as recorded by the authorized person with the balance on that account as recorded by the local bank.
   C. The balance on each client transaction account as recorded by the authorized person with the balance as recorded by the person with whom the account is held.
   D. Its records of collateral received from clients with the statement of collateral issued by the person with whom that collateral is located.

Market Conduct Regulations

13

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

Introduction

13.1 Prohibition Of Market Manipulation

13.1.1 Introduction

13.1.2 Market Manipulation Or Deceptive Acts And Practices

13.2 Insider Trading

13.2.1 Introduction

13.2.2 The 'Insider'

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13.3 Untrue Statements

13.3.1 Introduction

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13.4.3 Dealing Ahead Of Research And Dealing Contrary To A Recommendation

13.4.4 Liability For Acts Of Others

Introduction

The market conduct regulations have been produced by the board of the Capital Market Authority and expand on the rules laid down within Capital Market Law, Covered in Chapter 1 of this workbook. Because these regulations expand on the outline rules in the Capital Market Law, they are often referred to as implementing regulations for the Capital Market Law.

13.1 Prohibition Of Market Manipulation

13.1.1 Introduction

Learning Objective 13.1.1 – *Understand* the regulations concerning the prohibition of Market Manipulation and deceptive acts or practices

- Reasonable ground to know
- False or misleading impression
- Artificial prices

(Part 2, Article 2)

Article 2 of the market conduct regulations prohibits any person from engaging in, or participating in any, manipulative or deceptive acts or practices in connection with an order, or transaction in a security. Such a prohibition only applies if the person knows, or has reasonable grounds to know, that the act is manipulative or deceptive.

Furthermore, the regulation prohibits any person from entering an order or executing a transaction in a security (either directly or indirectly) for the purpose of creating:

- A false or misleading impression of trading activity or interest in that security; or
- An artificial bid price, ask price or trade price for that security, or any related security.

13.1.2 Market Manipulation Or Deceptive Acts And Practices

Learning Objective 13.1.2 – *Understand* the nature of activities that may be considered to be Market Manipulation or deceptive acts or practices

- Fictitious trades
- No change in beneficial ownership
- Matching purchase and sale transactions
- Escalating / Diminishing price orders
- Orders to manipulate prices

(Part 2, Article 3)

Article 3 of the market conduct regulations outlines examples of the types of action that are considered as manipulative or deceptive acts or practices. These include:

- Making a fictitious trade;
- Effecting a trade in a security that does not involve a change in its beneficial ownership.

The Article also provides five examples of manipulative or deceptive acts or practices designed to create a false or misleading impression of trading activity or interest in a security, and for the purpose of creating artificial prices:

1 - Entering an order (or orders) to buy a security with prior knowledge that an order (or orders) of substantially the same size, time and price for the sale of that security has been, or will be, entered.
2 - Entering an order (or orders) to sell a security with prior knowledge that an order (or orders) of substantially the same size, time and price for the purchase of that security has been, or will be, entered.
3 - Purchasing, or making offers to purchase a security at successively higher prices, or in a pattern of successively higher prices.
4 - Selling, or making offers to sell, a security at successively lower prices, or in a pattern of successively lower prices.
5 - Entering an order (or orders) for the purchase or sale of a security with the intention of:
    - Establishing a predetermined sale price, ask price or bid price;
    - Effecting a high or low closing sale price, ask price or bid price;
    - Maintaining the sale price, ask price or bid price within a predetermined range;
    - Entering an order, or a series of orders that are not intended to be execute

13.2 Insider Trading

13.2.1 Introduction

Learning Objective 13.2.1 – *Understand* the concept of trading in a Security as it is provided in the market conduct regulations.

- Trading Security
- Price affected by information
- Direct trading
- Indirect trading

(Part 3, Article 4a)

Article 4 of the market conduct regulations provides details on the offence of insider trading outlined in the Capital Market Law.

In order for the insider trading regulation to apply, the security must be a traded security and there must be inside information that would affect the price or value of that security, if the information were made available or disclosed to the general public.

It is then a violation for a person to trade, either directly or indirectly, in that security when in possession of the inside information.

Direct trading includes executing a trade for any account in which the person has an interest, and the person making a bid or offer for the security on the Exchange.

Indirect trading includes any one of three situations:

1 - The person executing the trade as agent for another.
2 - Arranging a trade to which a relative or person with whom he has a business or contractual relationship is party.
3 - Arranging for his agent, or any other person acting on his behalf or his direction, to trade in the relevant security.

13.2.2 The 'Insider'

Learning Objective 13.2.2 – *Understand* what is meant by 'Insider' for the purposes of the Insider 'Trading Regulations (Part 3, Article 4b)

The market conduct regulations also provide clarification of who is considered to be an insider and what is considered to be inside information. An insider is any of the following:

- A director, senior executive or an employee of the issuer of the security;
- A person who obtains inside information through a family relationship;
- A person who obtains inside information through a business relationship, including from:
    - The issuer of the security;
    - Any person who has a business relationship with the person who obtains the information
    - Any person who is business associate of the person who obtains the information.

- a person who obtains inside information through a contractual relationship, including obtaining the information from:
    - the issuer of the security;
    - any person who has a contractual relationship with the person who obtains the information.

13.2.3 Inside Information

Learning Objective 13.2.3 – *Understand* what is meant by 'Insider Information' for the purpose of the Insider Trading Regulations (Part 3, Article 4c)

Inside information is information that meets the following criteria:

- it relates to a security;
- it has not been disclosed to the general public, and is not otherwise available to the general public;
- a normal person would realize that, in view of the nature and content of the information, disclosing it or making it available to the public would have a material effect on the price or value of the security.

13.2.4 Disclosure Of Inside Information And Prohibition Of Insider Trading

Learning Objective 13.2.4 – *Understand* the regulations covering the disclosure of Insider Information and the prohibition of Insider Trading (Part 3, Articles 5 & 6)

The market conduct regulations place restrictions on the disclosure of inside information. An insider is prohibited from disclosing any inside information to any other person when the insider knows, or should have known, that it is possible that the other person might trade in the security affected by the inside information.

Similarly, a person who is not an insider is prohibited from disclosing inside information obtained from an insider when he knows, or should have known, that it is possible that the person to whom disclosure is made might trade in the security affected by the inside information.

The Regulation restricts insiders with the benefit of price sensitive, inside information from trading in the affected securities. Furthermore, those obtaining inside information from others that know, or should have known, that it is inside information are not allowed to trade in the affected securities.

13.3 Untrue Statements

13.3.1 Introducton

Learning Objective 13.3.1 – *Understand* the regulations concerning the prohibition of Untrue Statements (Part 4, Articles 7 & 8)

Articles 7 to 10 of the market conduct regulations relate to untrue statements. In broad terms, persons are prohibited from making untrue statements if the statement is made to influence the price of a security, or to induce another person to buy, sell, exercise or refrain from exercising the rights attached to a security. Such statements could be verbal or in writing. The prohibition also relates to failing to make a statement where required by the Capital Market Law, its implementing regulations or the rules of the Exchange or Depositary Center.

This prohibition of untrue statements also extends to rumors. A person is prohibited from circulating an untrue statement of material fact or a statement of opinion for the purpose of influencing price or value of a security, or for any other manipulative purpose. Circulating such rumors is prohibited, whether it is circulated directly or indirectly, and regardless of whether the statement was made by the person circulating it.

13.3.2 Untrue Statements Defined

Learning Objective 13.3.2 – *Know* the circumstances in which a person may make an Untrue Statement (Part 4, Article 9)

Article 9 of the market conduct regulations defines untrue statements. The definition hinges upon the statement of a material fact - a material fact is any information relating to a security that, if the investor knew about it, would have materially affected the price or value at which the investor bought or sold the security. Untrue statements must be made in relation to material facts, and a person is making an untrue statement in any of the following circumstances:

- he makes, or procures another person to make, a statement that is false or inaccurate in a material respect;
- he makes, or procures another person to make, a statement that contains a misrepresentation of a material fact;
- he omits a material fact when making a statement

13.3.3 Liability For Untrue Statements

Learning Objective 13.3.3 – *Understand* the circumstances under which a person may be liable for damages in respect of the making of an Untrue Statement (Part 4, Article 10)

There are two circumstances that may result in a person being liable for damages to a claimant for untrue statements.

The first is where a person made an untrue statement of material fact and the statement is made for profit (or commercial benefit) and in relation to the purchase or sale of a security. To be successful the claimant must establish that he was not aware that the statement was untrue, that he would have acted differently if he had been aware of the untruth and that the person who made the statement knew (or there was a substantial likelihood that he knew), that the statement was untrue in relation to a material fact.

The second is where a person fails to make a statement where required by the Capital market Law, the implementing regulations, or the rules of the exchange. As long as what had been omitted relates to a material fact, and the damages claim is in relation to a purchase or sale of a security, damages claim could be successful. The claimant must establish that he was not aware of the failure to make the statement, and that he would have purchased or sold the security in question (at all or at the same price) had he known that the statement was omitted.

13.4 Authorized Persons' Conduct

13.4.1 Conduct In Case Of Market Manipulation And Insider Trading By Client

Learning Objective 13.4.1 (a) – *Know* what action should be taken by authorized persons or registered persons if they suspect that their client is involved in market manipulation or insider trading (Part 5, Article 11)

Learning Objective 13.4.1 (b) – *Know* the authorized person or registered person's responsibilities in respect of clients' priority, timely execution, best execution, timely allocation and churning (Part 5, Article 12 - 16)

The regulations require an authorized person or a registered person not to accept or execute a client order if any of them has reasonable grounds to believe that the client:

- Is engaging in market manipulation or insider trading;
- Would be engaging in market manipulation or insider trading in another market if these Regulations applied to that market; or
- Would be considered in breach of the law, regulations or rules applicable in the relevant market.

Where an authorized person or registered person has decided not to accept or execute an order for the said client, the authorized person must document the circumstances of and reasons for its decision in writing and notify the Authority of the decision within three days. All records in relation to any decision shall be retained for a period of ten years from the date of the decision.

The Market Conduct Regulations further describe the authorized person or registered person's responsibilities in respect of clients' priority, timely execution, best execution, timely allocation and churning. These can be outlined as follows:

- ***Clients' priority:*** An authorized person or a registered person must execute client orders for a security before executing any order for his own account.
- ***Timely execution:*** If an authorized person accepts a client order or decides in its discretion to execute a client order, it must execute the order as soon as is practical in the circumstances.
- ***Best execution:*** Where an authorized person deals with or for a client, it must provide best execution. An authorized person is considered to provide best execution when acting as agent, it ensures that the order is executed at the best prevailing price in the relevant market or markets for the size of the order; and when acting as principal, it executes the transaction at a better price for the client than it would have obtained if it executes the order in accordance with the preceding paragraph.
- ***Timely allocation:*** An authorized person who executes a transaction based on a client order must ensure that the transaction is promptly allocated to the account of that client. An authorized person who executes a discretionary transaction must ensure that the transaction is promptly allocated to the account of the client for whom the authorized

person decided to transact.

- ***Churning:*** An authorized person must not advise or solicit a client to deal or arrange a deal in the course of managing for a client if the dealing would reasonably be regarded as contrary to the interest of the client, based on the number and frequency of trades relative to the client's investment objectives, financial situation and the size and character of his account.

13.4.2 Aggregation Of Client Orders

Learning Objective 13.4.2 – *Know* that aggregation of account is not allowed in Saudi market, but allowed with certain conditions in non-Saudi markets (Part 5, Article 17).

Aggregation of orders is the amalgamation of one client's order with orders of other clients, or including those of the authorized person itself. Such combined order is then executed as a single block transaction.

The regulations prohibit the aggregation of orders for securities traded on the Saudi Stock Exchange. Aggregation or orders for securities that are not traded on the Saudi Stock Exchange are only permitted under the following conditions:

- The authorized person has provided a written explanation to the client of the advantages and disadvantages of aggregation and obtained written consent from the client to aggregate orders;
- The authorized person ensures that no client will be disadvantaged by aggregation of his orders; and
- All clients' orders that are aggregated receive the average price of execution for all of the orders that are executed.

In addition, an authorized person must establish a written policy setting out its method of allocating trades to client and principal orders.

13.4.3 Dealing Ahead Of Research And Dealing Contrary To A Recommendation

Learning Objective 13.4.3 (a) – *Know* that trading for own account ahead of research is not allowed (Part 5, Article 18)

Learning Objective 13.4.3 (b) – *Know* that making a trade contrary to a research recommendation is prohibited (Part 5, Article 19)

The regulations provide that an authorized person must not trade in a security for his own account if he knows that a research report is about to be issued to a client regarding the said security, until the client to whom the research is intended has had a reasonable opportunity to react to it. However, an authorized person may trade in the security for his own account if the research report is not expected to affect the price of the said security.

The regulations further prohibit an authorized person from advising or making a trade on a security for a client that is contrary to the recommendation of a report issued by the authorized person or any of its affiliates on the particular security, unless the recommendation and its potential conflict of interest between the authorized person and the client is disclosed to the client prior to making the trade.

An authorized person is prohibited from making a trade on a security for his own account that is contradictory to the recommendation unless reasonable grounds exist to make the trade.

13.4.4 Liability For Acts Of Others

Learning Objective 13.4.4 – *Understand* the extent to which a person may be liable when acting at the direction of another person (Part 5, Article 20)

When an authorized person is found to have violated the provisions of the Capital Market Law or the Implementing Regulations on market manipulation, insider trading or untrue statements while acting on behalf of another person and at the direction of that person, that person is liable and is subject to any sanctions to which the person carrying out the relevant acts is subject, unless the person on whose behalf the act is carried out took reasonable steps to prevent the violations of the law and regulations, and did not authorize the acts in question.

Review Questions

1. How do Market Conduct Regulations define manipulative and deceptive acts in securities trading?

2. What is the meaning of creating a “false and misleading impression of trading activity” in a security? Provide examples.

3. What is the meaning of ‘making a fictitious trade’? Provide examples.

4. How do Market Conduct Regulations define an ‘insider’ and ‘inside information’ in relation to insider trading prohibition?

5. What is meant by ‘direct trading’ and ‘indirect trading’ in relation to the prohibition of insider trading?

6. How do the Market Conduct Regulations define an ‘untrue statement’? What are the liabilities for making an untrue statement?

7. What action should be taken by an authorized person or registered person if they suspect that their client is involved in market manipulation or insider trading?

8. Describe the authorized person or registered person’s responsibilities in respect of clients’ priority, timely execution, best execution, timely allocation and churning.

9. What is meant by ‘aggregation of orders’? Under what circumstances an authorized person is allowed to aggregate orders?

10. What is the meaning of front-running in securities trading? Why is this prohibited?

11. Under what circumstances are authorized persons allowed to trade for their own accounts ahead of a research report?

12. Under what circumstances are authorized persons allowed to trade for their own accounts that are contrary to a research report?

Sample Multiple Choice Questions

1. A person is prohibited to enter a buy order with prior knowledge that a sell order has been (or will be) made at the same time with the same quantity and price because this _____________.

   A. creates unnecessary interest, activities and liquidity in the stock.
   B. gives an artificial impression that there are interest, activities and liquidity in the security.
   C. gives an additional commission to the authorized person.
   D. helps clients to buy or sell the stock at unfair prices.

2. A person is prohibited to make buy offers in a pattern of successively higher prices because this is ________________.

   A. unfair to the seller.
   B. unfair to the buyer.
   C. artificially pushing up the price of the stock.
   D. giving a false impression on the interest, activities and liquidity of the stock.

3. Which of the following may NOT necessarily be an "insider" as defined in the Market Conduct Regulations in relation to insider trading prohibition?

   I. A close friend of the employee of the company
   II. A family member of the employee of the company
   III. An employee of the company

   A. I only
   B. II only
   C. I and II only
   D. I, II and III.

4. If a registered person has reasonable grounds to believe that the client is engaging in market manipulation or insider trading or in breach of security's law and regulation, the registered person should ____________.

   A. accept and execute the order, but advice the client of the consequences.
   B. not accept or execute the client's order.
   C. not accept or execute the client's order and must document the circumstances and reasons.
   D. not accept or execute the client's order and must document the circumstances and reasons and must notify the Authority.

5. The Market Conduct Regulations prohibit an authorized person to trade for its own account ahead of a research report that is about to be issued on the security, unless:

   I. The report is not expected to affect the price of the security.
   II. The client to whom the report is intended has had a reasonable opportunity to react to it.
   III. The client is not interested in the report.
   IV. The report does not lead to a conflict of interest between the authorized person and the intended client.

   A. I and II only
   B. I, II and III only
   C. I, II and IV only
   D. I, II, III and IV

Anti Money Laundering And Counter-Terrorist Financing (Aml/Ctf) Rules

14

Learning Objectives

The syllabus for this examination is broken down into a series of learning objectives and is included in the Syllabus Learning Map at the back of this workbook. Each time a learning objective is covered, it appears in a text box preceding the text.

Introduction

Anti-Money Laundering and Counter-Terrorist Financing Rules (hereafter refer to AML/CTF[4] Rules) was issued by the Capital Market Authority of Saudi Arabia in 2008 to ensure that :-

- The authorized persons fully apply the Anti-Money Laundering Law issued by Royal Decree No. M/39 dated 25/06/1424H and its implementing Regulation,
- The credibility, integrity and reputation of the Saudi capital market are maintained.
- The authorized persons and their clients are protected from illegal transactions involving money laundering terrorist financing or other criminal activities.

14.1 Definition

> **Learning Objective 14.1** - *Know* the meaning of money-laundering and terrorist financing as defined by the AML/CTF Rules. (Part1, Article 2).

Money laundering refers to committing or attempting to commit any act for the purpose of concealing or disguising the true origin of funds acquired by means contrary to Shari'ah or law, thus making the funds appear as if they had come from a legitimate source.

The definition has three components - first, the money normally comes from illegal or non-halal source, such as proceeds from criminal activities; second, there are actions taken to move the money in different ways and directions in order to lose track the origins of the money; third, the "cleaned" money now appears to be coming from legitimate source and ready for use in legal economic activities.

Terrorist financing refers to the financing of terrorist acts, terrorists and terrorist organizations. Terrorist financing are associated with three aspects - first, financing of terrorists, that is, person or people that are associated with terrorist activities or terrorism; second, financing of terrorist organizations; third, financing of terrorist acts.

[4] Often times, the abbreviation CTF and CFT are used inter-changeably. Literally, CTF means 'Counter Terrorist Financing' while CFT means 'Countering (or Combating) the Financing of Terrorism'.

14.2 AML/CTF Requirements

14.2.1 The Principles

Learning Objective 14.2.1 –*Understand* the general requirements and principles of implementing AML/CTF (Part2, Article 3).

Given the specific nature of securities business, organizational structure, type of clients and transactions, the authorized person must have in place appropriate policies and procedures to prevent money laundering and terrorist financing activities, and must ensure that these measures meet the requirements set out in the AML/CTF Rules.

The senior management of the authorized person is responsible to effectively manage the risks of money laundering and terrorist financing activities.

Senior management must be committed to establishing appropriate and effective policies and procedures for the prevention of money laundering and terrorist financing and ensuring compliance with those policies as well as relevant legal and regulatory requirements.

To ensure this, the authorized person must appoint a director or senior manager with direct responsibility for overseeing compliance with the AML/CTF policies, procedures and relevant legal and regulatory requirements.

14.2.2 Cash Payments

Learning Objective 14.2.2 – *Know* the restriction on accepting cash (Part 2, Article 5).

The regulations prohibit acceptance of cash from clients, whether for investment purposes or as payment for services provided.

14.3 Customer Due Diligence

Prior to accepting any clients, the authorized person must prepare a "Know Your Customer" form containing the information required as prescribed under the Authorized Persons Regulations and the other information required by these Rules.

14.3.1 Client Acceptance

Learning Objective 14.3.1 - *Know* the general procedure of accepting clients (Part 3, Article 7).

In order to identify the types of clients that are likely to pose a higher risk of money laundering and terrorist financing, an authorized person must develop client acceptance policies and procedures.

For the identified higher risk clients, a more extensive customer due diligence (CDD) process must be adopted which includes clear internal policies on the approval of a business relationship with such clients.

The following are some factors that should be taken into consideration in determining whether a particular client or type of clients is of a higher risk:

- the background or profile of the client;
- the nature of the client's business, and the possibility of the business being associated with money laundering or terrorist financing activities;
- the place of establishment of the client's business and location of the counterparties with which the client does business, such as countries designated by the Financial Action Task Force (FATF) or those known to the authorized person to have lack of proper standards in the prevention of money laundering or terrorist financing;
- unduly complex structure of ownership for no good reason;
- means of payment as well as the type of payment that could raise suspicion, such as payment is made by a third party check and the drawer of which has no apparent connection with the prospective client.
- any other information that may suggest that the client is of a higher risk (e.g. knowledge that the client has been refused a business relationship by another financial institution).

Although the risk category of a client is set in the beginning, the authorized person must reconsider the risk category when the pattern of account activity of the client does not fit in with the authorized person's knowledge of the client. Authorized person must also consider making a Suspicious Transaction Report (STR) to the Financial Intelligence Unit (FIU), Ministry of Interior, if necessary.

The regulations also prohibit an authorized person from accepting any client or opening an account for a client without meeting the client directly face-to-face unless the authorized person relies on other third parties for Client Due Diligence (CDD) process.

14.3.2 Politically Exposed Persons (PEP)

Learning Objective 14.3.2 – *Know* who are Politically Exposed Persons (PEPs) and the required review process to be carried out relating to PEPs. (Part3, Article 10).

Politically Exposed Persons (PEPs) are defined under AML/CTF Rules as any individual who occupies, has recently occupied, is actively seeking or is being considered for, a senior position in a government, government agency, or government-owned company. The definition of PEP includes immediate family members (i.e. spouse, parent, sibling) and close associates (i.e. advisor, agent), collectively known as Related Individuals.

It is a requirement for an authorized person to have risk management systems in place to identify whether a client or a potential client, or a beneficial owner, is a "politically-exposed person" (PEP). Any accounts identified as being held by such persons shall be considered higher risk and authorized person shall conduct enhanced ongoing monitoring of such accounts.

The opening or continued operation of an account for a PEP must be approved by senior management of the authorized person. Authorized person shall also take measures to establish the source of wealth and source of funds of clients or beneficial owners who are PEPs.

14.3.3 Non-Profit Organizations & Entities

Learning Objective 14.3.3 – *Know* what are the Non-profit Organizations and the required review process (Part 3, Article 11).

Appropriate policies, procedures and controls shall be established in order to comply with the Authority's requirements regarding the opening and handling of accounts and transactions for non-profit organizations and entities.

The AML/CTF Rules define a non-profit organization and entity as an organization that primarily engages in raising/collecting donations and/or disbursing funds for non-profit purposes. The following requirements shall be observed when dealing with accounts of any such organizations:

- Non-profit organizations and entities must have an official registration/license issued by the relevant government authority, specifying the purposes and activities of the organization.
- Authorized person shall classify non-profit organizations and entities as high risk, and shall apply enhanced due diligence when dealing with such clients.

14.3.4 Reliance On Other Third Parties For CDD

Learning Objective 14.3.4 – *Know* the extent of reliance on third parties for Client Due Diligence (CDD) process and the required steps and documents for verifications. (Part 3, Article 14).

It needs to be stressed that an authorized person is fully responsible to conduct a proper CDD for all its clients. However in certain situation, when a client is introduced by a third party and CDD has been conducted, the authorized person may accept part of the CDD that has been conducted.

A third party must either be a commercial bank or financial institution that engages in securities activities.

14.3.5 Non–Face–To–Face Business Relationships

Learning Objective 14.3.5 – *Know* the risk faced as a result of non-face-to-face business relationships and the required mitigating steps. (Part 3, Article 16).

The authorized person should be vigilant on the threats of technology on its business activities especially those related to money laundering and terrorist financing and must formulate its policies, procedures and controls, to prevent such threats, both at the time the business relationship is established and as part of ongoing CDD.

14.3.6 Ongoing CDD And Unusual Transactions

Learning Objective 14.3.6 – *Know* the requirements for ongoing CDD and unusual transactions monitoring. (Part 3, Article 17).

An authorized person must monitor on an ongoing basis the business relationships it has with clients.

In doing so it must monitor the conduct of the client's account and scrutinize transactions undertaken to ensure that the transactions are consistent with the authorized person's knowledge of the client, its business and risk profile and the source of funds.

The background and purpose of all such transactions, including transactions that have no economic or visible legal purpose, must be examined, the findings established in writing and those findings must be retained for a period of at least 10 years and be made available to the Authority, and internal and external auditors if requested.

14.3.7 Review And Updating Of Records

Learning Objective 14.3.7 – *Know* the requirements for regular review and periodical update of clients' records. (Part 3, Article 18).

Identification data collected under the CDD process must be kept up-to-date, accurate and relevant.

Authorized person must undertake annual or ad hoc reviews of existing records, particularly for high risk clients, when appropriate trigger events occur. Examples of trigger events that might prompt an authorized person to seek appropriate updated information include:

- An existing client applying to open a new account or establish a new relationship, or significantly alter the nature of an existing relationship;
- When there is a transaction that is unusual or not in line with the client’s normal trading pattern based on the authorized person’s knowledge of the client; or
- When the authorized person is not satisfied that it has sufficient information about the client or has doubts about the veracity or adequacy of previously obtained identification data.

14.4 Record Keeping

14.4.1 Record Keeping Requirements

Learning Objective 14.4.1- *Know* the details of record keeping requirements contained in the rules & regulations of the Authority and the Saudi Stock Exchange (Tadawul). (Part 4, Article 19).

All authorized persons have to comply with the record keeping requirements contained in the rules and regulations of the Authority and the Saudi Stock Exchange (Tadawul).

These records include all client identification data and other information and documents obtained from the CDD process, records of accounts and business correspondence, as well as all transaction records.

Authorized person is required to maintain sufficient records to permit reconstruction of individual transactions (including the amounts and types of currencies involved) so as to provide, if necessary, evidence for prosecution of criminal activity.

In particular, authorized persons shall keep the following information regarding the accounts of its clients:

- details of the client and beneficial owner(s) (if any) of the account, and other required CDD information;

- account details, including the volume of the funds flowing through the account; and
- for transactions: the origin of the funds, the form in which the funds were provided or withdrawn, such as, checks, transfer, identity of the person undertaking the transaction, destination of the funds, and the form of instruction and authorization.

Authorized person is required to ensure that all client and transaction records and information are available on a timely basis to the Authority.

All records on transactions, both domestic and international, shall be maintained by the authorized person for at least ten years after the date of the transaction.

The retention of such documents may be in the form of originals or copies, in paper or electronic form, provided that they are admissible as evidence in a court of law.

14.5 Suspicious Transaction Report

14.5.1 Suspicious Transaction Report (STR)

Learning Objective 14.5.1 – *Know* the process and procedures relating to suspicious transaction report (Part 5, Article 20 & Annex 1).

Consistent with the requirement of the AML Law and its implementing regulations, an authorized person must immediately file a suspicious transaction report (STR) to the Financial Intelligence Unit (FIU) for any complex, huge or unusual transaction that raises doubt and suspicion concerning its nature and purpose, or it is suspected to be related to money-laundering and/or financing of terrorism activities. A copy of the STR shall be provided to the AML Unit of the CMA.

Authorized person is required to appoint an appropriately senior employee as Money Laundering Reporting Officer (MLRO) to whom all staff members are instructed to promptly refer all suspicious transactions for possible referral to the FIU. The MLRO must be a registered person with sufficient academic, scientific and practical experience in AML/CTF. Note that this does not apply to authorized person whose licensed business activity is limited to managing non-real estate investment funds or managing the portfolios of sophisticated investors, arranging or advising, as such an AP may outsource the function of Compliance and AMLRO.

Where an authorized person employee brings a transaction to the attention of the MLRO, the circumstances of the case shall be reviewed at that level to determine whether the suspicion is justified, in which case a STR will be filed with the FIU. If a decision is made to not report the transaction to the FIU, the reasons for this shall be fully documented by the MLRO.

Records of all transactions referred to the MLRO by the employees together with all internal findings and analysis done in relation to them must be properly kept. A register must be maintained to record all STR made to the FIU. The register also should record all reports made by employees to the MLRO, regardless of whether the reports are filed to the FIU or not.

14.5.2 Tipping Off

Learning Objective 14.5.2 – *Know* the procedures relating to tipping off (Part 5, Article 21).

In all circumstances, an authorized person, its directors, officers and employees must ensure that clients or related parties are not alerted (informed or tipped off) to the fact that an STR related to the client has been made or being considered.

An authorized person shall at all times keep its reporting of suspicious transactions highly confidential, and reports of suspicious transactions or reports that are to be reviewed by the MLRO for possible reporting shall be accessible only by specifically staff of the authorized person.

14.6 Internal Policies, Procedures And Controls

14.6.1 Internal Policies And Compliance

Learning Objective 14.6.1 (a) – *Know* the requirement to develop and implement internal policies, procedures and controls to help prevent money-laundering and terrorist financing and the required communication to employees.

Learning Objective 14.6.1 (b) – *Know* the duties that shall be performed by the MLRO. (Part 6, Article 23)

Authorized person is required to develop and implement internal policies, procedures and controls to help prevent money-laundering and terrorist financing and must communicate these to its employees.

The compliance officer shall also ensure compliance with the AML-CTF policies, procedures and control. The policies, procedures and controls must include, among others, CDD measures, record retention, the detection of unusual and/or suspicious transactions and the obligation to make an STR.

An authorized person needs ensure that the MLRO and any of its staff (performing the compliance function) have timely access to all client and transaction records and other relevant information which they require to discharge their functions.

The MLRO shall undertake a number of duties and those that are specific to the staff of the authorized person relate to ensuring compliance with maintenance of records and organize training for all staff of the authorized person.

14.6.2 Internal Audit

Learning Objective 14.6.2 – *Know* the role of internal audit relating to AML/CTF (Part 6, Article 24).

The internal audit in the authorized person shall regularly assess the effectiveness of the authorized person's internal AML/CTF policies, procedures and controls and the authorized person's compliance with these Rules.

14.6.3 Education And Training

Learning Objective 14.6.3 – *Know* the requirement on AML/CTF regular and continuous education and training (Part 6, Article 25).

Appropriate steps shall be taken to ensure that all authorized person's employees receive regular training on:

- AML/CFT laws and regulations, and in particular, CDD measures, detecting and reporting of suspicious transactions;
- Prevailing techniques, methods and trends in money laundering and terrorist financing; and
- The authorized person's internal policies, procedures and controls on AML/CFT and the roles and responsibilities of staff in combating money laundering and terrorist financing.

An authorized person must have educational programs in place for training all new employees. Refresher training must also be provided at regular intervals to ensure that staff, in particular those who deal with the public directly and help clients open new accounts.

Review Questions

1. What is meant by 'money-laundering' and how is it related to securities business?
2. What is meant by 'terrorist financing' and how is this related to money-laundering?
3. What is meant by customer due diligence (CDD)? What are the types of clients that need an enhanced CDD?
4. Who are the people considered as politically exposed persons? How are these people treated in the CDD process?
5. What is the meaning of non-profit organizations and how are they related to AML/CFT activities?
6. How has on-line trading influenced the business relationship between an authorized person and its client?
7. Why is it necessary for an authorized person to do an ongoing CDD?
8. What are the record-keeping requirements that an authorized person must comply with?
9. What are the roles of a money-laundering reporting officer (MLRO)? What are the actions that need to be taken by MLRO when a suspicious transaction is brought to him by an employee of the authorized person?
10. What are the areas that need to be covered in the employees training requirement in relation to the AML/CTF?

Sample Multiple Choice Questions

1. Which of the following is NOT related to a money-laundering process?

   A. the money is generated from illegal or non-halal sources.
   B. transactions are conducted to move the money in different ways and directions in an effort to lose track the origins of the money.
   C. the "cleaned" money that appears to come from legitimate sources are used in legal economic activities.
   D. the money is also used to finance terrorist activities.

2. Which of the following is NOT a relevant factor in determining whether a particular client or type of client is of a higher risk, for the purpose of conducting an enhanced customer due diligence:

   A. The nature of the client's business, and the possibility of being associated with money laundering activities.
   B. Knowledge that the client has not been refused a business relationship by a financial institution.
   C. The place of establishment of the client's business and location of the counterparties, such as countries designated by the FATF.
   D. Unduly complex structure of ownership of the client's business.

3. Which of the following is NOT a politically exposed person (PEP) as defined under AML/CTF Rules?

I. A senior officer in the government and his/her relatives or friends
II. A senior officer in a government-owned company and his/her relatives or friends
III. A senior officer in a listed company and his/her relatives or friends

A. I only
B. II only
C. I and II only
D. I, II and III.

4. The AML/CTF Rules require an enhanced due diligence by authorized persons to clients who are classified as non-profit organizations (NPO) for the following reason:

A. They are often used as vehicles for terrorist financing.
B. They raised money from donations for charitable purposes.
C. They are usually related to money-laundering activities.
D. They are known to be involved in market manipulations.

5. Where an authorized person's employee brings a suspicious transaction to the attention of the Money Laundering Reporting Officer (MLRO), the following may take place:

I. A suspicious trading report (STR) is filed with the Financial Intelligence Unit (FIU).
II. A STR is filed with the Capital Market Authority.
III. A STR is not filed with the FIU but the reasons for not filing are fully documented.
IV. The suspicious transaction is investigated by the MLRO and solved internally.

A. I only
B. I and II only
C. I and III only
D. I, II, III and IV.

Syllabus Learning Map **CME 3 : Broker-Dealer Module**	
Section 1 – Operations Of Securities Markets	
Chapter 1 : Understanding Securities Markets	**Chapter/Section**
On completion, the candidate should :	
Investments	
1.1.1 (a) *Know* the definitions of investment and various types of investments and their associated expected return and risks (b) *Understand* the difference between investment and speculation	Ch 1, Section 1.1.1
1.1.2 *Understand* the different characteristics and investment behaviors between individual investors and institutional investors	Ch 1, Section 1.1.2
Securities market and stock Exchange	
1.2.1 *Understand* what is primary market and its importance towards economic development of a country	Ch 1, Section 1.2.1
1.2.2 *Understand* what is secondary market and its roles	Ch 1, Section 1.2.2
1.2.3 *Know* the roles of the stock exchanges in the economy	Ch 1, Section 1.2.3
Types of Securities	
1.3.1 *Know* the meaning of money market and the various types of money market securities	Ch 1, Section 1.3.1
1.3.2 (a) *Know* the meaning and types of equities (b) *Understand* the differences between common stock and preferred stock	Ch 1, Section 1.3.2
1.3.3 *Know* the meaning and characteristics of bonds	Ch 1, Section 1.3.3
1.3.4 *Understand* the various types and characteristics of Sukuk	Ch 1, Section 1.3.4
1.3.5 (a) Understand the various types and characteristics of derivative securities (b) *Understand the meaning and characteristics of options and futures*	Ch 1, Section 1.3.5
The investment process	
1.4.1 *Know* the various steps that need to be taken by an investor in order to make systematic investment decisions	Ch 1, Section 1.4.1
1.4.2 *Know* the definition of various returns concepts: • Required returns • Expected Returns • Realized returns	Ch 1, Section 1.4.2
1.4.3 *Understand* the definition of various return concepts and how to calculate them	Ch 1, Section 1.4.3
Chapter 2 : Buying And Selling Securities	**Chapter/Section**
On completion, the candidate should :	
Types of orders	
2.1.1 *Understand* what is a market order and its usage	Ch 2, Section 2.1.1

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Section 1 – Operations Of Securities Markets

2.1.2	*Understand* what is stop order and its usage	Ch 2, Section 2.1.2
2.1.3	*Understand* what is limit order and its usage	Ch 2, Section 2.1.3
2.1.4	*Understand* what is a stop limit order and its usage	Ch 2, Section 2.1.4
2.1.5	*Understand* (a) the meaning of time-in-force options in making a stock order, (b) the meaning of the following commonly used time-in-force designations – *Fill-or-kill, All or nothing and Good till cancelled.*	Ch 2, Section 2.1.5
Stock Trading		
2.2.1	*Understand* how orders are executed and how buy and sell orders are matched	Ch 2, Section 2.2.1
2.2.2	*Understand* the order matching principle called price – time priority and its effect on the way orders are being executed	Ch 2, Section 2.2.2
2.2.3	*Understand* what is stock quotation and be able to explain the common terms and abbreviations used in stock quotation	Ch 2, Section 2.2.3
Short – Selling		
2.3.1	*Understand* the meaning and mechanics of short – selling	Ch 2, Section 2.3.1
2.3.2	(a) *Understand* the "Purpose" of Short – Selling (b) *Understand* the differences between speculation and hedging in short – selling	Ch 2, Section 2.3.2
2.3.4	*Understand* the high risk involved in short – selling	Ch 2, Section 2.3.4
2.3.5	*Understand* the advantages and disadvantages of short – selling	Ch 2, Section 2.3.5
Margin Trading		
2.4.1	(a) *Understand* the meaning and operation of margin transaction (b) *Understand* the calculations involved in margin trading	Ch 2, Section 2.4.1
2.4.2	*Understand* the meaning of 'margin call' and what needs to be done when receiving a margin call	Ch 2, Section 2.4.2
2.4.3	*Understand* the leverage impact of margin trading	Ch 2, Section 2.4.3
Types of stocks		Ch 2, Section 2.6
2.5.1	*Understand* what is a growth stock	Ch 2, Section 2.5.1
2.5.2	*Understand* the difference between growth stocks and value stocks	Ch 2, Section 2.5.2
2.5.3	*Understand* what is a blue-chips stock	Ch 2, Section 2.5.3
2.5.4	*Understand* what is a large cap stock	Ch 2, Section 2.5.4

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Section 1 – Operations Of Securities Markets

2.5.5	*Understand* what is a speculative stock	Ch 2, Section 2.5.5
2.5.6	*Understand* what is a penny stock	Ch 2, Section 2.5.6
2.5.7	*Understand* what is a defensive stock	Ch 2, Section 2.5.7
2.5.8	*Understand* what is an aggressive stock	Ch 2, Section 2.5.8
2.5.9	*Understand* what is a cyclical stock	Ch 2, Section 2.5.9
2.5.10	*Understand* what is a counter – cyclical stock	Ch 2, Section 2.5.10
Chapter 3 : Understanding Market Behavior		**Chapter/Section**
On completion, the candidate should :		
Stock Market Indices		
3.1.1	*Understand* the meaning of stock market indices and its general role as market indicators	Ch 3, Section 3.1.1
3.1.2	(a) *Know* that there are different ways of constructing stock indices (b) *Understand* the various method of constructing stock indices: • Value-weighted index • Equally-weighted index • Price-weighted index • Fundamental value-weighted index	Ch 3, Section 3.1.2
3.1.3	*Know* some of the world's famous stock indices, their weighting schemes, history and management: • Dow-Jones averages • Nikkei 225 Index • FTSE 100 Index • Hang Seng Index	Ch 3, Section 3.1.3
Factors Influencing Stock Market		
3.2.1	(a) *Understand* the mechanics of stock market price determination through the interaction of supply and demand (b) *Understand* the factors that influence the supply and demand of shares	Ch 3, Section 3.2.1
3.2.2	(a) *Understand* how company specific factors influence market share prices (b) *Understand* how non – company factors influence market share prices	Ch 3, Section 3.2.2
3.2.3	*Understand* how changes in interest rate influence the stock prices and stock market	Ch 3, Section 3.2.3
3.2.4	*Understand* how world events can influence the stock prices and stock markets	Ch 3, Section 3.2.4
Market efficiency		

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Section 1 – Operations Of Securities Markets

3.3.1	(a) *Understand* the meaning of stock market efficiency (b) *Understand* the role of information in determining market prices	Ch 3, Section 3.3.1
3.3.2	*Understand* the meaning of non-predictability of prices in an efficient market situation	Ch 3, Section 3.3.2
3.3.3	*Understand* the three forms of market efficiency and their associated information set: • Weak – form efficiency • Semi – strong form efficiency • Strong – form efficiency	Ch 3, Section 3.3.3
3.3.4	*Understand* the meaning of stock market regularities and the common regularities found in stock markets around the world	Ch 3, Section 3.3.4
3.3.5	*Know* the roles of policy makers to promote an efficient market	Ch 3, Section 3.3.5
3.3.6	*Understand* the appropriate investment strategies in an efficient market	Ch 3, Section 3.3.6
Chapter 4 : Behavioral Finance		**Chapter/Section**
On completion, the candidate should :		
4.1.	*Understand* the meaning of behavioral finance and how it influence investment decisions	Ch 4, Section 4.1
4.2.	*Understand* the concept of 'anchoring' behavior in making financial decisions and how to avoid its negative impact	Ch 4, Section 4.2
4.3.	*Understand* the concept of 'mental accounting' behavior in making financial decisions and how to avoid its negative impact	Ch 4, Section 4.3
4.4.	*Understand* the concept of 'gambler fallacy' behavior in making financial decisions and how to avoid its negative impact	Ch 4, Section 4.4
4.5.	*Understand* the concept of 'herd behavior' in making investment decision and how to avoid its negative impact	Ch 4, Section 4.5
4.6.	*Understand* the concept of 'Overreaction' behavior in making investment decisions and how to avoid its negative impact	Ch 4, Section 4.6
4.7.	*(a) Understand* the meaning of 'prospect theory' and its differences with the conventional utility theory *(b) Understand* how the 'prospect theory' affects financial and investment decisions *(c) Understand* the meaning of 'disposition effect' in investors behavior and possible ways to mitigate its effect	Ch 4, Section 4.7
Chapter 5 : Securities Valuation		**Chapter/Section**
On completion, the candidate should :		

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Section 1 – Operations Of Securities Markets

Valuation of Fixed Income Securities		
5.1.1	*Understand the meaning of fixed income securities*	Ch 5, Section 5.1.1
5.1.2	*Know the various types of bonds*	Ch 5, Section 5.1.2
5.1.3	*Know the various terminologies related to bond pricing*	Ch 5, Section 5.1.3
5.1.4	*(a) Know* and understand the method of calculating a bond value *(b) Know* how to estimate cash flows of a bond *(c) Know* the method of estimating the required rate of return on a bond	Ch 5, Section 5.1.4
5.1.5	*Understand* the bond pricing and the relationship between bond values and the variables determining the value	Ch 5, Section 5.1.5
5.1.6	*Know* the different possible behaviors in interest rates over time and how interest rates differ based on the maturity of the instruments	Ch 5, Section 5.1.6
Valuation of Equity Securities		
5.2.1	*Know* the meaning of intrinsic value of a security	Ch 5, Section 5.2.1
5.2.2	*(a) Know* that meaning of dividend discounting model in estimating share value *(b) Know* how to estimate required rate of return for a common stock *(c) Know* how to perform share valuation based on different assumptions on dividend growth	Ch 5, Section 5.2.2
5.2.3	*(a) Know* the meaning of price – earnings ratio (b) Know how to use the PE ratio in valuating shares and suing it for investment decision	Ch 5, Section 5.2.3
5.2.4	*Know* the basic principal of valuation using the free cash flows generated by the company	Ch 5, Section 5.2.4
Chapter 6: Stock Analysis		**Chapter/Section**
On completion, the candidate should :		
6.1.1	*Understand* the meaning of stock analysis and its purpose and general approaches	Ch 6, Section 6.1.1
Fundamental analysis		
6.2.1	(a) *Understand* the meaning of fundamental analysis of securities (stocks) (b) *Understand* the methods of conducting fundamental analysis of securities	Ch 6, Section 6.2.1
Technical analysis		
6.3.1	(a) *Understand* the meaning of technical analysis and some of the tools used by technical analysts (b) *Know* the philosophies and assumptions of technical analysis	Ch 6, Section 6.3.1

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Section 1 – Operations Of Securities Markets

Tools for technical analysis		
6.4.1	*Know* some of the common tools used by technical analysts for stock trading	Ch 6, Section 6.4.1
Fundamental analysis versus technical analysis		
6.5.1	*Understand* the differences between fundamental and technical stock analyses	Ch 6, Section 6.5.1
6.5.2	*Know* why fundamental analysts believe that fundamental analysis is superior to technical analysis	Ch 6, Section 6.5.2
6.5.3	*Know* why technical analysts believe that technical analysis superior to fundamental analysis	Ch 6, Section 6.5.3
Chapter 7 : Corporate Actions		**Chapter/Section**
On completion the candidate should be:		
Dividend		
7.1.1	(a) *Know* the meaning of dividends and the difference between cash and stock dividends (b) *Understand* the meaning of various dividend terminologies	Ch 7, Section 7.1.1
7.1.2	*Know* the impact of dividend on stock prices	Ch 7, Section 7.1.2
7.1.3	(a) *Understand* that firms may use dividend declaration as a signal to the market regarding the firm's future profitability (b) *Understand* the perceived impact of dividend changes on stock prices	Ch 7, Section 7.1.3
7.1.4	(a) *Know* the basic theories of paying dividend (b) *Know* the reasons for firms paying or not paying dividends (c) *Know* the arguments for and against paying dividends	Ch 7, Section 7.1.4
Capital Changes		
7.2.1	*(a) Understand* the meaning of a rights issue and its purpose (b) *Know* what needs to be done by shareholders receiving a rights offer (c) *Know* what might happen to the share prices when the shares go ex – rights	Ch 7, Section 7.2.1
7.2.2	(a) Understand the meaning of a bonus issue and its similarities and differences with a stock dividend (b) *Understand the possible market reaction to the announcement of a bonus issue and on the bonus ex – date*	Ch 7, Section 7.2.2
7.2.3	*(a) Know* the meaning of stock split and the reasons for making a stock split	Ch 7, Section 7.2.3

Syllabus Learning Map CME 3 : Broker-Dealer Module		
Section 1 – Operations Of Securities Markets		
	(b) Know the possible effect of stock split announcement on share prices and the theoretical price adjustment on the ex – day *(c) Know* the meaning of a reverse stock split and its purpose	
Mergers and acquisitions (M&A)		
7.3.1	*Understand* the meaning of mergers and acquisitions and the differences between them	Ch 7, Section 7.3.1
7.3.2	*Understand* the meaning of synergy and its sources in mergers and acquisitions	Ch 7, Section 7.3.2
7.3.3	*Know* the various types of mergers	Ch 7, Section 7.3.3
7.3.4	(a) *Know* the different ways of corporate reorganization through break – ups (b) *Understand* the various methods of corporate break – ups: sell – offs, equity carve-outs and spin-off (c) *Understand* the various advantages and disadvantages of corporate break – ups	Ch 7, Section 7.3.4
Initial Public Offering		
7.4.1	*Understand* what is an initial public offering (IPO) and its purpose	Ch 7, Section 7.4.1
7.4.2	*Know* the various benefits o f a private company becoming a public listed company	Ch 7, Section 7.4.2
7.4.3	*Understand* the general IPO process	Ch 7, Section 7.4.3
7.4.4	*Understand* the IPO process for stock listing on the Saudi Stock Exchange	Ch 7, Section 7.4.4
7.4.5	(a) *Know* the reasons why IPOs are in general underpriced (b)*Understand* that IPOs are good investments in most cases	Ch 7, Section 7.4.5

Syllabus Learning Map CME 3 : Broker-Dealer Module	
Section 2 – Broker-Dealer Regulations	
Chapter 8 : Capital Market Law	**Chapter/Section**
On completion, the candidate should :	
Securities	
8.1.1 *Know* the types of investment specifically covered by the CML and referred to as 'securities' therein (Chapter 1, Article 2)	Ch 8, Section 8.1.1
8.1.2 *Know* the types of investment specifically excluded from the definition of 'securities' and therefore not covered by the CML (Chapter 1, Article 3)	Ch 8, Section 8.1.2
CMA objectives	
8.2.1 *Understand* the extent of the Authority's responsibilities under the CML and the functions that it may employ to achieve those objectives (Chapter 2, Article 5)	Ch 8, Section 8.2.1
Other Saudi Arabian Institutions	
8.3.1 *Know* the objective of the Exchange (Chapter 3, Article 20)	Ch 8, Section 8.3.1
8.3.2 *Understand* the functionality of the committee for the Resolution of Securities Disputes (Chapter 3, Article 25)	Ch 8, Section 8.3.2
8.3.3 *Understand* the functionality of the Securities Depository Center (Chapter 4, Articles 26 & 27)	Ch 8, Section 8.3.3
Broker Regulation	
8.4.1 *Know* the requirements of a person wishing to undertake brokerage business (Chapter 5, Articles 31 & 32)	Ch 8, Section 8.4.1
8.4.2 *Know* the activities that may be carried on by a broker (chapter 5, Article 32)	Ch 8, Section 8.4.2
8.4.3 *Understand* the Exchange's power to carry out investigations and inspections of licensed brokers or brokers' agents (Chapter 5 Article 35)	Ch 8, Section 8.4.3
Disclosure	
8.5.1 *Know* what information and statements must be contained in a prospectus relating to the issue of securities (Chapter 7, Article 42)	Ch 8, Section 8.5.1
Regulation of Restricted Purchases and Restricted Offers	

Syllabus Learning Map CME 3 : Broker-Dealer Module	
Section 2 – Broker-Dealer Regulations	
8.6.1 *Understand* what is meant by a "Restricted purchase of Shares" (Chapter 9, Articles 52 & 54)	Ch 8, Section 8.6.1
8.6.2 *Understand* what is meant by a "Restricted offer for Shares" (Chapter 9, Articles 52 & 54)	Ch 8, Section 8.6.2
Sanctions and Penalties for violations (General)	
8.7.1 *Know* the sanctions that the Authority may seek from the Committee for a violation of any provisions of the regulations, The Authority's rules or those of the Exchange (Chapter 10, Article 59)	Ch 8, Section 8.7.1
Chapter 9: Securities Business Regulations	**Chapter/Section**
On completion candidate should be:	
Carrying on securities business	
9.1.1 *Understand* the five securities activities that constitute securities business (Part 2, Articles 2 & 3)	Ch 9, Section 9.1.1
9.1.2 *understand* the criteria that must be present if a person is to be regarded as carrying on securities business in the kingdom of Saudi Arabia (part 2, article 4)	Ch 9, Section 9.1.2
9.1.3 *Understand* the categories of persons who may carry on securities business in the kingdom of Saudi Arabia (part 2, article 5 annex 1)	Ch 9, Section 9.1.3
Securities advertisements	
9.2.1 *understand* the criteria that must be present for a communication to be regarded as a securities advertisement (part 3, article 16)	Ch 9, Section 9.2.1
9.2.2 *Know* the authorized person's role in the making or communicating of Securities advertisements (Part 3, Article 17)	Ch 9, Section 9.2.2
Chapter 10 : Authorized Persons Regulations : The Authorization Process	**Chapter/Section**
On completion, the candidate should:	
The Principles	
10.1.1 *Know* the eleven principles governing the general conduct of the Authorized Persons. (Part 2, Article 5)	Ch 10, Section 10.1.1
Authorization	
10.2.1 *Know* the detail requirements for authorization (Part 3, Article 6)	Ch 10, Section 10.2.1

Syllabus Learning Map CME 3 : Broker-Dealer Module	
Section 2 – Broker-Dealer Regulations	
10.2.2 *Know* the specific criteria which an authorized person's employees, officers and agents will be assessed in determining whether it is fit and proper to carry out securities business for which it is authorized (Part 3, Article 9)	Ch 10, Section 10.2.2
10.2.3 *Know* the conditions for the withdrawal and cancellation of license (Part 3, Article 12)	Ch 10, Section 10.2.3
10.2.4 *Know* the notification requirements relating to controllers and closed links (Part 3, Article 13 & 14)	Ch 10, Section 10.2.4
10.2.5 *Know* the notification requirements that an authorized person must comply with in making various notifications on events or changes affecting the authorized person to the Authority. (Part 3, Article 15 & Annex 3.2)	Ch 10, Section 10.2.5
10.2.6 *Know* the record-keeping requirements that an authorized person must comply with (Part 3, Article 16)	Ch 10, Section 10.2.6
Registered Person	
10.3.1 *Know* the key functions that must be registered with the Authority (Part 4, Article 19)	Ch 10, Section 10.3.1
10.3.2 *Know* the general registration requirements, procedures and powers of the Authority in handling the registration applications (Part 4, Article 21& 22)	Ch 10, Section 10.3.2
10.3.3 *Know* the provisions for cancellation of registration (Part 4, Article 25)	Ch 10, Section 10.3.3
Chapter 11 : Authorized Persons Regulations : Conduct Of Business	**Chapter/Section**
On completion, the candidate should:	
Conduct of business	
11.1.1 *Understand* the limitations on the giving and receipt of gifts or inducements (Part 5, Article 27)	Ch 11, Section 11.1.1
11.1.2 *Understand* the circumstances in which an Authorized Person may enter into a special commission arrangement (Part 5, Article 28)	Ch 11, Section 11.1.2
11.1.3 *Understand* the exceptions to the Authorized Person's duty of confidentiality in respect of client information (Part 5, Article 29)	Ch 11, Section 11.1.3
11.1.4 *Understand* the characteristics and uses of Chinese Wall arrangements (Part 5, Article 30)	Ch 11, Section 11.1.4
11.1.5 *Understand* the requirements to which a prepared securities advertisement must adhere before it is communicated to any person	Ch 11, Section 11.1.5

Syllabus Learning Map CME 3 : Broker-Dealer Module	
Section 2 – Broker-Dealer Regulations	
(Part 5, Article 33 and Annex 5.1)	
11.1.6 *Understand* the requirements and restrictions to which any individual making the direct communication and the authorized person must adhere before and during the communication. (Part 5, Articles 34 & 35)	Ch 11, Section 11.1.6
Accepting Clients	
11.2.1 *Know* the three different types of clients (Part 5, Article 36)	Ch 11, Section 11.2.1
11.2.2 *Know* the requirement that an authorized person must provide a client with its terms of business; the basic purpose of doing so and its record keeping requirements (Part 5, Article 38 & Annex 5.2)	Ch 11, Section 11.2.2
11.2.3 *Know* the requirement of Know Your Customer and basic details of the information that should be retained from clients (Part 5, Article 39 & Annex 5.3)	Ch 11, Section 11.2.3
Clients Relations	
11.3.1 *Know* basic details of the fiduciary duties that an Authorized Persons owes to its customers (Part 5, Article 40 & Annex 5.4)	Ch 11, Section 11.3.1
11.3.2 *Understand* an Authorized Person's responsibilities regarding any conflict of interest between itself and its customers (Part 5, Article 41)	Ch 11, Section 11.3.2
11.3.3 *Understand* the restrictions placed on an Authorized Person's dealing with its customers when undertaking activities that involve risk (Part 5, Article 42)	Ch 11, Section 11.3.3
11.3.4 *Understand* the regulations regarding the suitability of advice or a transaction for a customer (Part 5, Article 43)	Ch 11, Section 11.3.4
11.3.5 *Understand* the circumstances under which an Authorized Person may lend money or extend credit to a customer (Part 5, Article 44)	Ch 11, Section 11.3.5
11.3.6 *Understand* the circumstances and conditions under which an Authorized Person may effect a margined transactions or the granting of a loan or credit to cover margin payments (Part 5, Article 45)	Ch 11, Section 11.3.6
Reporting to Clients	
11.4.1 *Know* the requirements that an Authorized Person must send a contract note when it has effected a sale or purchase of a security for a customer and the required content of a cover note (Part 5, Article 47 & Annex 5.5)	Ch 11, Section 11.4.1
11.4.2 *Know* the requirements that an Authorized Person who acts as manager for a client must send periodic valuations to that client and the required content of such periodic valuation statement (Part 5, Article 48 &	Ch 11, Section 11.4.2

Syllabus Learning Map CME 3 : Broker-Dealer Module	
Section 2 – Broker-Dealer Regulations	
Annex 5.6)	
11.4.3 *Understand* the record keeping requirements in respect of transactions effected by an Authorized Person for its clients and its clients' accounts (Part 5, Article 49)	Ch 11, Section 11.4.3
11.4.4 *Understand* the regulations regarding Employees' Personal Dealings as they affect the employee and the Authorized Person (Part 5, Article 50 & Annex 5.7)	Ch 11, Section 11.4.4
11.4.5 *Know* an Authorized Person's obligations if it wishes to make or accept telephone communications to or from its clients in relation to securities business (Part 5, Article 51)	Ch 11, Section 11.4.5
Chapter 12 : Authorized Persons Regulations : Systems And Controls Requirements	**Chapter/Section**
On completion, the candidate should:	
System and Controls	
12.1.1 *Know* the appropriate measures that should be taken by an Authorized Person to maintain a clear and appropriate division of the principal responsibilities among its directors or partners and senior management (Part 6, Article 53)	Ch 12, Section 12.1.1
12.1.2 *Know* the requirement for an Authorized person to establish and maintain systems and controls that are appropriate to its business. (Part 6, Article 54)	Ch 12, Section 12.1.2
12.1.3 *Know* the requirement for the Authorized person's governing body to carry out regular review of division of responsibilities, systems and controls (Part 6, Article 56)	Ch 12, Section 12.1.3
12.1.4 *Know* the requirement for the establishment of compliance function within an Authorized Person (Part 6, Article 57)	Ch 12, Section 12.1.4
12.1.5 *Know* the requirement for the establishment of compliance committee within an Authorized Person to oversee the effectiveness of compliance functions (Part 6, Article 58)	Ch 12, Section 12.1.5
12.1.6 *Understand* the extent of functions which could be delegated by an Authorized Person to external party and the supervisory controls required over this outsourcing arrangement (Part 6, Article 59)	Ch 12, Section 12.1.6
12.1.7 *Know* the requirement for the establishment of Audit Committee within an Authorized Person, if it required (Part 6, Article 60)	Ch 12, Section 12.1.7
12.1.8 *Know* the requirement for the establishment of an Internal Audit functions within an Authorized Person, if it required (Part 6, Article	Ch 12, Section 12.1.8

Syllabus Learning Map CME 3 : Broker-Dealer Module	
Section 2 – Broker-Dealer Regulations	
61)	
12.1.9 *Know* the requirements for regular review of Authorized Person's books, accounts and other records related to securities business (Part 6, Article 62)	Ch 12, Section 12.1.9
12.1.10 *Understand* the importance of proper customer's complaint handling process (Part 6, Article 63)	Ch 12, Section 12.1.10
12.1.11 *Know* the requirement for an Authorized Person to establish adequate procedures for the recruitment, training, supervision and discipline of its employees (Part 6, Article 65)	Ch 12, Section 12.1.11
12.1.12 *Know* the requirement for an Authorized Person to ensure that it can continue to operate and meet its regulatory obligations in the event of an unforeseen interruption to its activities (Part 6, Article 66)	Ch 12, Section 12.1.12
12.1.13 *Know* the importance of efficient record retrieval and ability to produce such document for Authority's inspection when requested (Part 6, Article 67)	Ch 12, Section 12.1.13
12.1.14 *Know* the requirements for an authorized person to establish and maintain adequate records and internal controls in respect of a mandate it has over an account in the client's own name (Part 6, Article 68)	Ch 12, Section 12.1.14
Client Money and Assets	
12.2.1 *Understand* the segregation requirements in respect of authorized person's own assets and those of its clients and the effect of segregation (Part 7, Article 69 & 70)	Ch 12, Section 12.2.1
12.2.2 *Understand* what constitutes Client Money and when money is not Client Money (Part 7, Article 71 & 72)	Ch 12, Section 12.2.2
12.2.3 *Know* the requirement that Client Money is held in a local bank and the regulations concerning risk assessment, overseas banks and specific acknowledgement from the bank (Part 7, Article 73 & 74)	Ch 12, Section 12.2.3
12.2.4 *Understand* the regulations concerning the paying in, withdrawing and maintenance of money in a Client Money Account (Part 7, Article 75)	Ch 12, Section 12.2.4
12.2.5 *Understand* when Client Money ceases to be Client Money (Part 7, Article 76)	Ch 12, Section 12.2.5
12.2.6 *Know* that no commission is payable to a client in respect of client money held in a client account (Part 7, Article 77)	Ch 12, Section 12.2.6
12.2.7 *Know* that an Authorized person must keep records which are sufficient to demonstrate compliance with the Client Money Rules of this Regulation (Part 7, Article 78)	Ch 12, Section 12.2.7

Syllabus Learning Map **CME 3 : Broker-Dealer Module**	
Section 2 – Broker-Dealer Regulations	
12.2.8 *Understand* the Authorized Person's obligations concerning the confirmation of balances in its Client Accounts (Part 7, Article 79)	Ch 12, Section 12.2.8
12.2.9 *Understand* the Authorized Person's obligations concerning the reconciliation of each client account against the balances held at the bank (Part 7, Article 80)	Ch 12, Section 12.2.9
Client Assets Rules	
12.3.1 *Understand* what constitutes Client Assets and the need for segregation (Part 7, Article 82 & 83)	Ch 12, Section 12.3.1
12.3.2 *Understand* the requirement that the titles of accounts used to record Client Assets make it clear that the assets belong to the client (Part 7, Article 84)	Ch 12, Section 12.3.2
12.3.3 *Understand* the regulations concerning the holding and registration of Client Assets (Part 7, Article 85)	Ch 12, Section 12.3.3
12.3.4 *Understand* the circumstances under which an Authorized Person may lend a client's securities (Part 7, Article 86)	Ch 12, Section 12.3.4
12.3.5 *Understand* the requirement to perform assessment of custodian (Part 7, Article 87)	Ch 12, Section 12.3.5
12.3.6 *Understand* the requirement for an Authorized Person to have clients' agreements with its clients prior to providing any custodial services (Part 7, Article 88)	Ch 12, Section 12.3.6
12.3.7 *Understand* the requirement for an Authorized Person to agree in writing with the custodian appropriate terms of business prior to holding of client's assets (Part 7, Article 89)	Ch 12, Section 12.3.7
12.3.8 *Understand* the Authorized Person's obligations concerning the reconciliation of clients' assets which it does not physically hold, which it physically holds as well as its obligations if any reconciliation reveals a discrepancy (Part 7, Article 90)	Ch 12, Section 12.3.8
12.3.9 *Understand* the Authorized Person's obligations concerning the provision of statements to clients and the matters covered in those statements (Part 7, Article 91)	Ch 12, Section 12.3.9
12.3.10 *Understand* the Authorized Person's obligations concerning the safeguarding of collateral (Part 7, Article 93)	Ch 12, Section 12.3.10
12.3.11 *Understand* the terms under which an Authorized Person may treat collateral as "other collateral" and the significance of holding collateral in this way (Part 7, Article 94)	Ch 12, Section 12.3.11

Syllabus Learning Map CME 3 : Broker-Dealer Module	
Section 2 – Broker-Dealer Regulations	
Chapter 13 : Market Conduct Regulations	**Chapter/Section**
On completion, the candidate should:	
Prohibition of Market Manipulation	
13.1.1 *Understand* the regulations concerning the prohibition of Market Manipulation and deceptive acts or practices (Part 2, Article 2)	Ch 13, Section 13.1.1
• Reasonable ground to know	
• False or misleading impression	
• Artificial prices	
13.1.2 *Understand* the nature of activities that may be considered to be Market Manipulation or deceptive acts or practices (Part 2, Article 3)	Ch 13, Section 13.1.2
• Fictitious trades	
• No change in beneficial ownership	
• Matching purchase and sale transactions	
• Escalating / Diminishing price orders	
• Orders to manipulate prices	
Insider Trading	
13.2.1 *Understand* the concept of trading in a Security as it is provided in the market conduct regulations (Part 3, Article 4a)	Ch 13, Section 13.2.1
• Trading Security	
• Price affected by information	
• Direct trading	
• Indirect trading	
13.2.2 *Understand* what is meant by 'Insider' for the purposes of the Insider 'Trading Regulations (Part 3, Article 4b)	Ch 13, Sectoin 13.2.2
13.2.3 *Understand* what is meant by 'Insider Information' for the purpose of the Insider Trading Regulations (Part 3, Article 4c)	Ch 13, Section 13.2.3
13.2.4 *Understand* the regulations covering the disclosure of Insider Information and the prohibition of Insider Trading (Part 3,	Ch 13, Section 13.2.4

Syllabus Learning Map

CME 3 : Broker-Dealer Module

Section 2 – Broker-Dealer Regulations

Articles 5 & 6)	
Untrue Statements	
13.3.1 *Understand* the regulations concerning the prohibition of Untrue Statements (Part 4, Articles 7 & 8)	Ch 13, Section 13.3.1
13.3.2 *Know* the circumstances in which a person may make an Untrue Statement (Part 4, Article 9)	Ch 13, Section 13.3.2
13.3.3 *Understand* the circumstances under which a person may be liable for damages in respect of the making of an Untrue Statement (Part 4, Article 10)	Ch 13, Section 13.3.3
Authorized Persons' Conduct	
13.4.1 (a) *Know* what action should be taken by authorized persons or registered persons if they suspect that their client is involved in market manipulation or insider trading (Part 5, Article 11) (b) *Know* the authorized person or registered person's responsibilities in respect of clients' priority, timely execution, best execution, timely allocation and churning (Part 5, Article 12 - 16)	Ch 13, Section 13.4.1
13.4.2 *Know* that aggregation of account is not allowed in Saudi market, but allowed with certain conditions in non-Saudi markets (Part 5, Article 17)	Ch 13, Section 13.4.2
13.4.3 (a) *Know* that trading for own account ahead of research is not allowed (Part 5, Article 18) (b) *Know* that making a trade contrary to a research recommendation is prohibited (Part 5, Article 19)	Ch 13, Section 13.4.3
13.4.4 *Understand* the extent to which a person may be liable when acting at the direction of another person (Part 5, Article 20)	Ch 13, Section 13.4.4
Chapter 14 : Anti-Money Laundering And Counter-Terrorist Financing Rules	**Chapter/Section**
On completion, the candidate should :	
14.1 *Know* the meaning of money-laundering and terrorist financing as defined by the AML/CTF Rule. (Part1, Article 2)	Ch 14, Section 14.1

Syllabus Learning Map

CME 3 : Broker-Dealer Module

Section 2 – Broker-Dealer Regulations

AML/CTF Requirements	
14.2.1 *Understand* the general requirements and principles of implementing AML/CTF (Part2, Article 3)	Ch 14, Section 14.2.1
14.2.2 *Understand* the AML/CTF Rules affecting the authorized person's overseas branches and subsidiaries (Part 2, Article 4)	Ch 14, Section 14.2.2
14.2.3 *Know* the restriction on accepting cash (Part 2, Article 5)	Ch 14, Section 14.2.3
Customer Due Diligence	
14.3.1 *Know* the general procedures of accepting clients (Part 3, Article 7)	Ch 14, Section 14.3.1
14.3.2 *Understand* the steps involved in performing customer due diligence and the required verification process for each type of clients (Part 3, Article 8)	Ch 14, Section 14.3.2
14.3.3 *Know* how to implement the risk-based approach of costumer due diligence – reduced and enhanced CDD. (Part 3, Article 9)	Ch 14, Section 14.3.3
14.3.4 *Know* what is Politically Exposed Persons (PEPs) and the required review process to be carried out relating to PEPs. (Part3, Article 10)	Ch 14, Section 14.3.4
14.3.5 *Know* what are the Non-profit Organizations and the required review process (Part 3, Article 11)	Ch 14, Section 14.3.5
14.3.6 *Know* the situations when CDD shall be performed. (Part 3, Article 12)	Ch 14, Section 14.3.6
14.3.7 *Know* the requirements for CDD on investment fund clients. (Part3, Article 13)	Ch 14, Section 14.3.7
14.3.8 *Know* the extent of reliance on third parties for CDD process and the required steps and documents for verifications. (Part 3, Article 14)	Ch 14, Section 14.3.8
14.3.9 *Know* the requirements of CDD for acquisition exercise. (Part 3, Article 15)	Ch 14, Section 14.3.9
14.3.10 *Know* the risk faced as a result of non-face-to-face business relationships and the required mitigating steps. (Part 3, Article 16)	Ch 14, Section 14.3.10
14.3.11 *Know* the requirements for ongoing CDD and unusual transactions monitoring. (Part 3, Article 17)	Ch 14, Section 14.3.11

Syllabus Learning Map CME 3 : Broker-Dealer Module	
Section 2 – Broker-Dealer Regulations	
14.3.12 *Know* the requirements for regular review and periodical update of clients' records. (Part 3, Article 18)	Ch 14, Section 14.3.12
Record Keeping	
14.4.1 *Know* the details of record keeping requirements contained in the rules & regulations of the Authority and the Saudi Stock Exchange (Tadawul). (Part 4, Article 19)	Ch 14, Section 14.4.1
Suspicious Transaction Report	
14.5.1 *Know* the process and procedures relating to suspicious transaction report (Part 5, Article 20 & Annex 1)	Ch 14, Section 14.5.1
14.5.2 *Know* the procedures relating to tipping off (Part 5, Article 21)	Ch 14, Section 14.5.2
14.5.3 *Know* the requirements to have effective procedures to promptly identify any clients or potential clients (including beneficial owners) that have been labeled as "designated persons" by the United Nations Committee under UNSCR 1267(1999) ("the 1267 Committee"); and successor resolutions. (Part 5, Article 22)	Ch 14, Section 14.5.3
Internal Policies, Procedures and Controls	
14.6.1 (a) *Know* the requirements to develop and implement internal policies, procedures and controls to help prevent money-laundering and terrorist financing and the required communication to employees. (Part 6, Article 23) (b) *Know* the duties that shall be performed by the MLRO. (Part 6, Article 23)	Ch 14, Section 14.6.1
14.6.2 *Know* the role of internal audit relating to AML/CTF (Part 6, Article 24)	Ch 14, Section 14.6.2
14.6.3 *Know* the requirements on AML/CTF regular and continuous education and training. (Part 6, Article 25)	Ch 14, Section 14.6.3

Answers To Sample Multiple Choice Questions

Chapter 1 : Understanding Securities Markets
1 B 2 C 3 A 4 C 5 D
Chapter 2 : Buying And Selling Securities
1 B 2 D 3 C 4 B 5 A
Chapter 3 : Understanding Market Behavior
1 D 2 B 3 C 4 D 5 A
Chapter 4 : Behavioral Finance
1 C 2 A 3 B 4 C 5 B
Chapter 5 : Securities Valuation
1 C 2 B 3 B 4 A 5 C
Chapter 6: Stock Analysis
1 A 2 A 3 D 4 C 5 B
Chapter 7 : Corporate Actions
1 B 2 D 3 A 4 D

5 C
Chapter 8 : Capital Market Law
1 D 2 C 3 A 4 B 5 C
Chapter 9 : Securities Business Regulations
1 B 2 D
Chapter 10 : Authorized Persons Regulations: The Authorization Process
1 B 2 C 3 D 4 A
Chapter 11 : Authorized Persons Regulations: Conduct Of Business
1 B 2 A 3 C 4 B 5 A
Chapter 12 : Authorized Persons Regulations: System And Controls Requirements
1 D 2 B 3 A
Chapter 13 : Market Conduct Regulations
1 B 2 C 3 C 4 D 5 A
Chapter 14 : Anti-Money Laundering/Counter-Terrorist Financing Rules
1 D 2 B 3 C 4 A 5 C