SAVINGS AND CAPITAL MARKETS
This book has been developed in collaboration with the World Bank, Pakistan Stock Exchange, Pakistan Mercantile Exchange and Mutual Funds Association of Pakistan.

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March 2019
In performing its functions and exercising its powers, the Commission shall strive:

to create awareness among investors and to provide an appropriate degree of protection for investors, having regard to the general principle that investors should take responsibility for their decisions”

Securities and Exchange Commission of Pakistan Act, 1997 section 20 (6) (ba)
PREFACE

With the evolution of the financial markets of Pakistan, awareness about it has become need of the hour. Developed and written in context of Pakistan's financial eco-system, this book elucidates matters related to the various avenues of investment available within the non-bank financial sector.

_Savings and Capital Markets_ provides the basic introduction to equity, debt and derivatives and its different types. It also educates the reader about the role of Securities and Exchange Commission of Pakistan (SECP) in regulating various sectors of the financial industry. In addition, it provides an overview of the Non-Banking Finance (NBF) sector and its intermediaries and outlines the rules and regulations that govern this sector. Other areas covered in the book include Islamic Finance, the Commodity Market of Pakistan, Insurance etc.

At a basic level, the book explains the life cycle of an investor, portfolio management and presents guidelines pertaining to personal financial planning.
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1. Introduction to Equities

Companies finance their operations by issuing either debt or equity securities. A debt is a liability of the issuing company, whereas by issuing equity you sell ownership of the company and bring in new investors as shareholders with you. When a company issues debt, it is legally obligated to repay the amount it borrows, that is the original principal borrowed plus the interest payments that is the cost the companies pay to use those funds for a specified period. Whereas, a company issuing equity securities or shares, is not legally obligated to repay the amount it receives from shareholders, nor it is under legal obligation to pay periodical returns as is the case with debt requiring periodical interest payments.

Shareholders have a claim on the company's assets after all the liabilities and debts are cleared or paid off it is also called the residual claim hence they
become owners of the company to the extent of the investment made by them. Consequently, shareholders expect the company’s management to act in their best interest by making decisions that will maximize the market price of their shares.

2. Equity Ownership

The amount of ownership an individual or company has in the assets of the company is called equity ownership. Owner’s equity is determined by subtracting the liabilities from the assets of the company, giving rise to the accounting equation:

Owner’s Equity = Total assets - Total liabilities

For example, if a home is worth Rs. 2 million and the owner owes the bank Rs. 1.5 million, the owner’s equity is Rs. 0.5 million.

For a company, this is also called net worth or shareholders’ equity or net assets.

3. Types of Shares

3.1 Ordinary Shares

An ordinary share represents equity ownership in a company and entitles the owner to a vote in matters put before shareholders in proportion to their percentage ownership in the company. Ordinary shareholders are entitled to receive dividends if any are available after dividends on preferred shares are paid. They are also entitled to their share of the residual economic value of the company should the business be wound up; however, they are last in line after bondholders and preferred shareholders for receiving business proceeds. As such, ordinary shareholders are considered unsecured creditors.

3.2 Preferred Shares

Preferred stock is a hybrid security; it is similar to bonds in some respects and to common stock in other ways. Preferred stock provides a specific dividend that is paid before any dividends are paid to common stockholders, and takes precedence over common stock in the event of a liquidation. Like common stock, preference shares represent ownership in a company; however, they do not enjoy any of the voting rights of common stockholders. Both preferred shares and common stock are part of the total equity. Also unlike common stock, preference shares pay a fixed dividend that does not fluctuate. The main benefit to owning preference shares is that the investor has a preferential claim on the company’s assets before common stockholders. Preferred shareholders always receive their dividends first and, in the event, the company goes into
bankruptcy, preferred shareholders are paid off before common stockholders.

### 3.3 Securities Markets

#### 3.3.1 Primary Markets

The primary market is the part of the capital market that deals with issuing of new securities. Companies, governments or public sector institutions can obtain funds through the sale of a new stock or bond issues through the primary market. Primary markets are facilitated by underwriting groups, which consist of investment banks that will set a beginning price range for a given security and then oversee its sale directly to investors. When a company publicly sells new stocks and bonds for the first time, it does so in the primary capital market. In many cases, this takes the form of an initial public offering, or IPO. In Pakistan's case, the company offers its shares to high net worth individuals, funds and companies through a book building process first, and then offers shares in small numbers through IPO to retail investors.

#### 3.3.2 Secondary Markets

The secondary market is where securities are traded after the company has sold all the stocks and bonds offered in the primary market. The secondary market is what people talk about when they refer to the 'stock market'. This includes Pakistan Stock Exchange and all the major exchanges around the world. The defining characteristic of the secondary market is that investors trade with each other. The stock market is where buyers and sellers meet to decide on the price to buy or sell securities, through a registered broker. The secondary market is where securities are traded after the company has sold all the issued stocks and bonds offered in the primary market. Market such as the Pakistan Stock Exchange is a secondary market. In the secondary market, small investors have a better chance of buying or selling securities, because they are able to purchase or sell any number of shares at the going market price. Anyone can purchase securities in the secondary market as long as they are willing to pay the price for which the security is being traded.

In the secondary market, an investor needs a broker to purchase securities on his or her behalf. The price of the security fluctuates with the market, and the cost to the investor includes the commission paid to the broker, exchange levies and government taxes. The volume of securities sold or traded also varies from day to day, as demand for the security fluctuates. The price paid by the investor is no longer directly related to the initial price of the security as determined by the first issuance, and the company that issued the security is not a party to any sale between two investors. However, the company can engage in a stock buyback on the secondary market, a law that has also been recently promulgated in Pakistan.
The difference between the primary capital market and the secondary capital market is that in the primary market, investors buy securities directly from the company issuing them, while in the secondary market, investors' trade securities among themselves, and the company with the security being traded does not participate in the transaction.

There are two types of markets within the secondary market:

**Ready Market/Spot Markets**

Ready Market Board or Ready Board as it is called in Pakistan is where stocks are bought or sold "on the spot". Delivery takes place literally within a few days. If a buyer buys a share, he receives delivery, and if he sells the share, he has to deliver the shares to the clearinghouse on the day of settlement. In Pakistan, more than 70% of the total market trade takes place on the Ready Board. The settlement cycle in Pakistan's ready market is T+2, which means the trade has to be settled on Trading plus two-day cycle.

**Futures Markets/Derivatives Markets**

Futures or Derivatives market in Pakistan is a simple plain vanilla forward market. The forward counter was introduced in order to allow investors to hedge their risk. However, this counter is also used by speculators who embrace greater risk in order to obtain higher returns on their investment.

Not every stock in the ready market is available in the futures market. Only the liquid stocks are available there. In futures market an investor can either close his position before the end of the contract period or can take or give delivery of the stock at some future date, which is between one to three months in Pakistan. The futures market is growing in importance globally and has higher trading volumes than the ready market but in Pakistan futures market is still in its nascent stage and most of the trading takes place in the ready market.

### 4. Market Indexes — Definition and Calculation

An index represents a given security market, a segment of security market or a certain asset class. The main purpose of an index is to reflect the performance of the market that it represents, estimate its risk and measure performance of fund managers. The stocks included in an index are a sample of the stocks in the equity market in most cases. The value of an index changes with the change in price of underlying stocks and is calculated on an ongoing basis. An index could be a Price Return Index which only reflects the prices of the stocks constituting the index, or another form of index could be a Total Return Index, which not only reflects the prices of the securities but also the reinvestment of all the income received since the start. The income from a stock could be in the shape of...
of cash dividends, stock dividends or any other kind of distribution.

4.1 Uses of Market Indexes

Market Indexes are used to understand the market sentiment. They are also used as a proxy for measuring return, systematic risk, risk-adjusted performance and benchmark for comparing a fund manager’s performance. Index also provides a historical perspective of stock market performance, giving investors greater insight into their investment decisions. Investors who do not know which individual stocks to invest in can use indexing as a method of choosing their stock investments. Indexes are also often used as a forecasting tool. By studying the historical performance of the Indexes, investment managers try to forecast trends in the market, however, there is insufficient evidence to conclude whether such trends are present in the market or not. In order for an index to be viable, it must be possible to buy all the components of the index in the same proportions of the index without incurring very high transaction costs or having market impact.

4.2 Broad Market Indexes

Broad market Indexes generally refer to the broader market and includes stocks with characteristics such as an actively traded stock with large market capital and representing at least one particular sector, etc. In Pakistan, the broader market index is KSE-100, comprises 100 stocks from the total market based on various categories.

4.3 Sector Indexes

Sector Indexes represent and track different economic sectors such as KMI-30 Index in Pakistan Stock Exchange tracks the Shariah compliant stocks. They can also represent various sectors such as fertilizer, energy, finance, etc. Indexes also represent certain asset class or region e.g. Morgan Stanley Composite Index (MSCI) Emerging Market represents stocks from all the emerging markets around the world.

4.4 Style Indexes

Style Indexes represent groups of securities, which are classified according to certain characteristics they may have. There could be growth stocks, value stocks, or small-cap stocks or a combination of stocks.

The two most popular and commonly tracked Indexes in PSX are KSE-100 and KMI-30.
4.5 KSE-100 Index

The primary objective of the KSE-100 index is to have a benchmark by which the stock price performance can be compared over a period. In particular, the KSE-100 index is designed to provide investors with a sense of how the Pakistan equity market is performing. The KSE 100 index is similar to other indicators that track various sectors of Pakistan’s economic activity such as the gross national product, consumer price index, etc. The KSE-100 index was introduced in November 1991 with a base value of 1,000 points. The index comprises 100 companies selected based on sector representation and highest free-float capitalization. This captures about 80% of the free-float capitalization of companies listed on the Pakistan Stock Exchange. Thirty-four companies are selected i.e., one company from each sector on the basis of highest free-float capitalization and the remaining 66 companies are selected on the basis of largest free-float capitalization in descending order. KSE-100 is a total returns index that is adjusted for dividends, bonuses and rights as and when announced.

4.5.1 Free-float methodology

Free-float means proportion of total shares issued by a company that are readily available for trading on the stock exchange. It generally excludes shares held by controlling directors, sponsors, promoters, government and other locked-in shares not available for trading in the normal course.

Objective and description:

- Free-float calculation methodology is used to construct stock indexes for better market representation than those constructed using total free-float market capitalization.
- It gives weight to constituent companies as per their actual liquidity in the market and is not influenced by tightly held large-cap companies.
- Free-float can be used by the exchange for regulatory purposes such as risk management and market surveillance.

4.5.2 Market capitalization

Market capitalization refers to the total market value of a company's outstanding shares. Commonly referred to as "market cap", it is calculated by multiplying a company's outstanding shares by the current market price of one share. The investment community uses this figure to determine a company's size, as opposed to using total sales or assets.

4.6 KMI-30 Index

The objective of KSE-Meezan index (KMI) is to serve as a gauge for measuring
the performance of Shariah compliant equity investments. Besides tracking performance of Shariah compliant equity investments, it may also act as a research tool for strategic asset allocation process. Besides tracking performance of Shariah compliant equities, its construction helps increase investor trust and participation.

4.6.1 Eligibility Criteria

- The core business of the company should not violate any principle of Shariah.
- Interest Bearing Debt to Total Assets, <37%
- Non-Compliant Investments to Total Assets, <33%
- Non-Compliant Income to Total revenue, <5%
- Illiquid Assets to Total Assets, >25%
- Net Liquid Assets/Share vs Market Price/Share

4.7 Raising Capital

4.7.1 Authorized Capital

Before a publicly traded company can sell stock, it must specify a certain limit to the amount of share capital that it is authorized to raise. This limit is set forth in its constitutional documents and can only be changed with the approval of the shareholders. This is sometimes known as the authorized share capital.

4.7.2 Paid-up Capital

Paid-up capital is the amount of money a company receives from shareholders in exchange for shares of stock. Paid-up capital is created only when a company sells its shares on the primary market directly to the investors. When shares are bought and sold between investors on the secondary market, no additional paid-up capital is created because the proceeds of those transactions go to the selling shareholders, not in the issuing company. A company does not usually issue the full amount of its authorized share capital. Instead, some will be held in reserve by the company for possible future use. The amount that is issued is called the paid-up capital. Paid-up capital can never exceed authorized share capital. In other words, the authorized share capital represents the upward cap on possible paid-up capital. In terms of investing or immediate business finance decisions, paid-up capital is generally more important. Paid-up capital represents money that is not borrowed. A company that is fully paid-up has sold all available shares, and thus cannot increase its capital unless it borrows money by taking on debt or gets authorization to sell more shares. A company’s paid-up capital figure represents the extent to which it depends on equity financing to fund its operations.
4.7.3 Issued Capital

The total of a company's shares that are held by shareholders is called the issued capital. A company can issue new shares up to the full amount of authorized share capital at any time, also called subscribed capital, or subscribed share capital.

5. Methods of Offering Shares through IPO

5.1 Fixed Price Method

The issuer sets the offer price. The price may be at par or at premium to the face value based on the valuation of the consultant to the issue, the prevalent market demand and/or the due diligence conducted by the underwriters or pre-IPO investors. The issue is underwritten through independent institutions that provide comfort to the prospective investors as far as the offer price is concerned.

The justification/basis for the offer price is disclosed in the prospectus together with details of the qualitative and quantitative factors. Investors subscribe for shares at the price already decided by the issuer.

5.2 Book Building Method

Book building is a systematic process of generating, capturing, and recording investor demand for shares during an initial public offering (IPO), or other securities during their issuance process, in order to support efficient price discovery. When the companies wish to raise capital from external sources, they use various means for the same. Two of the most popular means to raise money are Initial Public Offer (IPO) and Follow-on Public Offer (FPO). In Pakistan FPO was recently done for OGDC shares where the government divested a portion of its shareholding for the second time.

During the IPO or FPO, the company either offers its shares to the public at a fixed price or offers a price range, so that the investors can decide on the right price. The method of offering shares by providing a price range is called book-building method. This method provides an opportunity to the market to discover price for the securities that are on offer.

It is a mechanism where, during the period for which the book for the offer is open, the bids are collected from investors at various prices, which are within the price band specified by the issuer. The process is directed towards both the institutional investors as well as the retail investors. The issue price is determined after the bid closure based on the demand generated in the process.
Only high net worth qualified individuals, companies, funds, banks or corporates can participate in the book building process, as the minimum bid required is usually considerable higher. Currently, the minimum bid size is been kept to Rs. 1 million. The book runner, usually a broker or an investment bank opens the book for a specified time period where bids are taken from investors and inserted in the computer system. The buyers bid up the price to a level where the portion of IPO shares offered through book building are all taken up which is then called the strike price. All the successful bidders get the shares on the strike price subsequently in a few days. The IPO portion is then made open to the retail investors where opportunity is given for the smaller investors to buy shares.

All the applications received up till the last date are analyzed after which a final offer price, known as the Strike cut-off price is determined. The final price is the equilibrium price or the highest price at which all the shares on offer can be sold. If the price quoted by an investor is less than the final price, he will not get an allotment. If price quoted by an investor is higher than the final price, the amount in excess of the final price is refunded if he gets an allotment. If the allotment is not made, full money is refunded within 15 days after the final allotment is made. If the investor does not get money or allotment in a month's time, he can demand interest at 15 percent per annum on the money due.

5.3 Dutch Auction Method

A Dutch auction is a public offering auction structure in which the price of the offering is set after taking in all bids and determining the highest price at which the total offering can be sold. In this type of auction, investors place a bid for the amount they are willing to buy in terms of quantity and price; an auction in which the price on an item is lowered until it gets a bid. The first bid made is the winning bid and results in a sale, assuming that the price is above the reserve price. This is in contrast to typical options, where the price rises as bidders compete.

5.4 Strike Price

A strike price is the price at which a specific derivative contract can be exercised. The term is mostly used to describe stock and index options in which strike prices are fixed in the contract. For call options, the strike price is where the security can be bought (up to the expiration date); for put options, the strike price is the price at which shares can be sold.

5.5 Initial Public Offering

During the Initial Public Offering (IPO), retail investors can submit their bids for shares in sizes of 500, 1000, 2000, etc. through the designated banks and their
branch network. A retail investor has to fill in an application form and deposit the funds through a crossed cheque in the name of the issuer. The allotment of shares is subsequently announced on the specified date announced before hand. Shares of successful bidders are transferred to their CDC accounts whereas unsuccessful bidders get their funds in their respective bank accounts.

6. Financial Intermediaries

Financial intermediary is an entity that acts as the intermediary between two parties in a financial transaction. While a commercial bank is a typical financial intermediary, this category also includes other financial institutions such as investment banks, insurance companies, brokers, mutual funds and pension funds. Financial intermediaries offer a number of benefits to the average consumer including safety, liquidity and economies of scale. In the equities business a number of financial intermediaries are required to process transactions related to buying and selling of stock in the stock market. It can also be said that a broker who takes orders from clients is the primary financial intermediary and the rest of the intermediaries provide a platform to process the transaction from initiation of the order from the client to final settlement of the trade and safekeeping of the stock. The Capital Market of Pakistan has a triangular foundation comprising of a stock exchange, the depository company (CDC) and the clearing company (NCCPL).

6.1 Brokers and their Role

A broker is a person or firm in the business of facilitating buying and selling of securities. A brokerage house acts as a broker when it executes orders on behalf of clients. Brokers ideally buy or sell stocks on behalf of their clients or on their own account (proprietary) by entering orders in the automated trading platform of Pakistan Stock Exchange (PSX) called Karachi Automated Trading System (KATS). In addition, they also facilitate their clients by entering into block trades by matching client orders with other clients or with other brokers in the market through KATS. Brokers may also provide other related services that include investment advice to their customers through research reports, technical analysis or general know-how of the market, raise capital for companies through book building, IPO and underwriting deals as authorized. The broker also settles its clients’ trades on the settlement date by interacting with NCCPL.

6.1.1 TREC

PSX issues a license to a corporation that wants to act as a broker in the market. Such a license is called Trading Rights Entitlement Certificate (TREC). Currently, there are 251 brokers registered with PSX that provide brokerage services to
their clients. Subject to fulfilling, the conditions required under PSX Regulations, the TREC holders who are registered with SECP as brokers under the Brokers and Agents Registration Rules, 2001 are eligible to trade on the exchange and engage in the business of executing trades in securities for their own account or on account of their clients. A TREC can perform the following functions under this license:

i. Execute trades in securities
ii. Clearing and settlement function

6.2 Clearing Company or Clearing House

A clearing house is a capital market financial institution that performs clearing and settlement services for transactions in securities and derivatives. It handles confirmation, delivery and settlement of all transactions. In Pakistan, National Clearing Company of Pakistan Limited (NCCPL) is the institution that provides clearing and settlement services to the stock exchange in the country. As part of Capital Market Development Program of Asian Development Bank (ADB) in Pakistan, National Clearing and Settlement System (NCSS) was established to replace the separate and individual clearing houses of the three former Stock Exchanges, namely Karachi Stock Exchange, Lahore Stock Exchange and Islamabad Stock Exchange by a single and centralized entity.

Accordingly, the company was incorporated on July 3, 2001 to manage and operate the NCSS in a fully automated electronic settlement system. NCSS live operations commenced from December 24, 2001. However, the Company became operational in the year 2003-04 by inducting and handling clearing and settlement of all book-entry securities through NCSS. Thereafter, any security that becomes live in the Central Depository System, on ready status, is accordingly inducted into the NCSS.

NCCPL provides clearing and settlement services to Pakistan Stock Exchange (PSX) through its centralized clearing & settlement system known as National Clearing and Settlement System (NCSS). All trades / transactions are settled in NCSS on the settlement date on delivery vs payment (DVP) basis: Trades and transactions settled by NCSS, under balance order multilateral netting mechanism with T+2, are of two types:

a. Exchange trades are locked-in contracts between members executed through the exchange’s trading system.

b. Non-exchange transactions are generated in NCSS based on underlying exchange trades/transactions and are classified into the following:
6.2.1 Broker Clearing Members

A clearing broker is a member of an exchange that acts as a liaison between an investor and a clearing corporation. A clearing broker helps to ensure that the trade is settled appropriately and the transaction is successful. Clearing brokers are also responsible for maintaining the paperwork associated with the clearing and executing of a transaction. Clearing brokers are the backbone of the securities market because their expansive knowledge ensures that the system is dependable and efficient. They must also research and confirm the information they are given and manage funds associated with the transaction. General TREC holders are broker-clearing members. In other words, such broker clearing members can trade as well as settle all their clients’ trades.

6.2.2 Non-Broker Clearing Members

Such members cannot trade for their clients in the market but can conduct all the settlement functions for them instead. Such type of non-broker clearing members facilitate brokers that have executed large trades on behalf of non-broker clearing members being their institutional clients but find it difficult to settle such trades due to financial capacity constraints.

6.2.3 Custodian Clearing Members

Custodian clearing members are those members of the clearing house who also act as clearing agents and custodians for their clients. In Pakistan, a large number of foreign funds have banks such as Standard Chartered Bank or Citibank as their custodian clearing members. The foreign funds execute orders through brokers and then ask their custodian clearing members to settle the trade with the clearing house and also keep the stocks bought in their custody or if sold then, give the stock sold from their custody kept on their behalf.

Broker-to-Broker (BTB) Non-Exchange Transactions: BTB Delivery System of NCSS facilitates non-exchange transaction between members of different exchanges based on underlying exchange trades. Once a trade is executed by a member of an Exchange on behalf of a member of another Exchange for their proprietary or client account, such trade once transmitted in NCSS is auto-initiated in favor of the respective member for their affirmation. Upon affirmation by Member of the other Exchange, settlement obligation is shifted to such affirming Member. In case of non-affirmation/rejection, the transaction is settled by initiating member on respective settlement date.

Institutional Delivery System (IDS) Non-Exchange Transactions: Through this functionality, Non-Broker Clearing Members (NBCMs) of NCCPL can avail the facility of direct and streamline settlement of trades/transactions executed by
their members in the Ready and Futures Market. Once a trade is executed by a member of an exchange on behalf of NBCM of NCCPL, such trade once transmitted in NCSS is auto-initiated in favor of the respective NBCM for their affirmation. Upon its affirmation by NBCM, the settlement obligation is shifted to the affirming NBCM. In case of non-affirmation/rejection by NBCM, the transaction(s) is settled by the initiating Member on the respective settlement date.

6.2.4 View only Reports for investors- UIS (UIN Information System)

Unique Identification System (UIS) enables investors who are registered UIN holders to view all their trading, settlement and relevant information with their respective brokers in a smooth and efficient manner by using their dedicated user ID and password.

Settlement Mechanism

National Clearing Company of Pakistan carries out the following functions:

1. Clearing and settlement of deliverable and non-deliverable futures contracts
2. Clearing and settlement of Bonds Automated Trading System (BATS)
3. Clearing and settlement facility for custodian banks.
   - Risk Management
   - In order to maintain a traceable link for each trade and transaction, executed in the stock market, NCCPL provides a centralized mechanism
for the registration of investors in NCSS by assigning a UIN.

- All MTS transactions are executed through the On-Line trading system provided by NCCPL to market participants called Margin Trading System (MTS)

- Margin Financing (MF) facility is made available to all members against net ready market purchases of their clients and proprietary positions.

- Securities lending and Borrowing (SLB) transactions are executed through an on-line trading platform provided by NCCPL to lenders and borrowers for placing offers and bids.

- NCCPL being an independent organization has been assigned the responsibility to compute, determine, collect and deposit CGT with the national exchequer on behalf of the capital market investors. Centralized Capital Gains Tax (CGT) system provides ease of calculation and centralized one-window solution for the determination of CGT.

- NCCPL has developed a centralized clearing, settlement and custody service named as National Custodial Services (NCS). The capital market investors opting to avail the NCS services can continue to transact in the capital markets through their respective TREC Holders

### 6.3 Depository Institutions

Depository institution in case of equity markets is an institution that is legally allowed to keep the custody of shares. A few years ago, SECP disallowed physical dealing of shares and converted all the shares into dematerialized form also referred to as demat form. Dematerialization is the process by which physical share certificates held by an investor are converted into an equivalent number of securities in electronic form and credited into the investor's demat account. In Pakistan there is in only one central depository named Central Depository Company of Pakistan Limited (CDC). The main function of CDC is to operate and maintain the Central Depository System (CDS), an electronic book-entry system used to record and maintain securities and to register the transfer of securities.

The system changes the ownership of securities without any physical movement or endorsement of certificates and execution of transfer instruments. CDS facilitates equity, debt and other financial instruments in the Pakistani Capital Market. It manages Ordinary and Preference shares, TFCs, WAPDA Bonds, Sukuk, Open-end and Closed-end funds and Mudaraba certificates.

Following are some of the benefits of electronic settlement of securities
through CDS:

- Reduced workload and work force requirements due to paperless settlement.
- Instantaneous transfer of ownership. No stamp duty on transfers in CDS.
- No risk of damaged, lost, forged or duplicate certificates.
- No impact in case of sudden increase of settlement volumes.
- Instant credit of corporate entitlements (bonus, rights and new issues).
- Paperless environment (no traditional vaults).
- Secure custody of securities.
- Substantial reduction of paperwork during book closure.
- Convenient pledging of securities.
- Substantial reduction in time and capital investments.

CDC is the sole entity handling the electronic (paperless) settlement of transactions carried out at Pakistan Stock Exchange (PSX). Through efficient functioning of CDC, all the market settlement is in book entry form. The Central Depository Company of Pakistan Limited was formed under Central Depositories Act 1997 that was passed on June 10, 1997. Subsequently, the Central Depository Company of Pakistan Limited Regulations were developed and approved by the Securities and Exchange Commission of Pakistan. Relevant Legislation by which CDC is governed includes:

- Central Depositories Act, 1997
- Central Depository Company of Pakistan Limited Regulations
- Central Depository Companies (Establishment and Regulation) Rules, 1996

Some of the other functions that CDC offers are as follows:

- **Investor Account Services (IAS)**: allows retail investors to directly open and maintain accounts with CDC in Central Depository System for secure and safe custody of securities. Investors have direct access to their securities through investor accounts, which are maintained by CDC and operated on the instructions of investors. Investor accounts are safe and secure as they are directly maintained by CDC and are operated on written as well as online instructions of investor(s). Therefore, investors have direct and complete control over their book-entry securities. Multiple value added services are available round the clock for viewing account and available cash balance in investor account, account and cash activities through a dedicated web portal, interactive voice response (IVR), SMS, e-statement and e-alerts.
• **Custody of shares (Sub-Account)**

A broker has to open a sub-account with CDC for its retail clients trading with him. The broker needs this account to settle trades on behalf of his client, as he/she is not allowed to keep the clients' shares in his/her own personal account. The client can then either keep the shares in his respective sub-account opened with the broker or can ask the broker to transfer his shares to his Investor Account.

• **Trustee and Custodial Services**: CDC acts as a trustee and custodian. CDC takes into its custody all the assets of the Collective Investment Scheme/pension funds and holds them in a trust on behalf of the unit/certificate holders. It carries out instructions of Asset Management Companies (AMCs)/Pension Fund Managers (PFMs) with respect to their investment portfolios while ensuring regulatory compliances, protecting unit-holder interests and maintaining confidentiality in all manner.

• **Share Registrar Services** (SRS) also known as Transfer Agent or R/TA services: CDC Share Registrar Services facilitates Share Issuing organizations and their shareholders. SRS offers a composite portfolio of maintenance, registration, verification and direct customer dealing and interaction which include:

  a) Maintenance of computerized Security Holders’ Register
  b) Dealing with security holders through offices telephone, through mail and e-mail
  c) Verification of security holders' signatures on transfer deeds.
  d) Process physical transfer of securities, deposit of securities into CDS, withdrawal of securities from CDS and transmission of physical certificates/securities etc.
  e) Process Issuance of duplicate certificates and dividend warrants against appropriate indemnities and fulfillment of formalities
  f) Process split/consolidation/renewal of certificates
  g) Process dividend entitlements and payments to security holders
  h) Process Bonus Securities issuance to security holders with fractional securities payment
  i) Custody of undelivered certificates and dividend warrants, etc.
  j) Preparation of reports related to the securities and Security holders for filling with Issuers/Regulators
k) Taking attendance of Security holders in Annual General Meeting (AGM) Extra-Ordinary General Meeting (EOGM)

l) Compliance of legal obligations as Share Registrar/Transfer Agent

m) Other standard share registrar department activities such as dispatch of Annual/Half Yearly Accounts, etc

6.4 Settlement and Custodial Banks

An independent custodian or custodial service provider by definition is an institution that holds customers' securities for safekeeping to minimize the risk of their theft or loss. A custodial account is a financial account (such as a bank account, a trust fund or a brokerage account) set up for the benefit of a beneficiary, and administered by a respective custody bank. Custodian banks hold financial assets and safeguard the financial interests of their clients be it an individual or firm i.e., any type of financial assets, such as cash, stocks, bonds, commodities, metals and commercial paper. The custodian does any or all of the middle-office and back-office work relating to holding the assets as requested by the client, including making sure that taxes are paid, dividends and interest payments are passed through to the proper parties, prepare required disclosures, and file any required forms for domestic and international regulators, when applicable.

6.5 Investment Banks

An investment bank is a financial institution that assists individuals, corporations, and governments in raising financial capital by underwriting or acting as the client's agent in the issuance of securities (or both). Brokers may also have their investment-banking arm that offers such services but it is very important to have very strong Chinese walls, as investment bankers are at times privy to non-public material information that can affect the price of a stock in the secondary market. Investment banking is a specific division of banking related to the creation of capital for companies, governments and other entities. Investment banks underwrite new debt and equity securities for all types of corporations, aid in the sale of securities, and help to facilitate mergers and acquisitions, reorganizations and broker trades for both institutions and private investors. Investment banks also provide guidance to issuers regarding the issue and placement of stock. Essentially, investment banks serve as intermediaries between a company and investors when the company wants to issue stock or bonds. The investment bank assists with pricing financial instruments to maximize revenue and with navigating regulatory requirements.
7.  The Role of a Regulator

A capital market regulator is an institution that supervises and controls a financial system. Their objective is to guarantee fair and efficient markets and financial stability. The main responsibilities of capital market regulators are to enforce applicable laws, prevent cases of market manipulation, ensure the competence of financial capital market service providers, execute regular inspections, protect traders and clients, and investigate and prosecute misconduct, such as insider trading.

Financial capital market regulators are responsible for ensuring that a broker has segregated accounts. This means that the trading capital of a trader is safe even if the broker gets into financial troubles. Brokers that are regulated are more secure to trade with, as they are obliged to meet certain standards and requirements.

8.  Apex Regulator

The apex regulator’s role is to formulate rules and regulations, facilitate capital formation and maintain fair, orderly, and efficient markets while protecting investor rights. Fair, orderly and efficient markets are possible when:

- Companies offering securities for sale to the public tell the truth about their business, the securities they are selling, and the risks involved in investing in those securities.
- Those who sell and trade securities — brokers, dealers, and exchanges—treat investors fairly and honestly.

In Pakistan, the apex regulator of the capital market is the Securities and Exchange Commission of Pakistan (SECP). SECP is an autonomous body and is mandated with creating an environment conducive for capital raising and at the same time formulating rules and regulations to protect investors' rights. SECP conceptualizes, promulgates and monitors rules for various market products as well as all companies, brokerage houses, investment banks and asset management companies. The mission of SECP is "To develop a fair, efficient and transparent regulatory framework, based on international legal standards and best practices, for the protection of investors and mitigation of systemic risk aimed at fostering growth of a robust corporate sector and broad based capital market in Pakistan. The scope and authority of SECP has been extensively widened since its creation. Now SECP also regulates various external service providers that are linked to the corporate sector, like chartered accountants, rating agencies, corporate secretaries and others.

8.1  Structure of SECP

SECP is divided into the following four divisions:
8.1.1 Company Law Division

The Company Law Division (CLD) has two departments

**Corporatization and Compliance Department**

The department is responsible for administration of the Companies Act 2017, and the rules and regulations made thereunder, along with other relevant laws. Its primary functions include registration of companies, regulating their statutory functions, and monitoring of corporate compliance through examination of statutory returns and accounts. These functions are performed by eight regional offices of SECP called the Company Registration Offices (CROs).

**Corporate Supervision Department**

The department is responsible for regulation and enforcement of companies listed on the stock exchange, public unlisted companies, private companies having paid-up capital of Rs. 100 million and above and companies formed under section 42 Companies Act 2017 (except insurance companies, non-banking finance companies and Modarabas). The department is responsible for compliance with relevant laws and applicable accounting standards through review of accounts, investigation, and prosecution.

8.1.2 Securities Market Division

The Securities Market Division (SMD) is responsible for monitoring, regulating, and developing the securities market. It regulates the primary and secondary markets as well as market intermediaries through registration, surveillance, investigation, enforcement, and rule making, with the objective of protecting investor interests. SMD also processes and grants approvals to prospectuses for public offering of both debt and equity securities. In addition, it institutes appropriate regulatory reforms to develop and promote the market, engender investor confidence and instill transparency, effective risk management and good governance at the Pakistan Stock Exchange, Pakistan Mercantile Exchange, Central Depository Company and National Clearing Company.

The division has three departments:

**Policy, Regulation and Development Department**

It designs and administers SECP’s capital market reform agenda, including review and formulation of regulatory policies and framework; managing licensing, renewals and governance affairs of securities exchanges, central depositories and clearinghouses; implementation of structural reforms, introduction of new products; and corporate governance standards for listed
companies.

**Public Offering and Regulated Persons Department**

It formulates the regulatory framework for commodity exchange and approves the new products for listing. It registers brokers and agents of the stock and commodity exchanges, the debt securities trustees, underwriters, balloters and transfer agents and book runners.

**Surveillance, Supervision and Enforcement Department**

It is responsible for monitoring and surveillance of the trading activities at the exchanges. It is also responsible for oversight, offsite monitoring, onsite inspections, investigations and enquiries of the capital market participants.

8.1.3 **Specialized Companies Division (SCD)**

SCD strives to provide a regulatory environment that is conducive for development and promotion of a robust Non-Banking Financial (NBF) sector. The NBF sector under SCD’s oversight comprises mutual funds, pension funds, real estate investment trusts, private equity funds, Modarabas management companies and Modarabas. The major functions performed by SCD for the NBF sector include licensing, registration, regulation, on-site inspection, off-site surveillance and enforcement. The underlying objective is to safeguard the interest of stakeholders and at the same time facilitate diversification and innovation in products and services of NBF sector. For operational ease and enhanced efficiency, the SCD has been divided into two departments:

**Policy, Regulation and Development Department (PRDD)**

PRDD performs the functions of licensing, registration, provision of comprehensive regulatory framework and granting necessary regulatory approvals to the NBF sector.

**Supervision and Enforcement Department**

The Department is primarily responsible for centralized functions of on-site inspection, Off-site surveillance and enforcement.

8.1.4 **Insurance Division**

To strengthen SECP’s role as an effective facilitator for sound development of the insurance and takaful industry and to achieve the underlying objective of raising the insurance penetration level, the following key areas have been focus areas for SECP:

- Protection of the interest of insurance policyholders.
• Amendments in the regulatory framework to strengthen SECP’s role as an apex insurance regulator.
• Enhancement of regulatory framework for Takaful Insurance.
• Availability of insurance protection to the less privileged segment of the society (Microinsurance).
• Insurance awareness programs.
• Enhanced public image of the insurance industry.

Insurance Division has been divided into two main departments:

**Policy, Regulation and Development Department**

Responsible for policy reform, actuarial work, re-insurance treaty, facultative reinsurance approval, NOC for purchasing insurance policy from abroad, registration and de-registration.

**Supervision Department**

Responsible for centralized function of on-site inspection, off-site surveillance and enforcement.

9. **Front Line Regulator and its Role**

**Role of Stock exchanges**

Stock exchanges have multiple roles in the economy that may include:

**Raising capital for businesses**

The Stock Exchange provides companies with the facility to raise capital for expansion through selling shares to the investing public.

**Mobilizing savings for investment**

When people draw their savings and invest in shares, it leads to a more rational allocation of resources as such funds otherwise could have been consumed, or kept in idle deposits with banks.

Funds are mobilized and redirected to promote business activity with benefits for several economic sectors such as agriculture, commerce and industry, resulting in stronger economic growth and higher productivity levels and larger number of firms.

**Trading platform (Secondary market)**

A trading platform is a software through which investors and traders can open,
**Trading platform (Secondary market)**

A trading platform is a software through which investors and traders can open, close and manage market positions. It allows investors and traders to place trades and monitor accounts. Trading platforms may incorporate market analysis software as well, whereby traders and investors can chart the markets and perform stock trades on screen. The Pakistan Stock Exchange provides this software that gives access to all the registered TREC holders/brokers.

**Facilitating company growth**

Companies view acquisitions as an opportunity to expand product lines, increase distribution channels, hedge against volatility, increase market share, or acquire other necessary business assets. A takeover bid or a merger agreement through the stock market is one of the simplest and most common ways for a company to grow by acquisition or merger.

**Redistribution of wealth**

Stock exchanges do not exist to redistribute wealth. However, both casual and professional stock investors, through dividends and stock price appreciation that may result in capital gains, will share the wealth of profitable businesses.

**Corporate governance**

By having a wide and varied scope of owners, companies generally, tend to improve on their management standards and efficiency in order to satisfy the demands of their shareholders and adhere to the more stringent rules for public corporations imposed by public stock exchanges and the government.

**Creating investment opportunities for small investors**

As opposed to other businesses that require huge capital outlay, investing in shares is open to both large and small stock investors because a person buys the number of shares they can afford. Therefore, the stock exchange provides the opportunity for small investors to own shares of the same companies as large investors.

**Government capital raising for development projects**

Governments at various levels may decide to borrow money in order to finance infrastructure projects such as sewage and water treatment works or housing estates by selling another category of securities known as bonds. These bonds can be sold through the Stock Exchange whereby members of the public buy them, thus loaning money to the government.
Barometer of the economy

Share prices reflect the demand and supply of each stock. Share prices tend to rise or remain stable when companies and the economy in general show signs of stability and growth. An economic recession, depression, or financial crisis could lead to a decline in share prices. Therefore, the movement of share prices and in general of the stock indexes can be an indicator of the general trend in the economy.

Pakistan Stock Exchange (PSX) is divided into two distinct functions or arms.

9.1 Commercial Arm

Pakistan Stock Exchange provides state-of-the-art technology and automated trading operations, driven by a team of professionals in accordance with good corporate governance to protect and safeguard the interests of all its stakeholders, i.e. members, listed companies, employees and the investors at large. Pakistan Stock Exchange (PSX) was formed on 11 January 2016 after the integration of Karachi Stock Exchange (KSE), Lahore Stock Exchange (LSE) and Islamabad Stock Exchange (ISE). As more than, 99% of volumes were taking place in KSE the regulators decided to merge the three exchanges into one to create a better working environment rather than have three competing exchanges. PSX offers platforms such as Karachi Automated Trading System (KATS) and Karachi Internet Trading System (KITS) where companies can list their stocks and offers a secondary market to the investors. Bonds can also be traded on a separate system called Bond Automated Trading System (BATS). Some of the products offered are as follows:

- Ready Market
- Cash Settled Futures Contract Market
- Stock Index Futures Contract Market
- Deliverable Futures Contract Market
- Index Options

9.2 Regulatory Arm

The regulatory function of stock exchanges in the past was mostly limited to issuing rules and clarifying aspects of existing frameworks. The standard-setting role of stock exchanges was essentially exercised through the issuance of listing, ongoing disclosure, maintenance and de-listing requirements. On the enforcement side, stock exchanges have shared their regulatory function with capital market supervisory agencies. In addition to overseeing their own rules, stock exchanges are assigned the role of monitoring the compliance with legislation and subsidiary securities regulation. Pakistan Stock Exchange is a self-regulatory organization. The crux of exchange’s responsibility in the enforcement function lies in their capacity to monitor market developments.
and bring cases to the attention of securities regulators. Hence, exchanges can obviously make an important contribution to the prevention of fraud and other abusive practices.

10. Market Efficiency

An efficient capital market is one in which security prices adjust rapidly to the arrival of new information and, the current prices of securities reflect all information about the security. What this means, in simple terms, is that no investor should be able to employ readily available information in order to predict stock price movements quickly enough to make a profit through trading shares. Championed by Fama (1970), the efficient market hypothesis (EMH), in particular the semi-strong form claims that stock prices must contain all relevant information including publicly available information. This has important implications for policy-makers and the stock-broking industry alike. Economic theory suggests that stock prices should reflect expectations about future corporate performance, and corporate profits generally. If stock prices accurately reflect the underlying fundamentals, then the stock prices should be employed as leading indicators of future economic activities.

10.1 Forms of Efficient Market Hypothesis

10.1.1 Weak Form

In the weak-form efficient market hypothesis, security prices fully reflect all past market data, which refers to all historical price and trading volume information. In a weak form EMH, past trading data are already reflected in current prices and investors cannot predict future price changes by extrapolating prices or patterns of prices from the past.

10.1.2 Semi-Strong Form

In semi-strong-form efficient market, prices reflect all publicly available information that includes financial statement data such as earnings, dividends, changes in management, etc. This means, analyzing earnings announcements of companies to identify underpriced or overpriced securities is pointless because the prices of these securities already reflect all publicly available information. In this type of market, share prices react quickly and accurately to public information, e.g., if a company announces better than expected earnings, the price of its shares will quickly adjust to the new information.

10.1.3 Strong Form

In a strong-form efficient market, security prices fully reflect both public and private information. In such markets, insiders cannot benefit and earn abnormal returns based on the information privy to them. In essence, it means
that the share price reflects all the information that the management of the company may know which has not been released publicly yet.

**Implications**

It can be implied that developed markets sway between weak form and semi-strong form of efficiency but definitely not strong form.

- Investors cannot earn abnormal returns by trading based on past trends in price as securities markets are weak form efficient.

- Analysts need to collect and analyze new information to see if the information is already reflected in the stock price or not and how the new information affects its value as the securities markets could be semi strong form.

- Regulators prevent non-public information to be misused in the market for earning abnormal returns hence markets cannot be strong form efficient.

**11. Fundamental Analysis**

Every day, thousands of participants in the investment profession such as investors, portfolio managers and researchers want the answer to one question: What is the value of a particular asset or share? For one group of those participants - equity analysts - the question and its potential answers are particularly critical, because determining the value of a stock is at the heart of the investment or brokerage business. Fundamental analysis is the examination of publicly available information and estimation of an asset's value based on variables related to future investment returns. Forecasts are made of variables such as sales and earnings using risk estimates. Economic data and industry knowledge is used to estimate a price or the intrinsic value of the stock. Buy and sell decisions are made depending on whether the current market price of the stock is less than or greater than the estimated intrinsic value of the stock under study. Fundamental analysis is necessary in a well-functioning market because this analysis helps the market participants understand the value implications of information. Essentially, it facilitates a semi-strong efficient market by disseminating information that can affect the value of an asset or a stock. Specialized skill is required to be able to analyze available information.

**12. Technical Analysis**

On the other hand, there is another way to profit from the market by looking at past patterns of prices and trading volume. Technical analysis takes a completely different approach; technical analyst does not try to calculate the
value of the company and does not even look at the financial numbers announced by a company. Technicians or chartists as they are sometimes called are only interested in the price movements in the market. Technicians believe that all the information they need about a stock can be found in its charts. Technical analysis can be used on a time frame of weeks, days or even minutes, on the other hand fundamental analysis often looks at data over a number of years.

13. Research

One of the most important services offered in the investment business is research on stocks. In other words, determining what is the right price of the stock. Whether it is undervalued or overvalued as compared to the ongoing market price drives the whole investment business.

13.1 Research Regulation

Brokers who want to produce research reports for their clientele have to be registered with SECP under the Research Regulations 2015. A brokerage house and its analysts have to comply with research policy framed by each brokerage house, which touch upon areas such as:

- Research report content
- Analyst compensation
- Promises of favorable research
- Limitation on publication of research reports and restriction on public appearances by Research Analyst
- Personal investments and trading
- Maintenance of research data and records
- Disclosures in research report
- Research distribution and dissemination policy
- Compliance and enforcement mechanism for the research analyst

13.2 Who writes a Research Report?

The research reports are written by someone who has acquired the skills to understand financial modeling. An author of the research report is called a research analyst; he or she may have acquired specialized skills by studying finance. Some of the key valuation inputs used in research reports include cost of capital, risk free rate of return, equity risk premium, a description of the valuation model, a discussion of qualitative factors and other considerations that affect valuation. Analysts try to come up with a true or intrinsic value of a stock by forecasting based on various assumptions of variables. A comparison between the intrinsic value and market price provides the basis for an
investment recommendation. A research analyst is also expected to state the basis for computing the target price, a period for reaching the specified target price and information of the risks associated with reaching that price.

13.3 Contents of a Research Report

The whole idea of writing a research report is to come up with an investment recommendation for the client or for internal use. A typical research report would include an update on the company's financial data, reference to the general macro-economic conditions and its effects on the operations of the company and its performance as compared to its competitors in the same industry, analysis of supply chain and demand of its products, etc. All this information is converted into numbers and a financial model is prepared on various assumptions to forecast numbers such as sales, earnings, gross profit margin, tax structure, etc. A detailed discussion and analysis on the risks involved in the investment is also done with rationale and in most cases, a probability is also attached to various risks that could make the investment recommendation go wrong. An investment recommendation is made which is accompanied by an explanation of underlying rationale, which is also called the investment thesis. The investment thesis gives an explanation as to why a particular stock merits investment or disinvestment.

13.4 Research Report Responsibilities

An effective research report contains timely information, contains analyses, forecasts, valuation, and a recommendation. Research report is expected to distinguish between facts and opinions; state key risk factors involved and is objectively prepared and well researched. The key assumptions made in the report should be clearly identified and disclosure of any potential conflict of interest faced by the analyst should be identified.

14. Valuation Process

In general, the valuation process involves the following five steps:

14.1 Understanding the Business

Industry and competitive analysis, together with an analysis of financial statements and other company disclosures, provides a basis for forecasting company performance. Industry knowledge helps analysts understand the basic characteristics of the markets served by a company and the economics of the company. An industry and competitive analysis should highlight which aspects of a company's business present the greatest challenges and opportunities and should thus be the subject of further investigation and require analysis that is more extensive.
14.2 Forecasting Company Performance

Forecast of sales, earnings, dividends, and financial position provide the inputs for most valuation models.

14.3 Selecting the Appropriate Valuation Model

 Depending on the characteristics of the company and the context of valuation, some valuation models are more appropriate than others are.

14.4 Converting Forecast to a Valuation

Beyond mechanically obtaining the output of valuation models, estimating value involves subjective judgment as well.

14.5 Applying the Valuation Conclusions

Depending on the purpose, an analyst may use the valuation conclusions to make an investment recommendation about a particular stock, provide an opinion about the price of a transaction, or evaluate the economic merits of a potential strategic investment.

14.6 Sources of Information

Most of the required information is provided by the company itself through their financial reporting, regulator-mandated disclosures, regulatory filings, company press releases and analyst briefings. Analysts should compare the information provided directly by companies to their own independent research. Earnings press releases summarize the company’s performance for the period, and usually include financial statements together with explanations for the performance. As a follow-up to their financial results announcements many companies host conference calls or analysts' briefings in which they further elaborate on their reported performance, and answer questions posed by analysts. Many companies also post presentations, Webcasts or audio recordings of the analyst’s briefings or conference calls. Apart from company-provided sources of information, analysts also obtain information from third-party sources such as industry organizations, regulatory agencies and commercial providers of market intelligence.

14.7 Industry and Company Analysis

An analyst reviews the company and its environment such as its industry, key products, strategic position, management, competitors, suppliers and customers. With this information, an analyst determines revenue and cost drivers and tries to assess the likely impact of relevant economic trends and technological developments. An analyst understands the fundamental drivers
of the business and uses this for developing inputs to the forecast models. For example, a software industry analyst has to keep track of innovations and new companies who can suddenly become a serious threat to the existing business model of the company under study.

15. Equity Analysis and Valuation Techniques

Determining correct value of any stock is the basis of various valuation methods used by an equity analyst. Market value of any stock can be quite different from its true value or intrinsic value. This is also one of the basic assumptions that market value may differ from the intrinsic value due to a number of factors such as demand and supply of stock in the market, information available and how stock is perceived by the investors in the market. Further, general optimism or pessimism of the economy, hope of outcome of any particular project of the company, etc. will also affect value.

15.1 Dividend

A dividend is a distribution of a portion of a company’s earnings, decided by the board of directors, to a class of its shareholders. Dividends can be issued as cash payments, or as shares of stock. A company’s net profits can be allocated to shareholders via a dividend, or kept within the company as retained earnings.

15.2 Bonus Share

A bonus issue, also known as a scrip issue or a capitalization issue, is an offer of free additional shares to existing shareholders. It is also called stock dividend. A company may decide to distribute further shares as an alternative to increasing the dividend payout. For example, a company may give one bonus share for every five shares held.

15.3 Rights Issue

A right offering (issue) is an issue of rights to a company’s existing shareholders that entitles them to buy additional shares directly from the company in proportion to their existing holdings, within a fixed time period. In a rights offering, the subscription price at which each share may be purchased is generally at a discount to the current market price. Rights are often transferable, allowing the holder to sell them on the open market. Companies generally offer rights when they need to raise money. They may need to raise money for a variety of reasons, for example to pay off debt, purchase equipment or acquire another company. The benefit to a company of raising money through a rights offering is that the company can bypass underwriting fees. In some cases, a company may use a rights offering to raise money if there
are no other viable financing alternatives.

15.4 Intrinsic Value

In simple terms, intrinsic value is described as the true or real value of an asset for any investor. In an efficient market hypothesis, market price of the stock reflects all available information about that stock. In reality market price of any stock diverges from its real value or intrinsic value. Hence, analysts try to study the stock and try to identify the reasons of mispricing with a basic assumption that in the long run all market prices move towards the intrinsic value of the stock and converge. In the end, all information comes to the market and is publicly available and hence the information is priced in. The difference between the market price and the estimated intrinsic value of a stock is known as alpha. An investment manager hopes to create positive return or alpha by trying to estimate a realistic intrinsic value of any stock and then taking positions accordingly. If the manager holds the stock and finds out through his analysis that the true value of the stock estimated by him with the help of valuation models is less than the current market price, then he would want to sell the stock to be able to buy it at a lower price. On the contrary, if he does not hold the stock and through his financial analysis, he finds out that the price of stock is much lower than its true value, then he would buy the stock and hold it for some time until the market value converges to the intrinsic value of the stock.

An analyst can never be sure if he has arrived at the right fair value of the stock through his analysis. It typically takes a few years for an analyst to learn about a particular industry and be able to analyze a stock even after he has acquired the required education. To obtain a useful estimated value the analyst will have to consider all the information available and the risks associated with it; uncertainty is at the heart of any valuation. The analyst will have to make many assumptions when calculating the estimated value of his stock and those assumptions will have to be deeply studied and backed by proper arguments. He will have to make a case as to why he is making certain assumptions and how they will affect the company’s profitability under study and to what extent. As there will be many analysts in the market analyzing the same stock using different valuation models and assumptions, there is no perfect estimated value. Analysts may come up with a different estimated value based on their study. Here the quality of the analyst’s forecast is a key element in determining an alpha or excess return on an investment.

15.5 Applications of Equity Valuation

Equity Analysis can be used for a variety of purposes particularly the following:

- Industry Analysis
15.5.1 Required Rate of Return

A required rate of return is the minimum level of expected return that an investor requires in order to invest in the asset over a specified period, given the riskiness of the asset. The required rate of return is the threshold level for being compensated enough for forgoing an opportunity of investing in another asset with similar risk. This notion is also called opportunity cost of investing in the asset. If the investor's expected return from an asset exceeds the required rate of return, the asset will be undervalued because it is expected to yield more than the fair compensation or return given the asset's risk. On the contrary, if the expected return falls short of the required rate of return, the asset will be seen as overvalued.

15.5.2 Holding Period Return

The holding period rate of return is the return earned from an asset over a specified period of time. The holding period for an investor can be time until which he wants to hold the asset, whether it is one day, few weeks, a year or any other length of time.

15.5.3 Discount Rate

Discount Rate is a general term for any rate used in finding the present value (PV) of a future cash flow. In essence, the discount rate reflects the compensation or return required by investors for delaying consumption. Generally, the risk free rate plus the required compensation for the risk taken on the future cash flow determines the discount rate.

14.5.4 Internal Rate of Return

The discount rate that equates the present value (PV) of the asset's expected future cash flows to the asset's price is called the Internal Rate of Return, commonly known as IRR. In simple words, the amount of money needed today to purchase a right to those cash flows is called IRR.

15.5.5 Equity Risk Premium

Equity risk premium is the incremental return that investors ask for investing in equities as compared to the risk free asset (such as T-Bills). In other words, it is
the difference between the risk free rate of return and the required rate of return on equities. It is worth noting that the equity risk premium will be different for different investors based on their perception of the risk in the stock they are investing. In other words, the equity risk premium, like the required rate of return, depends strictly on expectations of the future and it may differ from investor to investor. A foreign investor may see a country as a very risky place to invest whereas a domestic investor may not consider it as a risk to his investment.

It is very difficult to calculate the risk premium for any market or stock and hence can be a reason for differing investment conclusions for different analysts. Analysts try to use estimates because equity risk premium is used in their valuation techniques for stocks. There are two approaches broadly used for estimating the equity risk premium, one based on historical data available and the other on the expected data.

### 15.6 Historical Estimates

When reliable long-term records of equity return are easily available, analysts also like to use historical estimates for estimation of equity risk premium. The fact that historical estimates are based on actual data gives objective quality to their numbers. The most important assumption an analyst makes while calculating historic equity risk premium is that parameters that describe the return generating process are constant in the past and are assumed to remain constant in the future as well. An average return of the market is calculated overtime. An analyst selects a broad-based, market value-weighted index and decides on four major components, before developing a historic equity risk premium. The four major components are as under:

i. Broad-based index that represents market returns.
ii. Time period
iii. Type of mean calculated (arithmetic or geometric mean)
iv. Proxy for the risk-free rate of return (in Pakistan's case it can be the T-bill rate)

### 15.7 Forward-Looking Estimates

To calculate forward-looking estimates of equity risk premium, analysts use current information available and attach expectations concerning such variables based on certain assumptions. These expectations may differ from historical facts, and hence the expected equity risk premium may differ from the historical risk premium. However, it is important to note that personal or behavioral biases and potential errors in making key assumptions may occur while forecasting these estimates.
15.7.1 Dividend Discount Models

The dividend discount model or DDM is the simplest method to value a stock. From the perspective of an investor who buys and holds a stock, the cash flows he will receive are the dividends paid by the company or dividends paid on that share and the market price of the share when he sells it. If an investor wishes to buy a share and hold it for one year, the value of the share today would be the present value of the expected selling price in one year:

\[
V_0 = \frac{D_1}{(1+r)^1} + \frac{P_1}{(1+r)^1}
\]

Where

- \( V_0 \) = the value of a share of stock today, at \( t = 0 \)
- \( P_1 \) = the expected price per share at \( t = 1 \)
- \( D_1 \) = the expected dividend per share for year 1
- \( R \) = the required rate of return

The above equation applies to a single holding period, which means the present value, PV of the expected dividend, and the expected selling price is the asset’s value today. For the investor, stock value today depends directly on the dividends the investor expects to receive before the stock is sold and indirectly on the expected dividends after the stock is sold, because those future dividends determine the expected selling price.

15.7.2 The Gordon Growth Model

The Gordon growth model, developed by Gordon and Shapiro (1956) and Gordon (1962), assumes that dividends grow indefinitely at a constant rate. The simplest pattern that can be assumed in forecasting future dividends is growth at a constant rate. It can be stated mathematically as,

\[
D_t = D_{t-1} (1+g)
\]

Where

- \( g \) = the expected constant growth rate in dividends
- \( D_t \) = the expected dividend payable at time \( t \)

15.7.3 Sum of Parts Method

Another way to estimate the value of a company is to estimate the value of its various businesses and add them up to arrive at the total value of the business. In case of Pakistan, e.g. DG Khan Cement, Dawood Hercules, etc. all these
companies have various businesses running under one umbrella. One way to estimate the total value of one of these companies is to calculate values of these businesses that are independent and going-concern entities and then add them all up to arrive at the value of the other company. Analysts use sum-of-the-parts valuation when a company is operating its businesses in different industries that may have different valuation characteristics. In large corporate finance deals or buy-outs of the company, this method is also used to find the hidden value in a company, which can be unlocked after restructuring once the company is acquired.

This method is used when valuing a conglomerate such as Engro Corporation and sometimes the market applies a discount to the stock of a company that is operating in multiple unrelated businesses as opposed to a company, which has only one business. This discount is known as Conglomerate Discount that arises due to inefficiencies of allocation of capital to unrelated businesses.

15.7.4 Price -Earnings Ratio

The price-earnings ratio (P/E) is perhaps the most widely recognized valuation indicator. Price multiples are ratios of a stock’s market price to some measure of fundamental value per share. The basis behind price multiples is that investors evaluate the price of a share of stock; judge whether it is fairly valued, overvalued, or undervalued by considering what a share buys in terms of per share earnings, net assets, cash flow or some other measure of value (stated on a per share basis). The idea behind price multiples is that a stock’s price cannot be evaluated in isolation. Rather, it needs to be evaluated in relation to what it buys in terms of earnings, net assets, or some other measure of value. For example, a P/E of 10 means that an investor is willing to pay ten Rupees for one Rupee of current earnings.

A stock’s trailing P/E is its current market price divided by the most recent full year EPS. It is also commonly known as current P/E.

The forward P/E is a stock’s current price divided by next year’s expected earnings.

An analyst should apply the same definition to all companies and periods under examination when using the P/E or they will not be comparable. Fundamental analysis is a forward-looking P/E. An analyst can develop earnings forecasts of the company under study and obtain consensus earnings forecasts from the market to compare and see if the stock is undervalued, overvalued or fairly valued.
15.7.5 Peer Company Multiples

Companies operating in the same industry as the subject company are frequently used for comparison. The subject stock P/E is compared with the median or mean P/E for the peer group to arrive at a relative valuation. Similarly, multiplying the benchmark P/E with the company’s EPS gives you a stock’s value that can then be compared with the market price of the stock.

15.7.6 Industry and Sector Multiples

Taking account of relevant fundamental information, we compare a stock’s multiple with the median or mean multiple for the company’s industry. Comparisons with broader segments of the economy can potentially provide insight about whether the relative valuation based on comparable companies accurately reflect intrinsic value.

15.7.7 Overall Market Multiple

Equity market indexes have also been used for comparison. The analyst is always interested in finding out whether the overall market is fairly priced or not. Like most equity indexes, PSE’s index is also market-capitalization weighted; hence, analysts and company reports often report the average market P/E along with the individual P/E weighted by the company’s market capitalization. As a result, the stocks with biggest market capitalization heavily influence the calculated market P/E.

Using the Gordon growth model, an expression for P/E in terms of the fundamentals can be developed. This expression has two uses:

1. When used with forecasts as inputs to the model, the analyst obtains a justified P/E - the P/E that is fair or justified based on fundamentals. The analyst then can state his view or opinion in terms of the justified P/E. The P/E method is very widely recognized and is an effective way to communicate the analysis of any stock.

2. What expected earnings growth rate is implied by the actual market P/E compared to the P/E at which the stock is offered at the going market price?

15.7.8 Price to Book Value

Book value refers to the fact that the measurement of value comes from accounting records or books as opposed to market value as was the case when calculating P/E ratio. Again, book value per share also represents the value on a per-share basis. Book value of the company is represented by total shareholders’ equity of the firm, which is equal to total assets minus total liabilities.
Shareholders’ Equity = Total Assets - Total Liabilities

An analyst also deducts any value attributable to preferred stocks from the shareholders’ equity, as we are only interested in getting the value of the common stock. The price-to-book ratio (P/B Ratio) is used to compare a stock’s market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter’s book value per share. A lower P/B ratio could mean that the stock is undervalued. However, it could also mean that something is fundamentally wrong with the company. As with most ratios, be aware that this varies by industry. This ratio also gives some idea of whether you are paying too much, for what would be left if the company went bankrupt immediately.

15.7.9 Goodwill

Goodwill represents the excess of the purchase price of an acquisition beyond the fair value of acquired tangible assets and specifically identifiable intangible assets. It is believed that goodwill does not represent an asset because it is not separable and may reflect an overpayment on an acquisition.

15.7.10 Price to Sales

Analysts have also started to use price to sales multiples in their investment process. Sales figures are less subject to distortions or manipulation, as compared to EPS or BV. Companies can distort EPS by showing higher than or lower than usual expense. Whereas, total sales in the Profit and Loss Statement is a number before deduction of any expenses, therefore, P/S is generally more stable than P/E, especially for companies where EPS is abnormally high or low.

15.8 Enterprise Value

Enterprise value multiple relates the total market value of all sources of a company’s equity capital to a measure of fundamental value for the entire company. The basis behind enterprise value multiple is: investors evaluate the market value of an entire enterprise relative to the amount of earnings before interest, taxes, depreciation, and amortization (EBIDTA), sales, or in other words its operating cash flow. The most important argument for using enterprise value multiples rather than price multiples in valuation process is that enterprise value multiples are less sensitive to the effects of financial leverage than price multiples. Price multiples compare companies that are using different levels of leverage.

15.9 Other Issues Affecting Valuation

- Control Premium
• Lack of marketability discount
• Illiquidity discount
• Blockage factor

16. Behavioral Finance

Behavioral finance is the study of the influence of psychology on the behavior of financial practitioners and the subsequent effect on markets. Behavioral finance is of interest because it helps explain why and how markets might be inefficient. Anyone knowledgeable in financial market understands that there are numerous variables that affect prices in the securities markets. Investors' decisions to buy or sell may have a more distinct impact on market value than favorable earnings or promising products. The role of behavioral finance is to help market analysts and investors understand price movements in the absence of any intrinsic changes on part of companies or sectors. What behavioral finance is saying is that there are biases in the decision making process. The cornerstone of the behavioral finance theory is that emotions do affect financial decisions of an investor.

16.1 Loss Aversion

Loss aversion refers to the tendency for people to avoid losses. It is common knowledge that people are afraid of losing things, as the pain of losing is psychologically about twice as powerful as the pleasure of gaining. People are more willing to take risks to avoid a loss. In other words, the fear of avoiding losses makes one hold on to the position for a longer time in a falling market and effectively ending up taking on more risk.

16.2 Overconfidence

We systematically overestimate our knowledge and our ability to predict—on a massive scale. We tend to overestimate our knowledge of finance; we tend to think that we know better than the market and hence make wrong bets. Overconfident investors generally conduct more trades than their less-confident counterparts.

16.3 Greed

So often, investors are caught up in greed (excessive desire). After all, most of us have a desire to acquire as much wealth as possible in the shortest amount of time. Greed is a great motivation for becoming involved in trading. There is nothing wrong with that because many things would not be accomplished without some element of greed to provide incentive. Nevertheless, greed often overreaches reality and the limits of a trader's account and ability, producing more risk than the trader can handle. Greed can make traders make
random trades, or hang on to positions longer than their trading system dictates, in an effort to chase the market.

### 16.4 Fear

In day trading, the main fear a trader has is that they are going to make a losing trade and lose money. Day trading is highly speculative in nature and should be left to professionals. Ordinary investors generally do not have the time or the market knowledge needed to trade in the market. When stocks suffer large losses for a sustained period, the overall market can become more fearful of sustaining further losses. However, being too fearful can be just as costly as being too greedy. Just as greed dominated the market during the dotcom boom, the same can be said of the prevalence of fear following its bust. In a bid to stem their losses, investors quickly moved out of the equity (stock) markets in search of less risky buys. Investors look for assets that are safe and stable or in other words, are low risk in nature. Naturally, when someone chooses a low risk investment the returns will be lower. This mass exodus out of the stock market shows a complete disregard for a long-term investment plan based on fundamentals. At a time when stocks are really cheap and available in the market at prices much below their actual intrinsic values investors should look for good bargains and put money for long-term investment.

### 17. Market Abuses

#### 17.1 Insider Trading

The buying or selling of a security by someone who has access to material nonpublic information about the security is called insider trading. Law generally restricts insider trading and heavy penalties are imposed on someone who is found guilty of it. The person who holds insider information is called an insider. An insider can be a firm's employee, director, auditor, rating agency, or anyone who is privy to material nonpublic information. Insider trading violations may also include "tipping" such information, securities trading by the person "tipped," and securities trading by those who misappropriate such information. Part X of the Securities Act 2015 deals with Insider Trading where the law has clearly defined what includes insider trader, what is inside information and responsibilities of the listed companies to disclose inside information? Following are some of the examples of persons who are considered insiders:

- Corporate officers, directors, and employees who traded the corporation's securities after learning of significant, confidential corporate developments
- Friends, business associates, family members, and other "tippees" of
such officers, directors, and employees, who traded the securities after receiving such information

- Employees of law, banking, brokerage and printing firms who were given such information to provide services to the corporation whose securities they traded
- Government employees who learned of such information because of their employment by the government and
- Other persons who misappropriated, and took advantage of confidential information from their employers

17.2 Front Running

Stockbrokers and traders often have access to inside information regarding the orders to be executed for their client. Brokers and traders might be lured to use this insider information to make investments that benefit them personally or someone else.

To illustrate, suppose a stockbroker at an investment bank has learned that his bank’s executive board will purchase 100,000 shares of Company XYZ stock in the coming week. As it is quite possible that this large purchase order will push up the price of the stock, the stockbroker purchases 1000 shares of that company for his personal account, hoping to profit from the price jump.

17.3 Price Manipulation

Market manipulation is a deliberate attempt to interfere with the free and fair operation of the market and create artificial demand. In other words, the act of artificially inflating or deflating the price of security is price manipulation. It is done by initiating a series of transactions in a security to raise or lower the security’s price and to give the appearance of trading with the intent of affecting the price of the security.


Investor protection and the promotion of investor confidence in the integrity of securities markets are the two cornerstones of capital markets. Investor education is a key strategy for enhancing investor protection, promoting investor confidence and fostering investor engagement in financial planning and decision-making. It is complementary to the traditional tools of regulation, supervision and enforcement. Investor education and financial literacy
programs have the potential to help improve financial outcomes for retail investors.

Financial literacy generally relates to all aspects of a person's financial situation and can include the concept of financial capability (a person's awareness, knowledge, skills, attitudes and behaviors). Investor education focuses on issues relevant to the education and information needs of individuals who participate or are considering participating in the securities markets.

**SECP's Investor Education Program**

In Pakistan, SECP has developed a dedicated Investor Education Program (IE Program) "Jamapunji" in line with IOSCO principles. Under the banner of Jamapunji program, SECP has developed a dedicated web-portal (https://jamapunji.pk) for investor education and awareness. The key benefit of this web-portal is that it contains a range of material for the potential and existing investors on various topics including articles related to financial planning, investment avenues, capital markets, corporate registry, insurance, facility to verify companies etc. Moreover, this portal has the facility of a stock-trading simulator for the public. This platform can be used to put their trading skills to test using live feeds from PSX and learn how a stock exchange works.

The IE program employs a three-pronged strategy i.e. physical, digital and print mode. The physical mode includes sessions and seminars while the digital mode includes social media, webinars, TVCs, videos, web-portal etc. The print mode includes advertisement and information disseminated through the newspapers and other print mediums.

SECP is also carrying out physical awareness sessions by reaching out to universities, colleges and the corporate sector. These awareness sessions are carried out across Pakistan on various topics including corporate registry, capital markets, how to avoid financial frauds/scams, mutual funds, insurance and voluntary pension schemes etc. Anyone can request for a seminar from the Jamapunji team through its web-portal by filling out a simple form available on "Approach Jamapunji" link https://jamapunji.pk/approach-jamapunji.

Additionally, SECP has signed MoUs with top universities across Pakistan, research institutes, HEC, ACCA, ICAP and ICMAP. Further, SECP is also part of HEC Curriculum Review Committees of Commerce, Business Administration and Economics. This is the first time that content pertaining to capital markets, insurance, corporate registry,non-bank finance companies and the role of regulator will be incorporated in the curriculum students pursuing business and commerce related education both at the bachelors and masters level.
Leveraging social media, SECP also has established its presence through its official pages on Facebook (www.facebook.com/jamapunji.pk) and Twitter (www.twitter.com/jamapunji_pk). Investor awareness and educational videos have been developed for the public pertaining to different topics including insurance, capital market, complaint redress etc. available on the Jamapunji web-portal and social media platforms. To make SECP even more accessible to the public can also post your queries/ comments and interact with our team through our social media platforms. SECP has established a state of the art and telephony integrated online Service Desk Management System (SDMS) which can be accessed at https://sdms.secp.gov.pk/ supported by a toll free number (0800-88008). The complaints and queries can also be filed through email at queries@secp.gov.pk and complaints@secp.gov.pk. The SDMS also serves as a channel for educating the investors.

In order to reach the sizeable base of smart-phone users in Pakistan, SECP has launched several Jamapunji mobile apps to equip the public about the risks associated with investments and avoid frauds. Apps such as ‘Scam Meter’ and ‘Risk Profiler’ help educate the users about investment risks and frauds to better equip them with preventive measures. For information pertaining to financial knowledge and planning, one can benefit from other applications such as Tax Credit Calculator, Jamapunji Barhao, Jamapunji Retirement Planning, Life Events and Jamapunji Bachao. These applications can be downloaded from both Android and iOS platforms.

18.1 Benefits of Investor Education and Financial Literacy

Investor education and financial literacy programs have the potential to help improve financial outcomes for retail investors. Some key benefits include more informed saving and investment decision-making, better financial and retirement planning, greater confidence and higher participation in the securities markets, greater wealth accumulation, and increased awareness of investor rights and responsibilities. Investor education and financial literacy programs, as a complement to securities market regulation and supervision, can help address any misalignment of investor and industry interests, particularly with respect to information asymmetry. For example, investor education could potentially reduce both the propensity for investors to buy wrong investment products and services and for intermediaries to sell those products and services. This could lead to fewer investor complaints. In addition, investor education can also help investors better assess the appropriateness and suitability of investment advice, investment products and services. It can also help investors, detect and avoid suspected fraudulent activity, and distinguish between regulated and non-regulated activity, all of which could reduce investor losses.
In case of complaints, you can lodge it with SECP’s SDMS and toll free number (0800-88008) which provides you with the platform for the redress of their grievances. Moreover, all the listed entities are mandatorily required to display their own and SECP’s complaint contact people/department details on their websites. You can access SECP’s complaint drop boxes which are placed at major locations in Pakistan.

The SDMS system generates vital intelligence for the management of SECP, which includes nature of complaints, common complaints, potential fraud tip-offs, vulnerability in the existing regulatory framework etc. This information helps SECP to improve the relevant regulatory framework, ensure enforcement of existing laws, which consequently helps in preventing the incidents of fraud and scams.

**18.2 Investment Knowledge and Understanding**

**18.2.1 Basic Financial Concepts**

Research in many jurisdictions has identified low levels of knowledge among investors about basic financial concepts, such as compound interest, inflation, and portfolio and risk diversification.

**18.2.2 Investment Product Attributes, Including Fees, Risk and Returns**

Research (including behavioral economics) shows that while investors often believe that they are well informed about the features of investment products and services, in practice many are not. For example, investors may not understand the risks of a product in which they have invested, particularly when the investment product is complex, or appreciate the impact of fees on long-term returns.

**18.2.3 Suitability**

Retail investors may be unable to assess the suitability of investment products and services for their own unique set of personal circumstances (for example, risk appetite, current financial commitments and goals, investment time horizon). They may also not be aware of product features that could impede their exit from the investment if their circumstances change, for example, due to illness or job loss.

**18.2.4 Avoiding Fraud, Including the Use of Alerts**

Data from enforcement actions by securities regulators shows that retail investors continue to be susceptible to investment scams or frauds, such as get-rich quick schemes promoted as “can’t lose” opportunities.
18.2.5 Investor Rights and Responsibilities

Retail investors may not understand their rights under their jurisdiction's legal framework, or be aware of the importance of researching intermediaries and investment products.

18.2.6 Complaint Handling and Recourse

When investors believe that they have been treated unfairly or were wrongly sold an investment product, they often do not know who to contact or how to file a complaint. They may also not know what action to take if they suspect wrongdoing or fraud.

18.3 Financial Skills and Competence

18.3.1 Working with Intermediaries

Many retail investors are unaware of tools and resources that can help them check the background of an investment professional. Investors should do business with only those investment professionals or financial intermediaries that are registered with SECP as per the procedure laid down in Securities Act 2015. In addition, in many jurisdictions, there is a plethora of "advice professional" or "financial professional" credentials, which may be regulated by different private and/or public sector entities. This makes it difficult for investors to assess the qualifications of financial professionals.

18.3.2 Financial Planning and Money Management

Research in various jurisdictions shows that a gap in basic financial skills impedes the ability of some retail investors to plan and manage money. Behavioral economics has further demonstrated that people are generally poor intuitive statisticians and are prone to making systematic errors in decisions involving uncertainty, such as achieving a future retirement goal. Retail investors may not be aware of or have access to, online tools and calculators that could assist them with planning and decision-making. Still others consider financial planning to be relevant only for the extremely wealthy.

18.3.3 Critical Thinking

Retail investors may not have the knowledge, experience or access to tools needed to exercise a "healthy sense of skepticism" or to determine whether the advice they receive is accurate, suitable and consistent with their goals as retail investors.
19. Investor Rights (source: CFA institute)

The "Statement of Investor Rights" was developed by CFA Institute to advise buyers of financial service products of the conduct they are entitled to expect from financial service providers. These rights reflect the fundamental ethical principles that are critical to achieving confidence and trust in any professional relationship. The list applies to financial products and services such as investment management, research and advice, personal banking, insurance and real estate. Whether you are establishing an investment plan, working with a broker, opening a bank account or buying a home, the Statement of Investor Rights is a tool to help you get the information you need and the service you expect and deserve. Demanding that financial professionals abide by these rights, helps you build trust in the person and/or firm you engage with, and thereby collectively restores trust, respect, and integrity in finance.

When engaging the services of financial, professionals and organizations, the client has the following rights:

1. **Honest**, competent, and ethical conduct that complies with applicable Law
2. Independent and **objective** advice and assistance based on informed analysis, prudent judgment, and diligent effort
3. Client financial **interests** taking precedence over those of the professional and the organization
4. **Fair** treatment with respect to other clients
5. **Disclosure** of any existing or potential conflicts of interest in providing products or services
6. **Understanding** of client circumstances, so that any advice provided is suitable and based on the investor's financial objectives and constraints
7. Clear, accurate, complete, and **timely communications** that use plain language and are presented in a format that conveys the information effectively
8. An explanation of all **fees** and costs charged and information showing these expenses to be fair and reasonable
9. **Confidentiality** of client information
10. Appropriate and complete **records** to support the work done on client's behalf.

20. Local Taxation Structure and Levies

20.1 Transaction Costs

Generally, a broker charges a commission on any transaction done by him for his clients. The commissions can differ among brokers depending upon the services they offer and their relationship with the respective clients. The
broker has to pay certain levies to the exchange and the regulator on each trade. He will be charging commissions for each trade from his client that will cover all the costs and certain profit margin. Similarly, the client will also have to bear certain other costs such as costs of shares movement charged by CDC, account maintenance fee to CDC and NCCPL costs of calculating CGT to NCCPL.

### 20.2 Capital Gains Tax

Capital gains tax (CGT) were introduced for the first time through Finance Bill 2011 to encourage long-term investment and improve revenues of the government. The rates for CGT on disposal of securities are based on the holding period of the seller and are provided in the Income Tax Ordinance 2001. Depending on the holding period, the rates can range from 0% to 20%. At the time of writing this guide, the rates for income tax filers are lower than those of non-filers to encourage people to come in the tax net. To ensure that correct rates are used in calculations, it is always advisable to refer to the Income Tax Ordinance 2001 as amended in force at the time of disposal of security.

Under Section 37 (a) of the Income Tax Ordinance 2001 as amended Capital, losses on disposal of securities can only be adjusted against capital gains during the tax year. This means that if a stock is held for less than 12 months and is sold for a loss that loss can be adjusted against any gain in that tax year; however, any excess loss cannot be carried forward to the subsequent tax year.

### 20.3 Mode of Collection

A fixed cost of 0.50% on non-proprietary trades and 0.25% on proprietary trades is charged on disposal or acquisition of securities, as the case may be, in lieu of all expenses. However, such fixed cost shall only be allowed in respect of Market Based Transactions. Financing Cost Incurred through NCCPL’s Leveraged Market Products shall be taken into account while computing capital gains. CGT is collected on monthly basis for the transactions settled in a particular month. CGT is collected from or through the respective clearing members on net capital gains of persons/investors. If any person is not satisfied with the computation of capital gain or tax thereon or both made by NCCPL, such person/investor may re-compute the capital gain and can lodge claim of refund, if any, with the commissioner of FBR. If you are covered under the CGT regime, you are not required to maintain records and accounts with respect to CGT. An annual certificate showing computation of capital gains and tax thereon, if any, is issued to each eligible person/investor within thirty days from the end of the financial year. Quarterly statements of amount collected from eligible persons/investors have to be furnished to the FBR within thirty days from the end of each quarter by NCCPL. Every person/investor is also
required to file the annual certificate, as provided by NCCPL, along with the return of income to FBR.

21. **Introduction to Debt Markets**

A fixed-income security is an instrument that allows governments and companies generally called issuers to borrow funds from investors. In its simplest form, a fixed income security is a financial obligation of an entity that promises to pay a specified sum of money at specified future dates. The entity that promises to make the payment is called the issuer of the security. Examples of issuers are Government of Pakistan (GOP) issuing Pakistan Investment Bonds (PIBs), Engro Corporation issuing Engro Rupiah Certificates. In other words, the issuer is the borrower of funds, whereas the investor who purchases such a fixed income security is called the lender or creditor. The promised payments that the issuer agrees to make at the specified dates consist of two components: interest payments and repayment of the amount borrowed. Fixed income securities that are debt obligations include bonds, mortgage-backed securities, asset-backed securities and bank loans.

21.1 **Maturity**

The term to maturity of bond is the number of years over which the issuer has promised to meet the conditions of the obligations. The maturity date of a bond refers to the date that the debt will cease to exist, at which time the issuer will redeem the bond by paying the amount borrowed. The general practice in the bond market is to refer to "maturity" as "term" or "tenor". Maturities typically range from overnight to 10 years in Pakistan. Fixed-income securities with maturities at issuance of one year or less are known as money market securities. In Pakistan, they are called Treasury Bills, which are issued by the State Bank of Pakistan through Open Market Operations (OMOs) at frequent intervals. There are bonds of various maturities. PIBs in Pakistan are issued for terms of 1 year, 3 years, and 10 years.

21.2 **Par Value**

The par value of a bond is the amount that the issuer agrees to repay the bondholder at the maturity date. This amount is also known as the principal, face value, redemption value or maturity value. Bonds can have any par value. As bonds can have different par value, the prices of the bonds are generally quoted as a percentage of its par value. A value of 100 means 100% of par value. For example, if a bond has a par value of Rs. 1000 and it is trading at Rs. 900, then the bond is said to be selling at 90. Similarly, if the same bond is selling at Rs. 1100, then it will be quoted as selling at 110. The bond may trade below or above its par value. When a bond trades below its par value, it is said to be trading at a discount, whereas when a bond is trading above its par value
it is said to be trading at a premium.

### 21.3 Coupon Rate

The interest rate that the issuer agrees to pay each year is called the coupon rate; the total annual interest amount to be paid in one year is called the coupon. The coupon is determined by multiplying the coupon rate by the par value of the bond that is:

\[ \text{Coupon} = \text{Coupon Rate} \times \text{Par Value} \]

Coupon payments can be made annually, semi-annually, quarterly or even monthly, but generally in Pakistan annual or semi-annual payments are popular.

A conventional bond pays a fixed rate of interest. In this type of bond, there is no change in the coupon payments during the life of a bond, in other words, until the bond matures. Bonds that pay a floating rate of interest are called floating-rate bonds. The coupon rate of a floating rate bond includes two components: a reference rate, plus a spread.

The spread, called the excess margin, is usually constant and expressed in basis points (bps); a basis point is equal to 0.01%. The excess margin or spread as it is called is set when the bond is issued and depends on the creditworthiness of the issuer at the time of issuance. The higher the creditworthiness of the issuer the lower the spread and vice versa. The reference rate is reset periodically; the reference rate in Pakistan is Treasury Bill Rate (T-bill) of the SBP. A floating rate bond may also have restriction on the maximum coupon rate that will be paid at any reset date that is called a **cap**. Similarly, there could be a minimum coupon rate specified which is called a **floor**.

### 21.4 Zero-Coupon Bond

A zero-coupon bond, also known as an "accrual bond," is a debt security that does not pay interest (a coupon) but is traded at a deep discount, rendering profit at maturity when the bond is redeemed for its full face value. Some zero-coupon bonds are issued as such, while others are bonds that have been stripped of their coupons by a financial institution and then repackaged as zero-coupon bonds. Because they offer the entire payment at maturity, zero-coupon bonds tend to fluctuate in price much more than coupon bonds. When a zero-coupon bond matures, the investor receives one lump sum equal to the initial investment plus the imputed interest. The maturity dates on zero coupon bonds are usually long term.
21.5 Callable Bond

An issuer generally wants the right to retire a bond issue prior to the stated maturity date because at some time in the future the issuer may want to take advantage, if the general level of interest rate has fallen below the issue's coupon rate. Hence, redeeming the issue and replacing it with another bond issue with a lower coupon rate makes perfect sense for the issuer. This right to the issuer is a disadvantage to the bondholder because he will have to reinvest his/her funds at a lower interest rate. Consequently, if the issuer wants to keep this right, it will have to compensate the bondholder by offering a higher coupon rate at the time of issue. The issuer gets this option or right when it issues a **callable bond**. The primary reason why issuers choose to issue callable bonds is to protect themselves against a decline in interest rates. In the event of decline in interest rates or improvement of credit quality or creditworthiness of the issuer, the issuer calls the bonds or in other words redeems a bond and replaces it with a less expensive bond.

Conversely, a **puttable** bond is beneficial to the bondholder because the issuer guarantees a pre-specified selling price at the redemption dates. If interest rate rise after the issuance of bond, the price of the bond will decline, the bondholder can sell the bond back to the issuer, generate cash and redeploy or reinvest the proceeds at a higher rate. Since the put option gives advantage to the bondholder, the price of the puttable bond will be higher than a comparable bond without a put option.

22. Risks Associated with Investment in Bonds

22.1 Interest Rate Risk

The price of the bond moves in an opposite direction to that of the interest rates, which means when the interest rates increase the price of the bond falls and when the interest rates fall the price of the bond rises. Hence, the risk that an investor faces is that the price of a bond held will decline if the general interest rates in the market rise. This kind of risk is called interest rate risk and is the biggest risk faced by investors in the fixed income market. Suppose an investor buys a 10-year PIB bond at 9.5%, in other words the issuer, the government in this case will have to pay 9.5% annual coupon to the investor. Assuming the investor wants to sell his holding after 3 months when the interest rates in the market have risen to 10%. This investor will not find a buyer of a bond or a new investor of the bond who will be willing to buy the bond at 9.5%. The reason is that any buyer who wants to purchase this bond is able to buy a similar 10-year PIB with a coupon rate of 10%. The investor cannot ask the issuer to change the coupon rate nor can he ask him to shorten the tenor or maturity date of the bond. The only option available with the original investor
of the bond is to adjust the price of the bond so that the new buyer can yield 10% or in other words get a return of 10% at this new price, which is equal to the going interest rate of the market.

22.2 Call Risk or Prepayment Risk

As explained earlier a bond may include the provision of call-option or put-option that allows the issuer to retire or call all or part of the issue before the maturity date. This provision may disturb the cash flow pattern of a callable bond; hence, there is no certainty of the maturity date of the callable bond.

It is most likely that the issuer will redeem or call the bond when interest rates in the market have dropped below the coupon rate of the bond, hence the investment risk as the investor will have to redepone his funds at a lower rate. Finally, the price appreciation of the bond in the event of any decline in interest rate will be limited because there will be a time when the issuer will recall the bond to take advantage of lower interest rates. Because of the disadvantages mentioned above the investor or buyer of a callable bond is exposed to call risk. In other words, as the issuer has the option to prepay, the buyer of the bond faces prepayment risk.

22.3 Reinvestment Risk

The risk of not being able to reinvest the proceeds at the same or higher interest rate than the bond in which they were originally invested is called reinvestment risk. A bond will most probably be called by the issuer in case the interest rates go down to take advantage of this decline. It may be noted that the issuer has already paid an extra price to the investor at the time of issuance of bond for this right or option. Thus, the investor faces the problem of having to reinvest the proceeds received from the issuer when the bond is called in a lower yield environment.

22.4 Credit Risk

There are three types of credit risks:

a) Default Risk

Default risk represents the chance the investor will lose his or her investment. If the issuer fails to satisfy the terms of the obligation, for example, does not pay interest on time or does not honor his commitment at the time of maturity then the investor is said to be facing the default risk. The percentage of a population of bonds that is expected to default is called the default rate. In case of a default, it is not necessary that the investor loses the entire amount invested; the percentage of the investment that can be expected to be recovered is called the recovery rate. Default risk goes up if a debtor has large
number of liabilities and poor cash flow. Companies and persons with high
default risk stand a greater chance of a loan being denied and having to pay a
higher interest rate on the loans they do receive. Examples include: poor or
falling cash flow from operations (which is often needed to make the interest
and principal payments), rising interest rates (if the bonds are floating-rate
notes, rising interest rates increase the required interest payments) or changes
in the nature of the marketplace that would adversely affect the issuer (such as
a change in technology, an increase in competitors, or regulatory changes). The
default risk associated with foreign bonds also includes the home country’s
sociopolitical situation and the stability and regulatory activity of its
government.

b) Credit Spread Risk

In finance, the yield spread or "credit spread" is the difference between the
quoted rates of return on two different investments, usually of different credit
quality. It is often an indication of the risk premium for investing in one
investment product over another. Spread risks are not associated with
contractual guarantees but rather originate from the intersection of interest
rates, credit ratings and opportunity cost. Credit spread risk arises from the
possibility that changes in credit spreads will affect the value of financial
instruments. Credit spreads represent the credit risk premiums required by
market participants for a given credit quality. Even in the absence of default, an
investor is concerned that the market value of a bond does not decline and the
price performance of the bond he has invested in does not worsen against
bonds of similar characteristics. For example, in general during economic
recessions investors are concerned that issuers will face a decline in cash flows
and the issuer may not be able to service its bond obligations. As a result, the
credit spread tends to widen between government T-bills or government
bonds and bonds issued by corporates.

c) Downgrade Risk

Downgrade means a negative change in the rating of a security. This situation
occurs when analysts feel that the future prospects for the security have
weakened from the original recommendation, usually due to a material and
fundamental change in the company’s operations, outlook or industry.
Downgrade risk is the risk that a bond price will decline due to a downgrade in
its credit rating. Lower ratings suggest that a bond issue is riskier than an issue
with higher ratings, which in turn leads to a lower price. Market participants
determine the default risk of an issue by looking at the credit ratings assigned
to issues by rating companies such as JCR VIS, PACRA, etc. A downgrade,
therefore leads to a lower price. The downgrade risk arises from deteriorating
financial condition of a company, and every bond faces this risk to a certain
22.5 Liquidity Risk

Market liquidity is the ability to trade an asset or a bond in this case at short notice, at low cost and with little impact on its price. Liquidity risk is the risk that the investor will have to sell a bond below its true value where the true value is indicated by a recent transaction. The primary measure of liquidity is the size of the spread between the bid price and the ask price. The wider the bid-ask spread, the great the liquidity risk. For investors who plan to hold a bond until maturity and need not mark a position to market, liquidity risk is not a major concern. An institutional investor that plans to hold the bond until maturity but is required to mark-to-market the bond at regular intervals, liquidity is a major concern. Mark-to-market means revaluing the security in the portfolio at current market value.

22.6 Currency Risk

If the bond is issued internationally, such as Eurobond issued by Government of Pakistan (GoP) in US dollars, then the cash flows in the investor’s domestic currency are dependent on the exchange rate at the time of interest payments or final payment at the expiry received from the issuer. Therefore, a bond whose payments are not in the domestic currency of the investor has unknown cash flows in the domestic currency. The risk of receiving less of the domestic currency when investing in a bond issue that makes payments in a currency other than the investor’s domestic currency is called the exchange rate risk or currency risk.

22.7 Inflation Risk

Purchasing power risk or inflation risk arises because of the inflation rate. An investor is exposed to inflation risk because the interest rate at which he receives the interest payments are fixed for the tenor. For example, if an investor purchases a bond with a coupon rate of 10% but the inflation rate is 7% then the real rate of return to the bond holder is only 3% (10% - 7%).

22.8 Event Risk

At times, the ability of an issuer to make interest and principal payments changes dramatically and unexpectedly because of many factors such as:

a) Natural disaster or an industrial accident
b) Takeover or corporate restructuring
c) Regulatory change
d) Political factors
These events are also called Black Swan events as they happen unexpectedly and their impact can be huge and far reaching. For example, capital controls were invoked in Pakistan after the nuclear tests or the 2008 crises when there were no buyers in the market after the economic meltdown.

23. Debt Markets

23.1 Credit Ratings

A credit rating is an evaluation of the credit worthiness of a debtor predicting the debtor's ability to pay back the debt. The credit rating represents the evaluation of the credit rating agency of qualitative and quantitative information for the debtor, including non-public information obtained by the credit rating agencies, analysts. A credit rating agency calculates the probability of a debtor defaulting on its obligations. Research is the foundation for any analysis that is conducted by a credit rating agency. Entity rating signifies the level of investment risk and the capacity and/or willingness of an entity to meet its debt obligations. Similarly, instrument rating is a specific opinion given on a specific instrument. This entails analysis of the instrument structure and the collaterals that it contains.

23.2 Sovereign Debt

Governments issue bonds to bridge their fiscal gap, in other words to fund spending when tax revenues are not enough to cover all the expenditures. Governments issue different types of bonds, such as fixed rate bonds, floating rate bonds or even inflation-protected bonds. Sovereign bonds are usually unsecured obligations of the government hence are not backed by any collateral. Any country that has a strong domestic savings base has the luxury of being able to issue bonds in its local currency and sell them to domestic investors. Similarly, a country can also issue a bond in foreign currency to international investors.

23.3 Corporate Debt

Companies can also raise debt as part of their overall capital structure, both to fund the short-term working capital requirement or long-term capital expenditure requirement. The backing for the bond is usually the payment ability of the company, which is normally money to be earned from future operations. A corporate debt obligation may be secured or unsecured. Secured debt means that there is some form of collateral pledged to ensure payment of the debt. An unsecured debt does not have any pledge collateral.

23.4 Sukuk

Sukuk in general may be understood as a Shariah compliant 'Bond'. The claim
embodied in Sukuk is not simply a claim to cash flow but an ownership claim. Sukuk are structured in such a way as to generate returns to investors without infringing Islamic law (that prohibits Riba or interest). Sukuk represents undivided shares in the ownership of tangible assets relating to particular projects or special investment activity. A Sukuk investor has a common share in the ownership of the assets linked to the investment although this does not represent a debt owed to the issuer of the bond. In the case of conventional bonds, the issuer has a contractual obligation to pay to bondholders, on certain specified dates, interest and principal. In contrast, under a Sukuk structure the Sukuk holders each hold an undivided beneficial ownership in the underlying assets. Consequently, Sukuk holders are entitled to a share in the revenues generated by the Sukuk assets. The sale of Sukuk relates to the sale of a proportionate share in the assets. Since the beginning of 2000, Sukus have become important Islamic financial instruments in raising funds for long-term project financing. The first Sukuk were issued by Malaysia in 2000, followed by Bahrain in 2001. Since then Sukus have been used by both the corporate sector and states for raising alternative financing. While Sukuk issuance was affected by the global financial crisis, since 2011 Sukuk have been growing in popularity.

24. Treasury Bills

Treasury bills or T-bills, as popularly known, are short term government papers issued by the Government of Pakistan in multiples of Rs. 5000 with a short tenor of 3, 6 or 12 months. T-bills are issued through a competitive bidding process at a discount from par, which means that rather than paying fixed interest payments like conventional bonds, the appreciation of the bond provides the return to the holder. The State Bank of Pakistan (SBP) publishes a quarterly schedule of auction; auctions are held on fortnightly basis. Banks can hold T-bills in their Investor Portfolio Securities (IPS) account, whereas the ultimate custodian of T-bills is SBP. Equity analysts sometimes use 12-month T-bill rate as the risk free rate for their analysis. It is easy to invest, has sovereign guarantee, is accepted as collateral by banks and stock exchanges and is liquid.

25. Pakistan Investment Bonds

Pakistan Investment Bonds (PIBs) are long term debt instruments issued by the Government of Pakistan and issued in denomination of Rs. 100,000 with a tenor of 3, 5, 10 and 20 years.

Coupon payments are fixed and semi-annual. Again, like T-bills, banks can hold them in their IPS accounts but the ultimate custodian is SBP. These bonds are also guaranteed by GOP and have benefits such as easy to invest, accepted as collateral by banks and are relatively liquid. Some analysts use 10-year PIB rate
as the risk free rate instead of the T-Bill rate in their valuation techniques.

26. National Savings Schemes (NSS)

The history of National Savings Organization dates back to the year 1873 when the Government Savings Bank Act, 1873 was promulgated. During the First World War, the British Government introduced several Schemes for collection of funds to meet the expenditure. Until December 1971, the National Savings Organization functioned as a publicity organization and its activities were merely promotional in nature. However, in early 1972, the scope of its activities was enlarged as the Central Directorate started selling initially Rupee Prize Bonds, and subsequently engaged in the operations of other savings schemes. This resulted in considerable expansion of the National Savings Organization. At present, this Organization has a total sanctioned strength of 3377 employees in various grades and with offices spread around the country. Its main products are:

- Prize Bonds
- Defence Saving Certificates (DSC)
- Special Saving Certificates Registered (SSCR)
- Regular Income Certificates (RIC)
- Bahbud Savings Certificates (BSC)
- Savings Account (SA)
- Special Savings Account (SSA)
- Pensioner’s Benefit Account (PBA)

27. Introduction to Derivatives

A derivative contract is a financial instrument with a return that is obtained from or "derived" from the return of another underlying financial instrument. A derivative's performance is based on the performance of an underlying asset. The price for immediate purchase of underlying asset is called the cash price or spot price. A market where assets are traded on cash is called a cash market or spot market, for example, the ready board of the Pakistan Stock Exchange is the spot market or ready market. A derivative contract on the other hand initiates on a certain date and terminates on a later date.

27.1 The Role of Derivatives Markets

One of the prime functions of the derivative market is price discovery. Futures markets provide valuable information about the prices of the underlying assets on which futures contracts are based. The second most important purpose of derivative markets is risk management. Hedging and speculating are often referred to as complementary activities. Hedging means reduction or
elimination of risk whereas taking on or adding on more risk is when you speculate. In general, hedgers seek to eliminate risk and naturally need speculators to assume the risk they need to shed.

In simple words, someone who needs to hedge or speculate is a party with opposite beliefs or opposite risk exposure. For example, an oil exploration company like Pakistan Oil Fields would want to hedge future sales of its oil by entering into a derivatives transaction with an oil marketing company such as Pakistan State Oil. Both forwards contracts and futures contracts are commitments to buy or sell an asset at a future date at a price agreed on today. No money changes hands at the start of either transaction. With an open, standardized and regulated market for futures contracts, their prices can be disseminated to other investors and the public. Futures prices are closely watched by a vast number of market participants, many trying to discern an indication of the direction of future spot prices and some simply trying to determine what price they could lock in on future purchase or sale of the underlying asset. Although forward prices provide similar information, forward contracts are private transactions and their prices are not publicly reported.

Futures market thus provides transparency to the financial markets. They reveal the prices at which parties’ contract for future transactions. Therefore, futures prices contribute an important element to the body of information on which investors make decisions. In addition, they provide opportunities to transact for future purchase or sale of an underlying asset without having to worry about the credit quality of the counter party.

27.2 Forward Contract

The forward contract is an agreement between two parties in which one party, the buyer, agrees to buy from the other party, the seller, an underlying asset at a future date at a price established at the start. The terms and conditions, such as when and where delivery of the underlying asset will take place are pre agreed between the buyer and the seller. The contract is said to be customized. Forward contracts in the financial world take place in a large and private market consisting of banks, investment banking firms, governments, and corporations. The forward market is a private and largely unregulated market. Pakistan does not have a developed forwards market hence there is no data available. Contracts only take place privately between the parties and are not reported anywhere.
27.3 Futures Contract

A futures contract is a variation of a forward contract that has essentially the same basic definition but some additional features that clearly distinguish it from a forward contract. Unlike forward contract a futures contract is a public, standardized transaction that takes places on a futures exchange. Pakistan has a futures market and certain scripts are available on the futures market. In Pakistan, three types of futures contracts are offered, 30-days contract, a 60-days contract and 90-days contract. PSX provides a mechanism for engaging in futures transactions through which parties can buy and sell these contracts. The contracts are standardized, which means the exchange determines the expiration dates, the underlying stock, number of units of the underlying stock included in one contract and various other terms and conditions.

The most important distinction between a futures contract and a forward contract is the default risk associated with the contract. In a forward contract, the risk of a default is a concern as the party with the loss on the contract can potentially default whereas, in futures contract the exchange guarantees to each party that if the other fails to pay, the exchange will pay. In effect, the exchange actually writes itself into the middle of the contract so that each party has the contract with the exchange and not with each other. The exchange collects payment from one party and disburses payment to the other. Like in the ready or spot market, the exchange implements this performance guarantee through its clearing house i.e. the National Clearing Company of Pakistan Limited (NCCPL).

Another important distinction between forward and futures contracts is the ability to engage in offsetting transactions. Forwards are generally designed and kept until expiration although it is possible for a party to engage in the opposite transaction but not with ease. On the other hand, futures contracts have standardized terms and trade in the market that provides enough liquidity for both the parties to enter the market at any time and offset transactions initially created.

27.4 Default Risk

Regardless of whether the contract is for delivery or cash settlement, the potential exists for a party to default.

27.5 Termination of Forward Contract

There is always a possibility that one of the parties to the contract wants to terminate the position prior to expiration date. For example, suppose a party goes long, meaning that they agree to buy the asset at the expiration date at the price agreed on at the start, but subsequently decide to terminate the
contract before expiration. The reasons for terminating a forward contract may include:

- Change in business needs; the party no longer wants the exposure or option given in that contract;
- Price changes in the market during the period since the original contract was created; or
- It may be advantageous to close the original contract and enter into a different one at the new prices.

28. Types of Forward Contracts

28.1 Equity Contracts

An equity forward contract is a contract calling for the purchase of an individual stock, a stock portfolio or a stock index at a later date. In Pakistan Stock Exchange we have forward contracts on individual stocks as well as stock index, but the popular and the most widely traded forward contracts is a 30 day forward contract in individual stocks. Not all the stocks listed on the spot market are available in the forwards market. In Pakistan, we call it a forward contract but essentially, it is a futures contract that has been standardized. There are other types of contracts such as:

28.2 Options

An option is a financial derivative contract that provides a party the right to buy or sell an underlying asset at a fixed price by a certain time in the future. The party holding the right is the option buyer; the party granting the right is the option seller. There are two types of option, a call and a put.

A call is an option granting the right to buy the underlying asset; a put is an option granting the right to sell the underlying asset. To obtain this right, the option buyer pays the seller a sum of money, commonly referred to as the option price, also called, premium. The premium is paid when the option contract is initiated. The fixed price at which the option holder can buy or sell the underlying asset is called the exercise price or strike price. Like all derivative contracts, an option has an expiration date. When the expiration date arrives, an option is either exercised or not exercised; the ones not exercised simply expire.

What happens at expiry date depends on whether the option is a call or a put option. When the buyer is exercising a call, he pays the exercise price and receives either the underlying asset or equivalent cash settlement. Similarly, the seller for the transaction, receives the exercise price from the buyer and delivers the underlying asset, or alternatively, pays equivalent cash settlement.
An important concept in the study of options is the notion of an option's moneyness. This refers to the price of the underlying asset as well as the exercise price. An option is said to be in the money, if by exercising the option the investor produces a positive cash inflow. Similarly, it is said to be out-of-the-money, if by exercising the option the investor would generate negative cash flow; naturally, the investor will not exercise such an option. Finally, if the strike price or exercise price is equal to the price of the underlying asset then it is said to be at-the-money.

In Pakistan, we do not have any options market but the Pakistan Stock Exchange is striving hard to introduce products and options are one of them.

28.3 Swaps

A swap is a variation of a forward contract that is effectively equivalent to a series of forward contracts. In other words, a swap is an agreement between two parties to exchange a series of future cash flows. Swaps, like forward contracts, are private transactions and thus not subject to direct regulation. Once again, there is practically no market for swaps in Pakistan and will not be discussed at length here.
29. Practice Questions

Q1. Define Preferred Stock.

Q2. List the benefits of Secondary Market.

Q3. What is the difference between Ready and Futures Market?

Q4. Why would an organization float its shares in the capital market?

Q5. What do indexes tell you about the market?

Q6. Discuss KMI-30 index.

Q7. What are the advantages of initial public offering?

Q8. What do you understand from the clearing function of the clearinghouse?

Q9. What role does a stock exchange play in driving the economy of a country?

Q10. Why is it important to have regulatory oversight by a body such as SECP and what role do they play in the capital markets of Pakistan?

Q11. Briefly, describe the structure of SECP.

Q12. What are the functions of commercial arm and regulatory arm of the stock exchange?

Q13. Briefly describe the three forms of market efficiency.

Q14. What is the difference between fundamental and technical analysis?

Q15. Why is it important to read good research of a company in which you want to invest?

Q16. List down any two valuation techniques used by research analysts?

Q17. What is the difference between P/E and P/BV ratios, what do they tell us about a stock?

Q18. What do you understand by the term behavioral finance?

Q19. Explain with examples any two aspects of market abuse.

Q20. How can financial intermediaries help you make better investment
decisions?

Q21 Briefly, describe what do you understand from investor rights and describe any three?

Q22 Describe a callable bond.

Q23. Describe each of the following risks:
   • Interest Rate Risk
   • Prepaid Risk
   • Reinvestment Risk
   • Default Risk
   • Liquidity Risk
   • Event Risk

Q24. What is the role of credit rating agencies?

Q25 Define and differentiate sovereign and corporate Debt?

Q26. Describe the following terms:
   • Forward Contract
   • Futures Contract
   • Options
   • in-the money
   • Out-of-the money
1. Introduction

The Non-Banking Finance Companies (Establishment and Regulation) Rules, 2003 provide detailed requirements for establishment of Non-Banking Finance Companies (NBFCs) and lays down the rules that govern their operations. The Rules establish the eligibility criteria and conditions for grant of permission/license and operations of the NBFCs. The Rules also prescribe the forms, schedules and other procedural requirements applicable to NBFCs.

SECP in order to provide a more conducive regulatory environment to the investors and develop a robust Non-Banking Financial Sector has introduced many amendments to the Non-Banking Finance Companies (Establishment and Regulations) Rules, 2003 with the approval of the federal government. The latest amendment was made in 2015.
The NBFCs have been classified into two major types, which are lending and fund management.

- Fund management NBFCs operating under a single entity can undertake different fund management services including asset management, investment advisory, private equity and venture capital fund management services, and REIT management services.
- Lending NBFCs include leasing companies, investment banks, housing finance companies and discount houses.

2. Overview of Mutual Fund Industry

A mutual fund is a collective investment scheme that pools money from many investors. The money is managed by an asset management company (AMC) duly licensed by the Securities and Exchange Commission of Pakistan (SECP). The money is invested by the asset management company on behalf of the unit holders in stocks, bonds, money market instruments and similar assets for profits and income and is known as the fund’s portfolio. The ownership of the fund property vests in the investors and the fund manager is entitled only to certain fees for managing the fund. Majority of the income earned by the mutual funds portfolio is given back to the investors/ unit holders as illustrated below:

One of the main advantages of mutual funds is that they enable small and large investors to safely invest in professionally managed portfolios of equities, debt and money market instruments such as Term Finance Certificates (TFCs) and other financial assets and Government Securities. A small investor with limited investment funds simply cannot achieve diversification offered by mutual funds. At least 90 percent of the income earned by a mutual fund from sources other than capital gains, after deducting allowable expenses, must be
distributed among the unit holders in proportion to the number of units owned by them on a Pari-passu (equal footing) basis. Accordingly, mutual funds can provide an investor with regular income and an opportunity for increasing their savings through reinvestment.

**Basic Types of Mutual Funds**

There are two types of mutual funds:

- Open-end funds
- Closed-end funds

### 2.1 Open-End Funds

Open-end mutual funds generally create and sell units on continuous basis to accommodate new investors. Therefore, the numbers of units outstanding at any particular point in time varies. An open-end fund does not have a fixed pool of money. The fund manager is committed to continuously issue units to new investors at the offer price, and to buy-back units from 'old' investors at the repurchase price, also known as redemption price. The units do not trade on a stock market. Investors purchase mutual fund units/shares from the fund itself or from banking/financial companies authorized to act as distributors/sales agents.

Open-end mutual fund units can be purchased or redeemed as needed at the fund's current net asset value (NAV) per share adjusted for offer/redemption price. NAV of the units of an open-end mutual fund is announced on the respective websites of the asset management company/fund manager and the Mutual Fund Association of Pakistan (MUFAP). The fund is set up as a trust, with an independent trustee, who has custody of the assets of the fund. Each share of the fund is called a unit and the fund, itself, is called a unit trust.

### 2.2 Closed-End Funds (CEF)

These funds have a fixed number of shares like a public company that are floated through an initial public offering (IPO). Once issued, they can be bought and sold at the market rates in the secondary market i.e. Pakistan Stock Exchange (PSX). The market rate is announced daily by the stock exchange. These funds may trade at a premium or discount to NAV. For example, if the NAV of a CEF is Rs.10 and its market price is Rs.11, the CEF is trading at a premium of 10%. If the NAV is Rs.10 and its market price is Rs.9, the close-end fund is trading at a discount of 10%. Though some funds may at times trade at a premium, the majority of close-end funds trade at discount, often as much as 15% to 20%. The price of a closed-end fund share fluctuates based on investor supply and demand i.e. the price is not linked to its book value, but determined
exclusively by the supply and demand factor.

Closed-end funds issue a specific number of shares and their capitalization is fixed. The shares are not redeemable, but are readily transferable and traded either on main board of the stock exchange or over-the-counter. Unlike open-ended mutual funds, closed-end funds are not required to redeem their shares.

A closed-end fund, as with any other incorporated public listed company, has a board of directors elected by the shareholders. The board appoints an investment advisor (and, possibly, sub-advisors) for investment research and portfolio management. The investment advisor employs a portfolio manager who is assisted by a team of analysts, who make the actual investment decisions. Investments are made in accordance with the guidelines listed in the offering document issued during the initial public offering of the fund, and any subsequent amendments made to it.

### 2.3 Comparison of Open-End vs. Closed-End Funds

<table>
<thead>
<tr>
<th></th>
<th>Open-end fund</th>
<th>Open-end fund</th>
<th>Closed-end fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buying/selling of units</strong></td>
<td>Through the asset management Company &amp; distributors</td>
<td>Stock exchange</td>
<td></td>
</tr>
<tr>
<td><strong>Issued units</strong></td>
<td>No limit</td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td><strong>Public Offering</strong></td>
<td>Continuous</td>
<td>One-time</td>
<td></td>
</tr>
<tr>
<td><strong>Pricing</strong></td>
<td>Net assets value i.e. breakup value of fund</td>
<td>Determined by demand &amp; supply at the stock exchange</td>
<td></td>
</tr>
<tr>
<td><strong>Sales commission</strong></td>
<td>Entry charge and/or exit charge</td>
<td>Brokerage charges on every transaction</td>
<td></td>
</tr>
</tbody>
</table>

### 2.4 Characteristics of Mutual Funds

Some of the unique characteristics of mutual funds include the following:

- Unlike other securities, there is always a willing buyer for your units; an open —end mutual fund must redeem shares at the net asset value, meaning investors can sell their shares back to the fund.

- The investment portfolios of mutual funds are managed by separate entities known as "Asset Management Companies" (AMCs) that are licensed by SECP.
The value of a mutual fund's portfolio fluctuates as money is invested and redeemed, and as the value of the securities held by the portfolio rises and falls.

Under the regulations, an independent trustee registered with SECP has custody of all mutual fund assets.

Each unit/share represents an investor's proportionate ownership of the fund's undivided portfolio; each unit holder shares equally with other investors in distributions.

### 2.5 Mutual Funds Association of Pakistan (MUFAP)

Mutual Funds Association of Pakistan (MUFAP) is the trade body for Pakistan's multi-billion rupees' asset management industry. Its role is to ensure transparency, high ethical conduct and growth of the mutual fund industry. MUFAP was formed in 1996 and was formally incorporated in 2001 as a public company limited by guarantee not having share capital. MUFAP is licensed by Ministry of Commerce (Directorate General of Trade Organizations).

After the establishment of MUFAP in 1996, private and foreign firms were allowed to float open-ended funds to the public. This time also saw the stock market's performance scale new heights because of positive government policies and incentives, registering a growth of more than 15 times in the net assets of the mutual funds during the period 2000-2008.

### 2.6 Structure of Mutual Funds

<table>
<thead>
<tr>
<th>MANAGEMENT COMPANY</th>
<th>TRUSTEE/ CUSTODIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Assets are in the custody of the trustee</td>
<td>Manages all investments in Funds</td>
</tr>
</tbody>
</table>

### 2.7 Asset Management Companies (AMCs)

Mutual funds are operated by Asset Management Companies (AMCs) which exist in the form of a public limited company are registered under the
Companies Act, 2017. The AMC launches new funds through the establishment of a trust deed, entered between the asset management company and the trustee, with due approval from the Securities and Exchange Commission of Pakistan (SECP) under the Non-Banking Finance Companies (Establishment and Regulation) Rules, 2003 (the “Rules”).

2.8 Trustee/Custodian

The Trustee performs the functions of the custodian of the assets of the fund. Under Pakistan’s law, banks and central depository companies approved by SECP can act as trustees. All mutual funds are obliged to appoint a trustee, which can be a scheduled bank having a minimum of 'A+' rating or a depository company. All the moveable and immovable assets of the funds are vested in the trustee for the benefit of the unit-holders, i.e., the beneficial ownership of the assets of the fund vests in the unit-holders. The Trustee is obligated to ensure that the fund manager:

- Takes all investment decisions within the framework of defined investment policy; and
- Does not take any action that violates the provisions of the trust deed, the offering document or; jeopardizes the interests of the unit-holders.

At present Central Depository Company of Pakistan (CDC) is acting as trustee of most of the funds of the industry. CDC performs the functions of the custodian and trustee, whereas, the AMC either acts as registrar or appoints an external registrar.

2.9 Regulator

The Securities and Exchange Commission of Pakistan (SECP) is the regulator of mutual funds industry. It has developed a transparent and a stringent process for issuing licenses to fund management companies, especially in the case of collective investment scheme (CIS). SECP also carries out continuous monitoring of mutual funds through reports that the mutual funds are mandated to file with SECP on a regular basis. In addition, SECP conducts on-site inspections of the AMCs.

Distributors/Sales Agents

Banking/financial companies are authorized to act as distributors/ sales agents.

Legal Advisor/Auditor

The Board of Directors of AMC must also approve and appoint a legal advisor
and auditor for legal and compliance matters.

**Net Asset Value:** A fund’s Net Asset Value (NAV) represents the price per unit. The NAV is equal to the market worth of assets held in the portfolio of a fund, minus liabilities, divided by the total number of units outstanding. The NAV of any fund is calculated and reported in the press:

\[
\text{NAV} = \frac{\text{Current Market Value of all the Assets - Liabilities}}{\text{Total Number of Units Outstanding}}
\]

In order to determine the sale price of the unit, sales load is added to the NAV. In case there is no sales load the NAV will be the sale price as well as the redemption price. The sale and redemption price is declared on a daily basis by the Funds and can be viewed on their respective websites as well as on the website of MUFAP.

### 2.10 Advantages and Disadvantages of Investment in Mutual Funds

**Advantages**

Mutual funds make saving and investing simple, accessible, and affordable. The advantages include the following:

- **Accessibility:** Mutual funds units are easy to buy.
- **Flexibility:** Investors can tailor their investment products according to their future individual and family needs, and make adjustments as their life cycle requirements change. For example, they may invest in growth funds to cater for future college tuition fees of their children or income funds for retirement, and adjust the investments as their needs change with age and responsibilities in life.

Investors wishing to actively manage their investments can move their funds within the family of funds when they perceive any change in market conditions. Investors can place their investments in equities fund when the market is bullish, and move into money market funds in anticipation of bearish stock market, and a rising interest rate atmosphere. Since, it is almost impossible to predict how the market will behave at any point in time, staying invested for the long-term in a diversified investment portfolio is recommended for most investors. Mutual fund unit holders receive regular reports from the funds, including details of holdings on a year-to-date basis.

- **Liquidity:** Mutual fund unit holders can convert their units into cash on any working day. They will promptly receive the current value of their
investment within six working days. Investors do not have to find a buyer; the fund buys back (redeems) the units.

- **Diversification**: By investing the pool of unit holders’ money across number of securities, a mutual fund diversifies its holdings. A diversified portfolio reduces the investors’ risk. It would be difficult for an average investor to buy varied securities to achieve the same level of diversification as is available through investment in mutual funds.

- **Transparency**: A unit holder is provided with regular updates and information on the fund's holdings and the fund manager's strategy, as the performance of a mutual fund is reviewed by various publications, and rating agencies which makes it easy for investors to compare the performance of their fund with other funds in the same category.

- **Lower Costs**: Economies of scale make them a cost-effective option for investment. Mutual funds buy and sell large amounts of securities at a time. Your costs for transactions and management fees are shared with fellow unit holders.

- **Professional Management**: An asset management company (AMC) evaluates the investment opportunities by researching and monitoring the performance of the portfolio managed by the AMC. This is not an easy task for an individual or a corporate entity without specialized knowledge.

- **Tax Benefits**: Investment in mutual funds and pension schemes entitles the investor to avail tax credit and enhance the overall return on savings.

**Disadvantages**

- **Expenses**: Investors have to pay charges like annual fees, and other expenses regardless of how the fund performs.

- **Price Uncertainty**: Real-time pricing information for a listed stock is easily available by checking financial websites or by calling your broker. However, in case of an open-end fund, the price at which you purchase or redeem shares will typically depend on the fund’s NAV, which the fund might not calculate until many hours after you have placed your order. In general, most mutual funds must calculate their NAV at the end of the day.

### 2.11 Categories of Mutual Funds

SECP has categorized the schemes of mutual funds as under:
Capital Protected Funds

Under a capital-protected fund, the original amount of the investment is protected. The fund places a major portion of the investment amount in a bank in the form of a term deposit, while investing the remaining net assets in accordance with the authorized investments stated in the offering document. Capital protected funds, unlike other funds, have a mutually agreed upon fixed maturity period. They are essentially low risk, low return funds.

Money Market Funds

Money market funds are among the safest and most stable of all the different types of mutual funds. These funds invest in liquid assets including short-term debt instruments such as treasury bills and bank deposits. Usually money market funds are considered as the safest for novice investors while being the easiest, least complicated to follow and understand.

Almost every mutual fund investment company offers money market funds, which are popular investment tools for new investors. These funds are considered appropriate for investors seeking stability of principal, ease of liquidity, and earnings that are more than return on bank certificates of deposit. Unlike bank term deposits, money market funds have no early withdrawal penalties.

Income Funds

These funds focus on providing investors with a steady stream of fixed income with moderate growth of principal invested. They invest in short term and long-term debt instruments like TFCs, government securities like T-bills/ PIBs, or preference shares.

Aggressive Fixed Income Funds

The aim of an aggressive income fund is to generate a high return by investing in fixed income securities while also taking exposure in lower to medium quality of assets. Aggressive fixed income fund focuses on generating current income on investments while maintaining the prospects for capital appreciation and potential for capital growth. These funds may invest up to specified percentages in accordance with their offering-documents in any one type of authorized Investment and may aggressively change weightings to take advantage of economic trends. They may hold some or even all of their assets in cash to provide liquidity or for defensive purposes. These Funds usually invest in a portfolio of diverse securities including government securities, fixed income debt securities, deposits with bank(s), clean placements, certificates of investments and commercial papers.
Balanced Funds

The basic objective of a balanced fund is to generate income as well as long-term growth of the principal amount that has been invested. These funds generally have portfolios consisting of bonds, preferred stocks with some percentage of common stocks. The funds are not expected to appreciate steeply, but simultaneously have a high degree of safety and moderate to high-income potential. Investors who desire to invest in a secure fund with a minimum downside i.e. who seek some current income and moderate growth with low-level risk, would do well to invest in balanced mutual funds.

SECP has laid down a criterion that requires balanced schemes/funds to invest in listed equity securities, government securities, cash in bank accounts, money market placements, deposits, certificate of deposits (COD), Certificate of Musharakah (COM), Term Deposit Receipts (TDRs), commercial papers, repurchase agreement (REPO), Term Finance Certificates (TFCs)/Sukuk, and preference shares. However, the rating of any debt security in the portfolio cannot be lower than A- (A minus).

Asset Allocation Fund

This category of fund can invest its net assets in several types of securities and investment styles as specified in its offering document. Asset allocation funds are generally considered high-risk funds due to their potential to be fully invested in equities at any point in time.

Asset allocation funds do not invest in just stocks, instead, they focus on equity, bonds, gold, real estate, and money market funds. This portfolio approach provides a very broad asset allocation and diversification, and decreases the reliance on any one segment of the marketplace.

Equity Funds

An equity fund is a mutual fund that invests primarily in stocks. For this reason, it is also known as a ‘stock’ fund. Equity funds vary in size and composition. They are classified by company size and the investment style of the portfolio holdings. The size of the fund is determined by its market capitalization. Equity funds may be domestic or international and can be broad market or sector specific. These can geographically be international, regional or single-country funds. In any Equity Scheme, at least 70% of its net assets should remain invested in listed securities during the year based on quarterly average investment, calculated on a daily basis. The remaining assets of the fund can be invested in cash and/or near cash instruments which include cash in bank accounts (excluding TDRs), and treasury bills (not exceeding 90 days' maturity.)
Index Funds

The intent of index funds is to track the performance of a specific index of the stock market. If the overall market advances, a good index fund follows the rise. If the market declines, so will the index fund. Index Funds' portfolios consist of securities listed on the popular stock market indexes. It is also the intent of index funds to materially reduce expenses by eliminating the fund portfolio manager; instead, the fund merely purchases stocks that make up the particular index it follows.

The securities/stocks in an index fund portfolio rarely change and are weighted the same way as in the particular market index that it tracks. Thus, there is little or no need for any great turnovers of the portfolio of securities. The funds are "passively managed" in a static portfolio. An index fund is almost fully invested in the securities of the index it tracks. An index mutual fund never outperforms the market if judged against the tracked index but may out or under perform other indexes. The reduction of administrative cost in the management of an Index Fund also adds to its profitability.

In short, index funds/schemes strive to mimic the stated index and disclose the likely tracking error in their offering-document. Index schemes and index tracker schemes however, can only select an index (or a subset thereof) established by a recognized independent third party like a stock exchange.

Sector Funds

Sector funds focus on investments in only one sector of the economy. Thus, sector funds concentrate in one specific market segment such as, energy, transportation, precious metals, health sciences, utilities, leisure industries, etc. In other words, they are narrowly based. Investors in Sector funds must be prepared to accept the rather high level of risk inherent in such funds, as they are not particularly diversified. Substantial profits are attainable by investors astute enough to identify which market sector is ripe for growth.

Fund of Funds Scheme

Fund of Funds are those funds, which invest in other mutual funds. These funds operate a diverse portfolio of equity, balanced, fixed income and money market funds (both open and closed ended).

Shariah Compliant (Islamic) Funds

Islamic funds are those funds, which invest in Shariah Compliant securities including shares, Islamic bank deposits and sukuk as may be approved by the Shariah Advisor of such funds. These funds can be offered under the same categories as those for conventional funds.
Commodity Scheme

These schemes enable small investors to take advantage of gains in commodities such as gold through pooled investments. During the year, at least 70% of the net assets must be invested in commodity or commodity futures contracts based on average quarterly investment calculated on a daily basis. They invest in commodity futures contracts, which include both cash-settled and deliverable contracts.

Recommended Investment Strategy Matrix

An investor can invest in any of the above categories of funds in accordance with their requirements and appetite for risk. For example, those who want to earn high returns over a longer period can invest in equity funds, whereas those who want to invest for the short term with reasonable return can invest in money market funds.

To help you plan your investment portfolio, basic characteristics of mutual funds in terms of fund category, investment time horizon, volatility/risk, and allowable investments are presented below:

<table>
<thead>
<tr>
<th>Fund Category</th>
<th>Investment Time Horizon</th>
<th>Volatility /Risk</th>
<th>Allowable Investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money market</td>
<td>Short or Long</td>
<td>Very low</td>
<td>Banks Yes</td>
</tr>
<tr>
<td>Income fund</td>
<td>Medium</td>
<td>Moderate</td>
<td>Banks Yes T-Bills Yes</td>
</tr>
<tr>
<td>Balanced fund</td>
<td>Medium-long</td>
<td>Moderate to High</td>
<td>Banks Yes TFCs / Sukus Yes</td>
</tr>
<tr>
<td>Equity</td>
<td>Long</td>
<td>Very High</td>
<td>Banks Yes No Yes</td>
</tr>
</tbody>
</table>

2.12 Fund Documentation and Mechanics

Key Fund Documentation

Trust Deed

The trust deed specifies the responsibilities of the trustees and the Investment Advisor/ Asset Management Company that need to be strictly adhered to by each concerned party. All stakeholders lay emphasis on good governance and ethical behavior in the mutual fund business. In order to gain acceptability with the investing public, it is imperative that the affairs of the funds are conducted in the most transparent manner, with dissemination of maximum amount of information to the investors. The trust deed also spells out the objective and
Investment policy, valuation of assets, pricing, fee and charges and details of dealings of the funds.

**Offering Document**

Every mutual fund publishes an offering document that states the name of the fund manager, its investment goal, authorized investments (such as stocks, bonds etc.), fees & expenses, distribution policy, risks and performance. A potential investor can also examine the annual and semi-annual reports. When examining a mutual fund’s performance, consistency of returns year after year is normally studied. Investing in mutual funds requires doing homework, setting goals, selecting appropriate funds and then keeping funds invested for long periods (usually five years) so that seasonal variations or cycles are smoothed out.

**Account Statement**

The Registrar sends, directly to each unit holder, a non-transferable statement of account, each time there is a transaction in the account, i.e. each time units are subscribed, redeemed, transferred to a third person, transferred from a third person, consolidated/split, additional units issued against bonus issue or reinvestment of dividend. A statement of account is posted to the investor after each relevant transaction.

**Electronic Issuance and Certificates**

When an application, duly filled in, is delivered to the authorized branch along with the payment in the prescribed form to a fund distribution company, units applied for are allotted (issued) to the investor as per policy of the fund. In most cases, the effective date is the date of realization of the funds in the mutual funds accounts. Certificates are issued only if requested by the unit holders. However, no certificate is issued under certain administrative arrangements that exclude issuance of certificates.

**Minimum Balance Requirements**

Most mutual fund accounts come with minimum balance requirements. This is usually the minimum amount necessary to earn profit, qualify for services, or extend waiver. Accounts that fall below the minimum balance requirements may be subject to special service charges if the average balance remains below the prescribed threshold.

**2.13 Fund Expenses and Load**

Various expenses, incurred in connection with managing of the fund, (e.g. salaries, rents, printing, advertising, etc.) are borne by the AMC. Main
expenses payable by the fund to the AMC are:

**Management fee to the AMC is charged in the following manner:**

<table>
<thead>
<tr>
<th>Open-end fund</th>
<th>Maximum fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Equity, Balanced, Asset Allocation Schemes and Capital protected (dynamic asset allocation-direct exposure)</td>
<td>Not exceeding 2% of average annual net assets</td>
</tr>
<tr>
<td>2. Income, aggressive income, index, fund of funds and Commodity Schemes (cash settled)</td>
<td>Not exceeding 1.5% of average annual net assets</td>
</tr>
<tr>
<td>3. Money Market, Commodity Schemes (deliverable) and Capital protected schemes</td>
<td>Not exceeding 1% of average annual net assets</td>
</tr>
</tbody>
</table>

- Trustee fee to the trustee
- Audit fee to the auditors
- Brokerage to the brokers (Variable)
- Formation cost including legal fee
- Rating
- Printing of Accounts

Funds pass these costs to investors in a number of ways.

**Sales/ Front-End Load**

An asset management company may charge a maximum sales load of up to 3% of the NAV per unit if an investor approaches directly for investment, and up to 1.5% of NAV per unit where transactions are done online or through a website. (SECP Circular No. 27 of 2017)

This includes sales and processing charges payable by an investor upon purchase of units. This charge is added to the Net Asset Value for determining the Offer Price. This is a one-time charge and is paid on the amount of investment. If an investor invests Rs. 1,000 in a mutual fund with a 3% front-end load, Rs. 30 will be paid for the sales charge, and Rs. 970 will be invested in the fund. Front-end Load is thus the difference between the offer price and NAV, the offer price, being higher than the NAV. Usually the Front-end Load is expressed as a percentage of the NAV. Therefore, if the Front-end Load is 3.0%, it means that it is 3.0% of the NAV. The Front-end Load, charges are normally used by the AMC to pay commissions to Sales Agents for finding investors for the Fund. Such Agents can be banks, securities/distribution companies or individuals.

**Exit/ Back-End Load**

This refers to fee paid by an investor when the units of a fund are redeemed.
Back-end load is also known as Deferred Sales Charge, typically goes to the agent who sells the funds units.

Example

Suppose the total investment amount in a fund is Rs. 10,000 while there was no front-end load paid at the time of purchase of fund. The fund generates a total return over one year of 10% while the back-end load is applied at 2%.

The value of back-end load will be calculated as:

\[
\text{Back-end load} = \text{NAV} \times \text{Back-end load rate}
\]

Whereas NAV = investment \( (1 + \text{return rate}) \)

NAV of Fund = 10,000 \( (1+0.10) \)

= 11,000

So, Back-end load = 11,000 \( \times 0.02 \) = Rs.220

Contingent or Deferred Sales Load

Some mutual funds charge contingent or deferred sales load on redemption of the investment. However, the mutual funds progressively reduce the load if an investor holds the investment for a longer period of time. This load is charged in case there is no front-end load.

No-load Fund (Zero-Load)

As the name implies, this means that the fund does not charge any type of sales load. No-load funds do not charge any fee for the sale transaction. In a no-load fund, the broker receives his commission from managers of the fund.

All the Asset Management Companies (AMCs) have been directed by SECP to ensure that where the offering document of the Collective Investment Scheme (CIS) permits charging of sales load, the cumulative sales load does not exceed 3% of the NAV per unit.

2.14 Dividends, Price Appreciation and Zakat Deduction

Dividend Payment

The management may declare dividends in either cash form or in the form of bonus units, subject to the profitability of the respective fund(s). Dividend is paid in the form of cash on monthly/quarterly/annual basis depending upon the category of the fund and varies from AMC to AMC. Any investor who wishes to re-invest the dividend amount has the option to inform the AMC beforehand so the dividend amount will be re-invested and new units will be issued. The
offer price of such units is the NAV as at the close of the period for which the dividend is being distributed, as certified by the auditors, after appropriation of the income of that year.

All payments for dividend are made by the registrar, by transfer of funds to the unit holder’s (or principal account holder’s or pledge/charge/lien-holder’s) designated bank account, usually within 30 working days of the declaration of the dividend.

Unit Price Appreciation

When the price of a fund increases due to appreciation in the overall portfolio of the fund, it results in capital gains for investors who can now redeem their units at a higher price.

Zakat Deduction

Except for the unit holders exempted from payment of Zakat in accordance with the provisions of the Zakat and Usher Ordinance 1980, units held by a Muslim resident Pakistani unit holder who is also Sahib-i-Nisab are subject to the deduction of Zakat @ 2.5% of the face value or NAV, whichever is less, as on the Zakat valuation/deduction date. Unit holders can also pay Zakat on their holdings in a mutual fund themselves. All they have to do is provide the AMC with a ‘Non-Declaration of Zakat Form’ one month prior to the beginning of the holy month of Ramadan. The due Zakat amount is collected by deducting it from the first payout (redemption or cash dividend) after the aforementioned Zakat valuation date.

2.15 Investment, Redemption and Transfer Mechanism

Investment by Individuals

The individual investor is required to provide the following at the designated sales points of the Asset Management Company

- Copy of CNIC
- Application /Account opening Form
- Purchase of Units Form
- Zakat Affidavit (Optional)
- KYC Form
- FATCA Form
- Cheque in favour of trustee of the fund

Investment by Corporates

FATCA stands for the Foreign Account Tax Compliance Act. It is a new piece of legislation to help counter tax evasion in the US.
The corporate/ Provident/ Pension Fund investors are required to provide the following:

- Memorandum and Article of Association/ Trust deed
- Board /Trustee resolution approving the investment
- Application/Account Opening Form
- Purchase of Units Form
- Power of Attorney and/or relevant resolution of board of directors/ trustee delegating authority to any of its officers to invest
- NTN of the institution with tax status
- CNIC of the officer to whom the authority has been delegated
- Cheque in favour of trustee of the Fund

Redemption

A unit holder may redeem units by lodging a request, on the prescribed form (redemption form), with an authorized branch of a distribution company.

Redemption payments are made to the investors within a maximum period of 6 working days, either through a cross-cheque or through a bank transfer by submitting the redemption form at designated sales points of an AMC.

Transfer of Units

A unit holder can transfer units held by him, by completing the prescribed 'transfer application form'. The form is required to be signed by the transferor submitted to an authorized branch of a distribution company along with the relevant certificate, on any working day during banking hours and paying any applicable charges. A person on becoming entitled to hold units as a consequence of the death, insolvency, or winding-up of a sole holder, or the survivor of a joint holder, can be registered as the holder or joint holder upon submitting evidence proving his entitlement to the units, in addition to completing the foregoing requirements. However, in case of transmission the processing fee is not payable by the successors or beneficiaries of the deceased’s estate. Such fee is paid by the AMC to the registrar. The registrar verifies the holding and the signature of the unit holder.

2.16 Tax Benefits of Investing in Mutual funds

As per Section 62 of Income Tax Ordinance, 2001, an individual investor of open end mutual fund (unit trust schemes) can claim tax credit on investment up to Rs. 1,500,000 or 20% of individual’s taxable income (whichever is lower) on an investment made in Mutual Funds between July 1st and June 30th.

Taxation of income from mutual funds
Rates of tax withholding on income from mutual funds are provided in the Income Tax Ordinance 2001, and maybe changed by the annual finance bill. At the time of writing this guide, the rates range from 10% to 25% depending on the type of recipient and the amount of the dividend. To confirm the current rate in force, it is always advisable to refer to the Income Tax Ordinance 2001, as amended, at the time of receipt of dividend.

2.17 Key Risks Encountered by Investors in Mutual funds

Mutual funds like other capital market instruments are subject to the same risks as the underlying investments. All funds carry some level of risk as illustrated in the figure above.

Specific risks that can be associated with the mutual funds include:

**Market Risk**

Market risk is the risk that the fair value or the future cash flows of a financial instrument may fluctuate as a result of changes in market prices. The asset management company manages market risk to marketable securities by following the internal risk management policies and investment guidelines approved by its Board of Directors, and the regulations laid down by the Securities and Exchange Commission of Pakistan.

**Credit Risk**

There is a possibility that companies whose TFCs are held by the fund fail to meet their debt obligations. Similarly, there is a probability that an investment will go down in value when the issuer of the security is assigned a negative rating (downgraded) by a reputable credit rating service.

**Price Risk**
Price risk is the risk of a decline in the value of a security or a portfolio held by a fund. To manage price risk arising from investments in securities, the fund diversifies its portfolio within the eligible stocks prescribed in the trust deed. The fund's constitutive document / NBFC regulations also place limits on individual and different classes of assets/securities that a fund must hold.

**Inflation Risk**

Inflation is the increase in the level of prices and as such, decreases the real value of money. Therefore, there is a threat that one's assets may decrease significantly in value over longer periods of high inflation. Inflation Risk refers to the risk posed to the value of assets or income by inflation. To avoid the pitfalls posed by inflation, portfolio allocation is important. Commodities such as oil, grains, metals etc. are often seen as a hedge against inflation. This is because commodity prices often rise with increased inflation, but simultaneously there are certain other risks associated with commodities and inflation as under:

i. Unlike stock/equities, commodities have no income or earnings stream. As a result, they have no inherent value beyond their market prices, which are dependent on the perceptions of agents in the market.

ii. Stocks play a crucial role, and have inflation cushion in growth in earnings. When they are highly over-valued, their future returns, (and therefore their inflation-fighting power) are likely to be diminished. Bonds on the other hand, tend to fall in price in response to inflation and the risk that inflation will outpace and erode investment returns overtime is a serious concern for money market funds.

iii. In general, it is important to have a well-constructed, diverse portfolio to counter the adverse effects of inflation. When considering inflation risk, it is important to keep long-term effects in mind since inflation tends to have a more significant impact on markets in the end.

**Default Risk**

It is the risk associated with an issuer of a debt instrument that may not have the financial ability to meet regular scheduled payments or is incapable of repaying the debt at maturity.

**Interest Rate Risk**

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. It is thus the risk resulting from increased interest rates in the market place.
Liquidity Risk

Liquidity risk is the risk that the fund may not be able to generate sufficient cash resources to settle its obligation in full as they fall due or can only do so on terms that may be disadvantageous. The fund is exposed to cash redemptions, at the option of unit holders. The fund’s approach to managing liquidity is to ensure, as far as possible, that the fund will always have sufficient liquidity to meet its liabilities when due under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the fund’s reputation. The funds therefore try to invest the majority of their assets in investments that are traded in active markets and can be readily disposed, and are considered readily realizable.

In short, liquidity risk in the context of securities markets is the risk that the market for assets becomes too thin to enable fair and efficient trading to take place. This is the risk that assets cannot be sold or bought as and when required.

Currency and Exchange Rate Risk

Exchange rate risk is the risk of value of investments changing due to changes in currency exchange rates. This risk can affect investors making international investments. For example, if money must be converted to another currency to make a certain investment, then any changes in the currency exchange rate will cause that investment’s value to either decrease or increase when the investment is sold and converted back into the original currency.

Settlement Risk

Settlement risk is the risk that one party will fail to deliver the terms of a contract at the time of settlement. Settlement risk is associated with default at settlement, and any timing differences in settlement between the two parties.

2.18 Risk Management

It is important for the fund manager to take proper risk management measures to avoid undue risks while investing the fund’s money. The investment process has to be transparent and adequately documented, with investment decisions taken by an investment committee. Such decisions are to be implemented ethically, without any conflict of interest and with no ambiguity as to the responsibilities of the personnel concerned, and must not violate different applicable rules and regulations under the regulatory framework for capital markets.
Commonly Used Risk Measures

Main indicators of investment risk that apply to the analysis of stocks, bonds and mutual fund portfolios include alpha, beta, and the Sharpe ratio. These statistical measures are historical predictors of investment risk and are all major components of modern portfolio theory (MPT). The MPT is the standard financial and academic methodology used for assessing the performance of equity, fixed-income and mutual fund investments by comparing them to market benchmarks. All of these risk measurements are intended to help investors determine the risk-reward parameters of their investments.

Some commonly used indicators are explained below.

**Alpha**

This is a measure of an investment’s performance on a risk-adjusted basis. It takes the volatility (price risk) of a security or fund portfolio and compares its risk-adjusted performance to a benchmark index. The excess return of the investment relative to the return of the benchmark index is its "alpha." Simply stated, alpha is often considered to represent the value that a portfolio manager adds or subtracts from a fund portfolio’s return. A positive alpha of two means the fund has outperformed its benchmark index by +2%. Correspondingly, a similar negative alpha would indicate an underperformance of 2%. For investors, the more positive an alpha is, the better it is.

**Beta**

Also known as the "beta coefficient," is a measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole. Beta is calculated using regression analysis, and you can think of it as the tendency of an investment’s return to respond to swings in the market. By definition, the market has a beta of 1.0. Individual security and portfolio values are measured according to how they deviate from the market. A beta of 1.0 indicates that the investment’s price will move in line with the market. A beta of less than 1.0 indicates that the investment will be less volatile than the market, and, correspondingly, a beta of more than 1.0 indicates that the investment’s price will be more volatile than the market. For example, if a fund portfolio’s beta is 1.2, it is theoretically 20% more volatile than the market.

Conservative investors looking to preserve capital should focus on securities and fund portfolios with low betas.

**Standard Deviation**

Standard deviation measures the dispersion of data from its mean. In simple words, the more that data is spread apart, the higher the difference is from the
norm. In finance, standard deviation is applied to the annual rate of return of an investment to measure its volatility (risk). A volatile stock would have a high standard deviation. With mutual funds, the standard deviation tells us how much the return on a fund is deviating from the expected returns based on its historical performance.

**Sharpe Ratio**

Developed by Nobel laureate economist William Sharpe, this ratio measures risk-adjusted performance. It is calculated by subtracting the risk-free rate of return (Yield) from the rate of return for an investment and dividing the result by the investment's standard deviation of its return. The Sharpe ratio tells investors whether an investment's returns are due to smart investment decisions or the result of excess risk. This measurement is very useful because although one portfolio or security can reap higher returns than its peers can, it is only a good investment if those higher returns do not come with too much additional risk. The greater an investment’s Sharpe ratio, the better its risk-adjusted performance.

Many investors tend to focus exclusively on investment return, with little concern for investment risk. The above-mentioned risks measures can provide some balance to the risk-return equation. The good news for investors is that these indicators are calculated and are available on several financial websites, as well as being incorporated into many investment research reports. As useful as these measurements are, keep in mind that when considering a stock, bond or mutual fund investment, volatility risk is just one of the factors one should be considering that can affect the quality of an investment.

### 2.19 Mutual Fund Ranking

The increasing number of asset managers as well as funds had created the need for an independent opinion on their performance. There are presently two credit rating companies operating in Pakistan: i) The Pakistan Credit Rating Agency (PACRA) and ii) JCR-VIS Credit Rating Ltd. The credit rating companies carry out the rating of two distinct ingredients of the mutual fund industry i) Asset managers and ii) the Funds; these two are rated on separate scales.

The asset manager rating seeks to determine the professional capacity of asset managers, while the rankings/ratings of mutual funds aim to highlight relative positioning of a particular fund with reference to certain identified parameters.

The mutual fund performance ranking (commonly referred to as "Star Ranking") focuses on relative actual recorded performance of a mutual fund. The ranking methodology is designed by credit rating companies in a manner
that the star ranking of a fund conveys a sense of how skillfully the fund has been managed; that is, the relative star rankings of any two funds in a category should be affected more by managerial skills than by market circumstances or events that lie beyond the fund managers' control. The star rankings to funds are assigned identically by the two credit rating companies.

Five rating categories are described as below: (Source: IFM)


The fund stability rating measures the sensitivity of a fund's Net Asset Value (NAV) and total return to changing market conditions with an emphasis on downside risk. Fund stability ratings are assigned only to income and bond funds. Stability ratings provide an indicator of the fund's ability to maintain its NAV and limit exposure to losses due to credit, market and/or liquidity risks.

3. Voluntary Pension System (VPS)

3.1 Overview

There are four types of retirement benefits in Pakistan. These include:

1. Provident Fund
2. Gratuity Fund
3. Pension Fund
4. Voluntary Pension Scheme

Here we will be discussing Voluntary Pension System that provides an excellent retirement planning financial product to the following:

- Self-employed
- Employed on contract basis with Government or private sector
- Employed with private employers who do not offer any pensions
• Any person who works in a pensionable job but feels the need for an additional pension and
• Other individuals who wish to provide for old age pensions

### 3.2 The Need for Retirement Planning

Most developed countries have retirement systems sponsored by employers and/or state that are funded during an individual's working life to pay pensions on retirement. In Pakistan because of lack of funding, we do not have a viable social security system. Support for the old is mainly provided through the family, and is generally not sufficient.

Retirement is the point where a person stops employment completely. A person may also semi-retire by reducing work hours. It is a phase of life where your sources of income stop or decrease, but your expenses remain the same. We refer to income received during retirement as pension income.

We would like to think of retirement as a part of our life where we can appreciate life and the beauty of the world around us. Unfortunately, for most individuals who have not planned for their retirement, it is a stage of life dominated by:

- Limited income
- Healthcare issues
- Dependency on children
- Difficulty in meeting expenses
- Sacrifices and hardships
- No enjoyment

For most retiring individuals, without adequate income during retirement, living on handouts from family members can be both challenging and humiliating. Accordingly, to maintain your independence and life style, it is important that you plan your retirement at an early age, so that you may have the pension income to pay for your expenses in old age.

### 3.3 Types of Pension Schemes

Pension schemes differ in terms of how they are funded. These include:

- Defined Benefit: This provides entitlement to a "fixed benefit" usually a proportion of salary in the last few years before retirement. The investment risk lies entirely with the employer/scheme sponsor

- Defined Contribution: Benefits paid out of the scheme are directly related to the contributions made, and the returns earned on those investments during the pre-retirement period. An annuity or draw down scheme is required on retirement. The investment risk lies
3.4 Pension Fund Alternatives in Pakistan

In Pakistan, there is some coverage through retirement benefit schemes that focus on lump sums such as provident and gratuity schemes. The utility of lump sum benefit systems is limited, as they pass on the responsibility for managing funds and risks of longevity to the retirees. Pension schemes exist primarily in the public sector including government and multinationals.

Private Citizens mainly depend on:

- The next generation to support them in their old age
- Income from property
- Interest on bank deposits

To enable individuals to provide for their retirement by investing for the long term in a regulated environment, the Securities and Exchange Commission of Pakistan (SECP) introduced the Voluntary Pension System (VPS).

3.5 Voluntary Pension System

The Voluntary Pension System (VPS) is a tax advantaged, self-contributory defined contribution pension scheme open to all adult Pakistanis having a computerized national identity card (CNIC). It was established under the Voluntary Pension System Rules, 2005. Under these rules, employed and self-employed individuals can voluntarily contribute to a pension fund during their working life to provide regular income after retirement.

It is important to note that a defined contribution plan does not promise a specific amount of benefit at retirement. Under this plan, the employee or the employer (or both) contribute to the employee’s individual pension account (IPA) which is invested for the long term. The funds accumulated are used for payment of a regular pension or lump sum on retirement.

The Voluntary Pension System (VPS) is regulated by SECP, which entails:

- Registration of pension fund managers
- Authorizing pension funds
- Prescribing investment and allocation policy for pension funds
- Monitoring the performance of pension funds and protecting the interests of pension fund account holders through enforcement
- Carrying out periodic comparison of all pension funds in terms of performance and cost, and publishing easily understood performance measures
3.6 Structure of VPS

To protect account holders, a VPS separates fund management and custody of funds through the establishment of a trust. Asset management companies (AMCs) and life insurance companies, meeting the fit and proper criteria, and regulatory requirements as laid down by SECP may register to act as pension fund managers (PFMs).

The Commission, before allowing the fund manager to invite the participants to contribute to their individual pension accounts (IPAs), approves constitutive document, trust deed and offering document of the pension fund. SECP has specified an investment and allocation policy for pension funds setting out the broad parameters for investment of contributions received.

The structure of Voluntary Pension System is illustrated below.

3.7 Regulatory Framework

The following laws govern the VPS:

- Voluntary Pension System Rules, 2005 and
- SECP Circulars

Other applicable laws include:

- Income Tax Ordinance, 2001 and
The pension fund managers, pension funds and trustees are subject to monitoring by SECP.

3.8 Characteristics of VPS

Some of the unique characteristics of VPS include:

- **Long-term investment horizon**: Investment strategy is guided by long term to enable fund managers to ride the ups and downs of the market, and to balance the portfolio keeping in view the participant's age and risk profile.

- **Security**: The VPS separates fund management and custody of funds through the establishment of the trust with an independent trustee.

- **Diversification**: Voluntary Pension Rules 2005 allow investment in up to four sub-funds, i.e. equity, debt, money market, and commodity market sub-funds. Allocation Schemes are designed to protect investors by offering a mix of the sub-funds based on investment horizon and risk appetite. Conventional and Islamic options are available.

- **Disciplined savings**: VPS promotes disciplined savings through contributions that may be matched by some employers. There is no penalty on missing any payment. Participants can define their own investment plan through choice of asset allocation based on their age, risk tolerance and return expectation.

- **Tax benefits**: At contribution stage, annual tax credit on up to 20% (or more if one is over 40 years) of annual taxable income; on retirement, one can receive 50% of lump sum amount tax free, remaining balance (or entire balance) can be invested in an income payment plan.

- **Professional fund management**: Pension funds are managed by asset management companies (AMCs) with proven past experience, and the ability to diversify and balance a portfolio keeping in view the investors risk tolerance and age.

3.9 Stages in VPS

There are three stages in accumulating retirement funds through the Voluntary Pension System. These are contribution, investment and retirement respectively.
3.9.1 Contribution Stage

Important: The only way to build enough funds for your retirement is to start contributing to your pension account as soon as you start working. You must make a commitment to contribute regularly to your pension account through salary reduction, if you are an employee, or individually if you are self-employed.

The following should be noted about the contribution stage:

- All Pakistani nationals over the age of 18 years (salaried or self-employed) with a valid computerized national identity card (CNIC) are eligible to participate. Contributions can be made by individuals as well as employers on behalf of their employees.
- Contribution can be in lump sum or at regular frequency. There is no penalty on missing any payment.
- The pension fund manager shall open and maintain an individual pension account (IPA) in the name of each Individual (referred to as a "Participant") for making contributions. Each individual pension account (IPA) is assigned a unique identification number (UIN).
- All contributions made by an individual are immediately credited to their IPA and used to purchase the units of the sub-funds according to the allocation scheme selected by the individual.
- At contribution stage, annual tax credit of up to 20% (or more if one is over 40 years) is allowed as specified in Section 63 of the Income Tax Ordinance, 2001.

Under the VPS rules 2005, a pension fund may offer the following four sub funds for investment of contributions:

i. Equity sub-fund: specializing in listed securities
ii. Debt market sub-fund: specializing in long-term debt securities
iii. Money market sub-fund: specializing in short-term debt securities and other money market Instruments and
iv. Commodity sub-fund: specializing in commodities future contracts traded on the Pakistan Mercantile Exchange (PMEX)

It may be noted that a majority of the pension fund managers are offering investment opportunities in only three sub-funds, namely equity, debt and money market respectively. Pakistan's commodity market is still developing
and there are only three funds offering commodity sub-funds.

### 3.9.2 Investment Stage

**Important:** The following should be noted:

- The value of investments as reflected in the net asset value (NAV) of units of a pension fund may decrease as well as increase, subject to market fluctuations and risks inherent in such investments. Past performance does not necessarily predict future results.
- The key to accumulating enough funds for your retirement is to keep a long-term investment horizon. This will allow you to ride the ups and downs of the market and accumulate enough funds for retirement.
- You must remember that selection of a pension fund manager/advisor and choice of investment plan will play an important role in accumulating necessary resources for your retirement.
- It is always advisable to meet your pension fund manager/advisor, and fully inform him about your investment objective, how much risk you can afford to take, and your time horizon. This will enable him to guide you with your selection of allocation scheme.

To protect investors through diversification in the investment of retirement contributions, SECP has mandated an investment and asset allocation policy under the Voluntary Pension System Rules, 2005. The Policy covers both, the Conventional and Shariah compliant funds and provides detailed guidelines in (SECP Circular No. 36 of 2009). Individuals can allocate their contributions between equities, debt, money market instruments and commodities in accordance with their investment horizon and risk appetite as reflected in their chosen allocation scheme. To ensure diversification, minimum investment allocation limits for applicable sub-funds have been defined for each allocation Scheme.

A pension fund must offer at least four pension allocation schemes. These are high volatility, medium volatility, low volatility and lower volatility respectively. Volatility refers to the change in the principal amount invested due to change in price of securities in the portfolio of the sub fund. The high volatility allocation scheme is equity intensive, and for the rest the equity component gradually diminishes, and finally disappears, substituted by debt and money market schemes. A participant can choose the percentage of contribution that goes into each fund subject to the minimum allocation limits prescribed for the applicable allocation scheme. The allocations and percentages can only be changed twice in a financial year.

### 3.9.3 Tax Benefits of Investing in VPS
• Individuals can reduce their taxes by 20%
• In addition to a tax reduction of up to 20%, investors joining VPS at the age of 41 and above are entitled to additional tax reduction of 2% per annum for each year of age exceeding 40 years
• Maximum investment eligible for tax reduction is capped at 30% of the preceding year’s taxable income
• As per current tax laws, FY 2018-19 ending June 2019 is last year to avail the additional benefit

### 3.10 Pension Funds Offering Three Sub-Funds

Allocation schemes and minimum allocation requirements prescribed by SECP for a pension fund offering three sub funds i.e. equity, debt and money market are presented below:

<table>
<thead>
<tr>
<th>Allocation schemes</th>
<th>Risk/return profile</th>
<th>Equity sub-fund (minimum allocation)</th>
<th>Debt sub-fund (minimum allocation)</th>
<th>Money Market sub-fund (maximum allocation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High volatility</td>
<td>High</td>
<td>65%</td>
<td>20%</td>
<td>(Nil)</td>
</tr>
<tr>
<td>Medium volatility</td>
<td>Moderate</td>
<td>35%</td>
<td>40%</td>
<td>10%</td>
</tr>
<tr>
<td>Low volatility</td>
<td>Low</td>
<td>10%</td>
<td>60%</td>
<td>15%</td>
</tr>
<tr>
<td>Lower volatility</td>
<td>Lower</td>
<td>(Nil)</td>
<td>40%</td>
<td>40%</td>
</tr>
</tbody>
</table>

### 3.11 Pension Funds Offering Four Sub-Funds

Some pension funds in addition to the equity, debt and money market may also offer a commodity sub-fund that specializes in commodities. Allocation schemes and minimum allocation requirements prescribed by SECP are presented below:

<table>
<thead>
<tr>
<th>Allocation schemes</th>
<th>Risk/return profile</th>
<th>Equity sub-fund (minimum allocation)</th>
<th>Debt sub-fund (minimum allocation)</th>
<th>Money Market sub-fund (maximum allocation)</th>
<th>Commodity Market Sub-Fund (maximum allocation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High volatility</td>
<td>High</td>
<td>40%</td>
<td>20%</td>
<td>(Nil)</td>
<td>Max 25%</td>
</tr>
<tr>
<td>Medium volatility</td>
<td>Moderate</td>
<td>20%</td>
<td>40%</td>
<td>10%</td>
<td>Max 15%</td>
</tr>
<tr>
<td>Low volatility</td>
<td>Low</td>
<td>5%</td>
<td>60%</td>
<td>15%</td>
<td>Max 5%</td>
</tr>
<tr>
<td>Lower volatility</td>
<td>Lower</td>
<td>(Nil)</td>
<td>40%</td>
<td>40%</td>
<td>(Nil)</td>
</tr>
</tbody>
</table>

If a pension fund wants to provide additional allocation schemes or products, (for example Lifecycle products) it may do so subject to the approval of SECP.
Under the VPS schemes, the individual has the choice of changing the allocation of funds during his/her working life. Younger individuals can take on more risk early in their career by focusing on capital appreciation through investing primarily in equity securities, and taking a conservative position later as they get closer to retirement.

It may be noted that in the event that the participant makes no choice, a pension fund manager (PFM) keeping in view the profile and age of the participant will allocate the contributions to an approved lifecycle scheme, if such a scheme is offered by the fund. However, if a life cycle scheme is not offered by the fund then the PFM will allocate contributions to either low volatility or a lower volatility scheme.

3.12 Benefit Disbursement Stage

**Important:** As you get closer to the distribution stage, your investment should be concentrated in money market and debt sub-funds. It is always advisable to consult with your pension fund manager/advisor to help you plan the withdrawal of your pension fund balance.

The following should be noted about the benefit disbursement stage:

- On retirement, you can withdraw up to 50 per cent of the amount in your individual pension accounts tax-free. The remaining (or entire balance) can be invested in an income payment plan.
- You can also enter into an agreement with a pension fund manager to withdraw from the remaining (or entire balance) in your accounts in monthly installments up to the age of 75 or earlier as per an income payment plan approved by SECP.
- On the death of a participant, the nominees shall be the only persons recognized as having any title to or interest in the balance held in individual pension account of the deceased.
- Participants who want to withdraw their money before retirement from their individual pension accounts would be subject to the conditions laid down in the Income Tax Ordinance, 2001.

3.13 Fees and Charges

The following fees and charges are applicable to investors in a pension fund:

**Front-End Fee**

A front-end fee of up to 3% is charged on the amount of fresh contribution to the individual pension account. Front-end fee is not payable in respect of a
balance a participant has transferred from a previous pension fund manager, or the balance a participant has transferred from a recognized provident fund.

**Management Fee**

A maximum fee of 1.5% may be charged by a pension fund manager for managing the balance in a participant’s individual pension account. The fee is payable to the pension fund manager on a monthly basis, in arrears, on the average balance in the individual pension account.

**Trustee Fee**

This is the trustee’s remuneration for services and consists of reimbursement of actual custodial expenses as well as annual charges.

### 3.14 Net Asset Value Per Unit of a Sub-Fund (NAV)

The net asset value per unit of a sub-fund (NAV) represents the value at which the units of the respective sub-funds can be issued or redeemed each working day. It is calculated for each sub-fund by dividing the net assets of that sub-fund by the number of units outstanding in respect of that sub-fund. This value represents the share of each unit of sub-fund in the net assets of the pension fund.

\[
\text{NAV} = \frac{\text{net assets of the sub-fund}}{\text{number of units outstanding for the sub-fund}}
\]

### 3.15 Risks Associated with Investment in VPS

Pension schemes are subject to the following investment risks.

**Credit Risk**

Credit risk is defined as the potential risk that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms, such as payment of interest or repayment of capital or any other financial or legal obligation.

**Market Risk**

Overall “market risk” is the greatest potential danger for investors in equity/stocks funds. Stock prices can fluctuate for a broad range of reasons such as the overall strength of the economy or demand for particular products or services. The value and income generated by the securities held by pension funds may decline in response to specific events. These may include:

- Industry downturn in companies whose securities are owned by the funds
• Local or global economic instability
• Currency and interest rate fluctuations

**Interest Rate Risk**

It is the risk that the value of an investment will change due to a change in the total level of interest rates. Normally, rise in interest rates during the investment period may result in reduced prices for the securities held. Funds that invest in long term bonds need to have higher interest rate risk.

**Liquidity Risk**

This arises from lack of marketability of an investment that cannot be quickly converted into cash without incurring a loss. Thinly traded securities carry the risk of not being readily saleable at or near their real values. Liquidity risk is a characteristic of the fixed income market.

### 3.16 Tax Credit on Contribution to VPS

Contributions made to a voluntary pension scheme in any one-taxyear (July 1 to June 30) are entitled to Income Tax Credit under section 63 of the Income Tax Act 2001. The tax liability can be reduced for both self-employed and salaried individuals. You can avail tax credit at your average rate of tax on the amount of actual contribution or 20% of your annual taxable income, whichever is lower. For participants joining VPS at 41 years or above and additional 2% of contribution is allowed for every year over 41-years of age, up to a maximum tax credit of 30% of taxable income of the preceding tax year. The relaxation of additional contribution has been made up to 2019.

### 4. Real Estate Investment Trust (REITs)

#### 4.1 Overview of REIT Schemes in Pakistan

A real estate investment trust is a real estate based collective investment scheme launched by a real estate management company (RMC) and is registered under the Real Estate Investment Trust Regulations (2015). A REIT combines a pool of money from individuals and institutions to invest in real estate assets. The ownership of the REIT is divided into units and each financial contributor is called a unit holder. Unit holders can invest according to their financial ability. The minimum amount of investment allowed at the time of IPO is PKR 5,000 only.

The REIT management company (RMC) is a Non-Banking Finance Company (NBFC) licensed by the Securities and Exchange Commission of Pakistan (SECP) to carry out REIT management services. The RMC is licensed under the NBFC Rules, 2003 and is obligated to abide by the provisions of Companies Act 2017,
4.2 How are REITs Set Up?

A REIT Management Company (RMC) identifies a real estate project and transfers it to the trustee of the REIT scheme before raising money through a public offering.

REIT Schemes are established by a trust deed, which is a legal document that sets out the working arrangement between the RMC, the Trustee, and the unit holders/investors. The trust is established by the REIT management company and the trustee. The trustee of the REIT Scheme holds property in its name and keeps an eye on the operations of REIT Scheme.

A RMC is licensed by SECP to manage the scheme in accordance with the provisions of the trust deed, the offering document, and the REIT Regulations, 2015. The public receives units against their subscription money.

Under the REIT Regulations, 2015 there are three types of REIT schemes:

- **Developmental REIT Scheme**: means a REIT Scheme established for investment in real estate with the object of development, construction and refurbishment of such real estate for industrial, commercial, residential or a combination thereof. After construction or refurbishment, the property is sold and sale proceeds are distributed to the unit holders.

- **Rental REIT Scheme**: means a REIT Scheme established for making investments in industrial, commercial or residential real estate for generating rental income. In a rental REIT, a fully constructed/income generating property is first bought by the RMC and then units are issued against it to unit holders. Rental income is distributed among the unit holders.

- **Hybrid REIT Scheme**: means a REIT Scheme, which has a developmental component as well as rental component.

4.3 Role of the Trustee

The trustee acts as the custodian of the REIT assets, and ensures that the REIT Scheme is managed according to the guidelines stipulated in the trust deed to minimize the risk of mismanagement by the RMC. The involvement of the trustee mitigates the risk of any malpractices that may be harmful to the interest of the unit holders and the public at large.
4.3.1 Real Estate as an Asset Class in Pakistan

Real estate is an important and a growing asset class due to increase in population and growing size of middle-income groups. Demand is evident in price escalations seen across the board in residential, office and retail segments, with an average 15% to 20% per annum increase in price. This has made real estate an attractive asset class for protection against inflation.

In Pakistan, initially the closed-end structure is being introduced due to high redemption and systemic risk. REITs are very diverse and may invest in office buildings, residential properties, shopping malls, hospitals/ schools and industrial use properties. In June 2015, Arif Habib Dolmen Rental REIT was the first and only REIT to be established in Pakistan.

REITs allow an average investor to take exposure in real estate with limited amount of money. Investors have the ability to receive cash by selling their units in the capital market. REITs provide the average investor with the opportunity to increase their wealth by participating in the increase in value of REIT stocks that may appreciate considerably over time.

In addition, REITs are tax exempt if at least ninety percent of the annual profit is distributed as dividend to the unit holders. A REIT is a pass through entity, and income distributed by the REIT is taxed at the unit holder level. This prevents double taxation of income.

4.4 Benefits of Investing in REITs

Investment in REITs has several benefits over actually owning real estate properties. It may be noted that REITs in Pakistan are closed-end funds and unlike an open-end mutual fund, the AMC will not redeem your units. However, unit holders can sell their shares in the stock market. Some of the major benefits of investing in REITs are as under:

- **Professional Management of Real Estate:** REITs are generally accepted as a symbol of quality. Professional management ensures better returns on the investment.

- **Liquidity:** REITs are liquid, unlike traditional real estate. REITs are traded on stock exchanges just like stocks, and are granted special tax concessions at the fund level in the same way as mutual funds.

- **Ownership of Commercial Properties:** REITs enable sharing in non-residential properties such as hotels, shopping malls, and other commercial or industrial use properties.

- **Affordability:** There is very low minimum investment requirement with
REITs, and units of REITs can be bought for as little as Rs. 5,000 at the time of IPO. After IPO, an investor can buy a unit of REIT Scheme from the stock exchange through a broker.

- **Diversification**: Presence of REITs in any investment portfolio suggests a fair amount of diversification in the portfolio. Further, REITs do not necessarily increase or decrease in value in parallel with the broader equities market, as the sentiments about the performance of the real estate and the stock market may differ at any one point in time.

### 5. Investment Finance Services

There are two types of Nonbanking Finance Companies (NBFCs).

(i) Lending NBFCs

(ii) Fund Management NBFCs

Lending NBFCs include investment finance companies, leasing companies, housing finance companies and discount houses. Lending NBFCs may further be classified into non-deposit taking and deposit-taking entities, each with distinct regulatory requirements.

NBFCs may also undertake micro finance business. Accordingly, a new class of NBFCs i.e. Non-Bank Micro Finance Companies (NBMFCs) has been introduced. These provide a comprehensive regulatory framework for providing finance to poor persons and microenterprises. SECP is responsible for regulating micro finance institutions other than micro finance banks.

Existing companies other than NBFCs may also apply for license to carry out lending activities subject to the fulfillment of prescribed eligibility criteria under the new regulatory regime. For instance, an equipment manufacturer, producer of home appliances or automobile assembler may undertake leasing of its own product as an ancillary activity by obtaining a leasing license.

To facilitate the different segments of NBF Sector keeping in view their size and diverse nature of activities, separate eligibility criteria encompassing several aspects such as type of company, number of directors, rating requirements etc. are prescribed for each class of NBFCs. In addition, to cater to the growing needs of Islamic Finance in the country, an enabling environment for Islamic NBFCs has also been provided. Further, housing finance companies are permitted to undertake commercial housing finance activities.

**Types of Services Provided**

Different types of services provided by lending NBFCs include:
1. Investment finance services
2. Leasing finance services
3. Housing finance services

An NBFC or any other company may apply to SECP for license subject to fulfillment of criteria provided in Schedule I of the NBFC Rules, 2003. In addition, the Commission also assesses the fitness and propriety of its directors, promoters, major shareholders, CEO and key executives. The company licensed by the Commission to undertake investment finance services can undertake leasing, housing finance services and discounting services and is not required to have separate licenses for separate activities.

Terms and conditions for an investment finance company include:

I. Minimum equity requirement for a deposit taking NBFC to undertake investment finance services is Rs. 1,000 million

II. Minimum equity for a non-deposit taking NBFC to undertake investment finance services is Rs. 100 million.

III. An Investment Finance Company on average must invest at least seventy per cent of its assets in financing activities on quarterly basis. It may be noted that cash, deposits with financial institutions, and investment in government securities are excluded when calculating this limit.

Investment finance services may be undertaken on conventional or Islamic basis.

5.1 Lending Non-Banking Finance Companies (NBFCs)

A lending NBFC (leasing company, investment finance company, housing finance company etc.) may engage, in addition to the licensed form of business, in anyone or more of the following activities, subject to compliance with the relevant regulatory framework:

a) Take part in all stages of preparation for public issues or private placement.

b) Make investment in projects through
   • underwriting public issue of stocks, shares and securities
   • short-term and long-term participation term certificate
   • term finance certificates of varying features

c) Guarantee and counter-guarantee loans and obligations, including establishment of documentary credits.
d) Act as adviser and financial agent for companies in helping them obtain direct bank loans, syndicated loans, export credits, leases and project finances, both domestically and internationally.

e) Assist companies in private placement of debt and equity, domestically or overseas.

f) Act as adviser to companies in corporate or financial restructuring as well as in the preparation of resource mobilization plans.

g) Act as adviser to companies in mergers, acquisition and divestitures.

h) Assist companies with cash management systems.

i) Prepare feasibility, market or industry studies for companies, both domestic and overseas.

j) Assist in raising equity for new and existing companies, by acting as financial agent.

k) Act as custodian for securities owned or held by clients pursuant to their instructions and provide each or any of the following services:
   - custody of securities
   - receipt of dividends and other income on securities
   - execution of voting and other rights in connection with securities
   - holding securities on behalf of their clients
   - transacting aforesaid activities through nominees, agents, or attorneys

l) Act as nominees, agent, attorney, administrator, executor or trustee for clients.

m) Act as trustee for collective investment schemes, private equity and venture capital funds, real estate investment trusts and debt instruments, if so approved by the Commission.

n) Raise funds through equity, foreign and local debentures both short and long term, commercial paper issued locally or overseas, sale of short and long term participation certificates, and term finance certificates.

o) Act as authorized seller for securities and certificates, denominated in local or foreign currency, issued by Federal or Provincial Governments, statutory bodies, and state-owned corporations, including instruments of National Savings Schemes.

p) Provide safe deposit vaults to clients.

q) Handle payments and collections for clients.
r) Provide discounting services, consumer financing etc.
s) Provide finance for capital market including margin financing; and
t) Any other activity as may be permitted by the Commission.

5.2 Certificate of Deposits

Non-Banking Finance Companies with license to undertake investment finance services are permitted to raise deposits in the form of “Certificate of Deposits”. However, they are not allowed to open checking deposit accounts, and issue cheque books. In order to be eligible to raise deposits, an investment finance institution must be compliant with the following main conditions of the Non-Banking Finance Companies and Notified Entities Regulations, 2008:

(a) NBFC is undertaking activities as a Lending NBFC for a minimum period of three years and has been, as per the audited accounts, making profits for the last two years
(b) NBFC meets the minimum equity requirement as specified in these Regulations
(c) NBFC complies with the Capital Adequacy Ratio as specified in these Regulations
(d) NBFC, or any other NBFC in which its sponsors had a stake of more than 10%, has not defaulted on, or obtained write off on finance availed from any financial institution or investor in any of its redeemable capital instruments within the last five years
(e) NBFC, or any other NBFC in which its sponsors had a stake of more than 10%, has not defaulted on any obligation towards any of its depositors, which term shall include investors in any of its deposit raising arrangements
(f) NBFC is listed on a stock exchange; however, the requirement to list the NBFC on a stock exchange shall not apply to an NBFC which is 100% owned directly by the Federal or Provincial Governments
(g) The operations of the NBFC and the conduct of its directors with respect to the NBFC has been in accordance with law and
(h) NBFC has been assigned a credit rating of minimum ‘A-’ by a credit rating agency registered with the Commission

NBFCs compliant with the above conditions, may submit an application to SECP for seeking permission to raise deposits. After obtaining permission to raise deposits, the NBFC can only raise deposits from individuals.

5.3 Key Considerations
When making a deposit with a NBFC, the general public should ensure that, the NBFC has:

- A valid license from SECP to do business in Pakistan
- Valid permission from SECP to raise deposits
- Minimum investment grade rating from any of the following two rating agencies: Pakistan Credit Rating Agency Limited (PACRA) and JCR-VIS Credit Rating Company Limited. The credit rating must be updated at least once every year
- Clean track record regarding repayment to depositors
- Profitable operations and dividend distribution track record, which can be evaluated through financial statements and
- Sound reputation in the industry

Anyone investing in the deposit schemes must note that the deposits raised by an NBFC are subject to various risks especially credit risk. Such deposits are unsecured and are lower in rank to secured creditors of the NBFC in liquidation. As per law, no preferential treatment is available to depositors of a NBFC in case of its liquidation.

5.4 Leasing Services

5.4.1 Definition

Leasing is the business of providing finance on operating lease or finance lease or on ijarah basis. A lease contract outlines the terms whereby one party (lessor) agrees to rent to another party (lessee). A lease guarantees the lessee (the renter) use of an asset and promises regular payments (lease rental installments) to the lessor (the asset owner) for an agreed period. Both the property owner and the renter must abide by the terms of the contract for the lease to remain valid.

5.5 Types of Lease Contracts

Main types of lease contracts practiced in Pakistan are as under:

5.5.1 Finance Lease

A lease is classified as a finance lease if it transfers the ownership of the asset to the lessee. An example of a finance lease is a car lease. The lessee makes periodic payments to the leasing company (lessor) and after a specific period, say after five years, the ownership of the car is transferred to the lessee.
5.5.2 Operating Lease

In an operating lease, the asset is provided to the lessee for use over a specific period of time. At the end of that period, the asset is returned by the lessee to the lessor and it remains the property of the lessor. Normally, the lease term is shorter than the useful life of the asset being leased. For example, an aircraft that has an economic life of 25 years may be leased to an airline for 5 years on an operating lease.

5.6 Ijarah

This is an Islamic form of lease in which the lessor gives the right to the lessee to use the asset for a specific period against payment of lease rentals. At the end of the lease term, the lessor may transfer the ownership of asset to the lessee. All types of assets ranging from home appliances to heavy machinery to commercial buildings can be leased under finance and operating leases under the Ijarah lease.

Terms and Conditions applicable to Leasing Companies in Pakistan

A leasing company in Pakistan is required by law to operate in accordance with the following conditions:

a) A deposit taking leasing company must have equity of Rs. 1,000/- million whereas a non-deposit taking leasing company is required to have equity of Rs. 50 million

b) A Leasing Company, if undertaking the business of leasing only, shall invest at least seventy per cent of its assets in the business of leasing. It may be noted that cash, deposits with financial institutions, and investment in government securities shall be excluded in calculating this limit. A Leasing Company must not engage in leasing operations pertaining to land, residential buildings and apartments.

c) Total exposure of a leasing company in listed equity securities (in the ready as well as in futures market), and spread transactions shall not exceed fifty percent of its equity. For the purpose of this Regulation, "spread transactions," mean such transactions where shares of one company are purchased on one settlement date and simultaneously sold on another settlement date. These will be considered as one transaction; however, the above condition shall not be applicable to non-deposit taking NBFCs.

d) Total investments of a leasing company in equity securities of any company shall not exceed ten percent (10%) of the paid-up capital of the investee company or ten per cent (10%) of its own equity, whichever is less. Explanation: - For the purpose of this Regulation, "investments in
equity securities" shall be valued at cost of acquisition for the purpose of calculating the above limit.

5.7 Certificates of Deposits

Same conditions apply to leasing companies for issuance of certificates of deposits as mentioned under the Section on Investment Finance Services.

Key Considerations for Leasing Company Clients

- Clients interested in using the services of leasing company must ensure that:
  - The company is registered with SECP
  - The company is licensed to perform leasing or investment finance or housing finance services
  - The company has developed proper systems and controls with appropriate level of documentation for dealing with clients
  - Proper documentary evidence in the form of invoice/ certificate/ receipt is issued for every transaction with clients
  - All transactions above Rs. 50,000 are settled by cheque
  - The company has its official website
  - The persons acting on behalf of the company are duly authorized representatives of the company
  - The company is not performing any unlawful business
  - All the product features, terms and conditions should be thoroughly examined before executing any transaction with the company
  - All claims made by the company regarding its profitability, performance, repayment/return history should be backed by relevant documentary evidence such as its financial statements, credit rating reports etc.
6. **MCQs/Practice Questions**

1. An open-end mutual fund can:
   a) Continuously issue new units on demand
   b) Redeem units on demand
   c) Can undertake both a) and b)

2. A close-end mutual fund may trade at a:
   a) Discount to NAV
   b) Premium to NAV
   c) Premium or discount to NAV

3. Mutual funds are operated by:
   a) Asset management company
   b) Trustee
   c) Regulator

4. Net Asset Value is:
   a) Market worth of fund’s assets divided by the number of units
   b) Liabilities of the fund divided by the number of units
   c) Market worth of fund’s assets minus its liabilities divided by the number of units outstanding

5. Mutual funds in Pakistan are regulated by:
   a) SECP
   b) SBP
   c) FBR

6. Payment of original investment is guaranteed with any further capital gain in:
   a) Capital Protected Fund
   b) Money Market Fund
   c) Fixed Income Fund

7. Asset Allocation Fund provides:
   a) A very broad asset allocation
   b) Diversification benefit
   c) Both a) and b)

8. Sector Funds focus on investments in:
   a) One sector only
b) Number of sectors

c) Limited number of sectors

9. The document that states investment goal, investments (such as stocks or bonds) that the fund purchases, past performance, name of the fund manager, fees and how it derives its returns is referred to as the:

a) Offering Document
b) Trust Deed
c) Accounting Statement

10. Subject to the profitability of the fund, its management may declare dividends in:

a) Either cash form or in the form of bonus units,
b) Cash only
c) Bonus units only

11. The risk that the market or economy will decline, causing individual investments to lose value regardless of the performance or profitability of the issuing entity is termed as:

a) Market risk
b) Credit risk
c) Default risk

12. The risk arising from downgrade in credit rating is termed as:

a) Credit risk
b) Default risk
c) Pricing risk

13. Liquidity risk is the risk that the Fund:

a) May not be able to generate sufficient cash resources to settle its obligation in full as they fall due
b) Can settle its obligations on terms that are materially disadvantageous
c) Both a) and b)

14. Measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole is termed as:

a) Alpha
b) Standard deviation
c) Beta

15. Sharpe ratio is calculated by:

a) Subtracting the risk-free rate of return (PIB Yield) from the rate of
return for an investment and dividing the result by the investment's standard deviation of its return
b) Dividing rate of return for an investment with the standard deviation of its return
c) Subtracting the risk-free rate of return (PIB Yield) from the rate of return for an investment and dividing the result by the investment's beta

16. The credit rating companies undertake the rating of:
   a) Asset managers
   b) Funds
   c) Both a) and b)

17. Lending NBFCs include
    a) Investment finance and leasing companies
    b) Housing finance companies and discount houses
    c) Both a) and b)

18. Minimum equity requirement for a deposit taking NBFCs to undertake investment finance of
    a) Rs. 1,000 million
    b) Rs. 1,500 million
    c) Rs. 2,000 million

19. In order to be eligible to raise deposits, an investment finance institution must be compliant with the following main conditions:
   a) Listed on the stock exchange with a credit rating of minimum investment grade from a credit rating agency
   b) Has been, as per the audited accounts, making profits for a period of at least two years
   c) Both a) and b)

20. REIT combines a pool of money from individuals and institutions to invest in:
    a) Real estate
    b) Stocks
    c) Fixed income securities

21. "Developmental REIT Scheme" means a REIT Scheme established for investment in Real Estate with the objective of:
    a) Development, construction and refurbishment of real estate
b) Generating rental income from industrial, commercial or residential Real Estate

c) Both a) and b)

22. VPS is meant for those who are:

a) Employed on contract basis with government or private sector or with private employers who do not offer any pensions

b) Any other individuals who want to arrange voluntarily for old age pensions

c) Both a) and b)

23. The Voluntary Pension System is the overall framework under which are launched and managed:

a) Regional funds

b) Pension funds

c) Specialty funds

24. The Allocation policy mandated by SECP obliges fund managers to offer at least:

a) 3 allocation schemes

b) 4 allocation schemes

c) 2 allocation schemes

25. Investment Finance is a specialized sector of banking which focuses on raising:

a) Long term capital for businesses on conventional or Islamic basis

b) Short term capital for businesses on conventional or Islamic basis

c) Both a) and b)

26. Investment Finance Company can legally undertake:

a) Money and Capital Market Activities

b) Project Financing and Corporate Finance Services

c) All of the above

27. A lease is classified as a finance lease if:

a) Transfers the ownership of assets to the lessee

b) The asset is provided to the lessee by the lessor for use over a specific period of time

{c) None of the above

28. Islamic form of lease in which the lessor gives the right to the lessee to use the asset for specific period of time against payment of lease rentals is
termed as:
  a) Ijarah
  b) Murabaha
  c) Musharakah

29. A Leasing Company in Pakistan shall not engage in the leasing operations pertaining to:
  a) Land
  b) Residential buildings and apartments
  c) Both a) and b)

30. Total exposure of a leasing company in listed equity securities (in the ready as well as in futures market), and spread transactions shall not exceed:
  a) Fifty percent of its equity
  b) Thirty percent of its equity
  c) Ten percent of its equity.

31. Suppose Offer Price of the Fund is PKR 3,000 while front-end load is 2%. What will be the value of the sales charge? How much will be invested in the fund?

32. Suppose NAV of the Fund is PKR 4,000 and it generates a return of 10%. If a backend load of 2% is applied on the fund, what will be the value of sales charge?

33. At what rate is Zakat deducted from mutual fund units? How can unit holders be exempted from Zakat deduction?

34. How can investment finance institutions participate in project financing?

35. List down key considerations while depositing funds with a non-banking finance company.

36. List down the benefits of investing in REITs.

37. List the advantages of investing in a pension fund under VPS.

38. List down key considerations for clients who wish to avail services of a leasing company in Pakistan.
### 7. Solutions for MCQs

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1. Overview of Islamic Finance

Islamic finance refers to financial market transactions, operations, and services that comply with Islamic rules, principles, and codes of practice, which prohibits unethical, immoral, speculative activities including interest (Riba), gambling (maysir), and uncertainty (gharār). In other words, Islamic finance is guided by the beliefs and value system of Islam. The goal of Islamic finance is to encourage risk and reward sharing over exploitation, community well-being over materialism, and fellowship of people over the fragmentation of society.

Shari’ah, i.e. Islamic religious law, forms the foundation of Islamic finance. Shari’ah attempts to promote equality and fairness in society by emphasizing moral, social, ethical, and religious factors.

1.1 Islamic Finance and Socially Responsible Financing

Socially responsible financing (SRF), also referred to as sustainable and responsible financing, shares many similarities with Islamic finance in its objectives of doing good no harm methods (exclusionary screening), and claims an emphasis on ethics. Of course, Islamic finance goes many steps beyond, and defines the structure of financing. For example, Riba and excessive gharar are prohibited (linked to the concept that money is not a commodity but only a medium of exchange). Further, the scope of exclusionary screening goes beyond considerations of alcohol, gambling etc. which are shared with SRF to cover many conventional financial services due to prohibition of Riba. Islamic financial institutions are gaining prominence globally as they are increasingly known for their conservative socially responsible investment.

2. Key Principles that Govern Islamic Finance

Islamic Financial Institutions (IFIs) are financial intermediaries that channelize funds (savings/deposits) from individuals/organizations and employ them in
economic activity through entrepreneurs to finance operations. However, IFIs have to abide by the guidelines of Shari‘ah in all aspects of their activities.

The key principles that govern Islamic finance are as follows:

2.1 Prohibition of Riba

Central to Islamic finance is the fact that money itself has no intrinsic value and is simply a medium of exchange. Each unit is 100% equal in value to another unit of the same denomination and you are not allowed to make a profit by exchanging cash with another person. A Muslim is not allowed to benefit from lending money or receiving money from someone.

The word “Riba” is an Arabic word and means excess, increase or addition. According to Shari‘ah terminology, it implies any excess compensation without due consideration. The Holy Quran expressly forbids Riba and states, “O you, who believe, fear Allah and give up what still remains of Riba, if you are believers.” (Surah Al Baqarah, Verse 278). There are two main types of Riba, identified by scholars namely ‘Riba An Nasiyah’ and ‘Riba Al Fadl’.

‘Riba An Nasiyah’ is defined as excess which results from predetermined interest (guaranteed return) which a lender receives over and above the principal in any loan transaction. This is the primary and more prevalent form of Riba encountered in our financial systems. Riba Al Fadl means any commodity-for-commodity exchange transaction (i.e. barter) in which the exchanged commodities are of the same type but of unequal measure. In other words an unlawful excess in the exchange of two counter-values where the excess is measurable through weight or measure. There are six commodities called “Amwaale-wiyyah” and have been identified to include 1) Gold 2) Silver 3) Dates 4) Wheat 5) Salt and 6) Barley. These six commodities can only be exchanged in equal quantities and on spot basis. An unequal exchange or a deferred exchange of these commodities with similar commodities will constitute Riba.

Muslim scholars have interpreted Riba to mean any fixed or guaranteed return on cash advances / loans or on deposits. In prohibiting Riba, Islam seeks to foster an environment based on fairness and justice. A loan with a fixed return to the lender regardless of the outcome of the borrower's course of action is viewed as unfair, exploitative and unproductive.

2.2 Risk-and-Return Sharing

Islam promotes fair market play and allows everyone to earn reasonable profit but prohibits Muslims from earning income from an asset or capital unless ownership risks have been assumed by the earner of that profit i.e. it permits income generation through the sharing of risks and rewards between the
parties to a transaction. This profit sharing mechanism encourages people to become partners, and this mutual responsibility for the outcome of the financed project is believed to increase the likelihood of success of the venture.

IFIs cannot lend money to earn guaranteed return nor can they borrow with the promise to give a fixed return to depositors/bondholders. They earn profit by taking risk of tangible assets, real services or capital and pass on the profit/loss to their deposit holders who also risk their capital.

### 2.3 Shari’ah-Approved Activities

Islamic finance encourages activities that do not violate the rules of Shari’ah. The law of the land may allow some subject matter or activities but if the same are not allowed by Shari’ah, these cannot be financed by an IFI. To ensure that all products and services offered are Shari’ah compliant, each IFI has an independent Shari’ah supervisory board/advisor.

### 2.4 Avoidance of Gharar & Maysir

Shari’ah prohibits financial transactions that involve gharar, which is often translated as "deception", "excessive risk," or "excessive uncertainty". Examples of gharar are sale of fish in the sea, of birds in the sky, and of unripe fruits on the tree, which cause excessive and avoidable uncertainty. Gharar is present in contracts where the object of sale is not in possession of the seller or does not exist at the time the parties enter into the contract, both elements introduce uncertainty as to the particulars of object of sale.

To minimize gharar, contracts must carefully state the terms of the agreement, particularly by giving a thorough description of the asset that is the subject of the contract and the asset’s transaction price.

### 2.5 Sanctity of Contract

Islam views contractual obligations and the related full disclosure of information as a sacred duty. Full disclosure is intended to reduce financial speculation (maysir) and uncertainty (gharar). The conditions that are necessary for a contract to be valid include a complete understanding of the underlying asset(s), profit-sharing ratios, as well as the presence of a willing buyer and seller. A contract must not contradict Islamic principles; otherwise, it will be deemed invalid and unenforceable.

### 2.6 Economic Purpose/Activity

Every Islamic financing transaction has certain economic purpose/activity. Further, Islamic finance transactions are backed by real assets or services.
2.7 Policies and Goals Pursued by Islamic Financial System

Some important policies or goals pursued by Islamic financial system include the following:

- **Shariah-compliant financial products and services**: To be Shari’ah compliant, the financial products and services must not be based on the payment or receipt of interest.

- **Stability in money value**: Stability in the value of money is enhanced by requiring that the currency be backed by an underlying asset, which enables the medium of exchange to be a reliable unit of account. Islam recognizes money as a store of wealth and as a means of exchange but does not view money as a commodity that should be bought and sold at a profit.

- **Economic development**: Participatory-type financing for infrastructure projects, based on Mudaraba (profit sharing) and Musharaka (joint venture), is designed so that investment returns to both the provider and user of funds will reflect the success of the project. The mechanism of sharing profits leads to a close working relationship between the IFI and the entrepreneur and stimulates economic development as a result of the IFI’s equity-type stake in the financed project (versus an interest-only or armed return).

- **Equitable distribution of resources**: One of the aims of Islamic finance is to serve the less fortunate by promoting equitable distribution of resources. The distribution of income and resources of Islamic financial structures is intended to be proportionate to the value offered by participating parties.

3. Key Differences between Conventional Financing and Islamic Financing

Some major differences between conventional and Islamic finance practices are highlighted below:

<table>
<thead>
<tr>
<th></th>
<th>CONVENTIONAL FINANCING</th>
<th>ISLAMIC FINANCING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money as a commodity</td>
<td>Money is a commodity besides a medium of exchange and store of value. Therefore, it can be sold at a price higher than its face value, and it can also be rented out.</td>
<td>Money is not a commodity though it is used as a medium of exchange and store of value, therefore, it cannot be sold at a price higher than its face value of tendered out.</td>
</tr>
<tr>
<td>Time value of money</td>
<td>Time value is the basis for charging interest on capital.</td>
<td>Profit on trade of goods or fees on services provided is the basis for earning profit.</td>
</tr>
<tr>
<td><strong>Profit &amp; loss sharing</strong></td>
<td>Interest is charged on the Financial Institution’s (&quot;FI&quot;) funds even in case the borrower suffers losses. It is not based on profit and loss sharing.</td>
<td>IFIs operate on the basis of profit and loss sharing based on the mode of financing used.</td>
</tr>
<tr>
<td><strong>Working capital finance</strong></td>
<td>While disbursing cash finance, running finance or working capital finance, no agreement for exchange of goods &amp; services is made.</td>
<td>The execution of agreements for the exchange of goods &amp; services is obligatory, when disbursing funds under Murabaha, Salam &amp; Istisna contracts.</td>
</tr>
<tr>
<td><strong>Economic activity</strong></td>
<td>Conventional banks use money as a commodity that leads to inflation.</td>
<td>Islamic finance creates a link with the real sectors of the economic system by using trade related activities.</td>
</tr>
<tr>
<td><strong>Business Framework</strong></td>
<td>Functions and operating modes are based on secular principles, not religious laws or guidelines.</td>
<td>Functions and operating modes are based on Shari'ah, and IFIs must ensure compliance with Shari'ah requirements.</td>
</tr>
<tr>
<td><strong>Interest Charging</strong></td>
<td>Financing is interest oriented, and a fixed or variable interest rate is charged.</td>
<td>Financing is not interest (Riba) oriented and is based on risk-and-reward sharing.</td>
</tr>
<tr>
<td><strong>Interest deposits</strong></td>
<td>Depositors receive interest and a guarantee of principal repayment.</td>
<td>Account holders do not receive interest (Riba) but share risk and rewards of investments made by the IFI.</td>
</tr>
<tr>
<td><strong>Risk sharing on equity financing</strong></td>
<td>Risk sharing is not generally offered but is available through venture capital firms and investment banks, which may also participate in management.</td>
<td>IFIs offer equity financing with risk sharing for a project. Losses are shared on the basis of equity participation, whereas profit is shared on the basis of a pre-agreed ratio.</td>
</tr>
<tr>
<td><strong>Shari'ah compliant</strong></td>
<td>FIs may finance any lawful product or service.</td>
<td>IFIs are allowed to participate only in Shari'ah compliant economic activities. For example, IFIs cannot finance a business that involves selling pork or alcohol.</td>
</tr>
<tr>
<td><strong>Penalty on default</strong></td>
<td>Financial Institutions (FIs) normally charge additional money (compound interest) in case of late payments or defaults.</td>
<td>IFIs are not allowed to charge penalties to enrich themselves but may impose penalties to discourage late payments or defaults. Penalties are donated to a charity or used to offset collection costs.</td>
</tr>
<tr>
<td><strong>Avoidance of gharar</strong></td>
<td>Speculative investments are allowed.</td>
<td>Transactions with elements of gambling or speculation are forbidden.</td>
</tr>
<tr>
<td><strong>Customer relationships</strong></td>
<td>The status of a FI in relation to its clients is one of creditor and debtor.</td>
<td>The status of an IFI in relation to its clients is that of a partner and an investor.</td>
</tr>
<tr>
<td><strong>Statutory requirements</strong></td>
<td>FI must comply with statutory requirements of the regulators of the country in which it operates.</td>
<td>An IFI must comply with statutory requirements of the regulators of the country in which it operates and with Shari'ah guidelines.</td>
</tr>
</tbody>
</table>

4. **Essential Elements of an Islamic Contract**

Islamic financial institutions deal with many types of underlying Islamic
financial contracts and documentation related to deposit, financing, and investment products. The contract must include the following essential elements to ensure transparency, Shari'ah compliance, and to reduce the risk of dispute:

- **Offerer and Offeree**: A contract cannot be formed in the presence of a single party. Although a single person's intent may lead to a number of self-imposed obligations, such as remitting a debt or declaring a charitable donation, these commitments are not considered to be a contract according to Shari'ah.

- **Offer and Acceptance**: A contract must have an offer (ijab) and an acceptance (qabul), and both must be executed at the same time. Either party to the contract—buyer or seller—may make an offer.

- **Subject Matter and Consideration**: The subject matter and consideration must be lawful under the principles of Shari'ah. They should also exist at the time the contract is made and be deliverable. In addition, both parties should know the quality, quantity, and specifications of the subject matter. The price, or consideration, must be determined when the contract is made.

5. **Shari'ah Compliance Framework in Pakistan**

Shari'ah compliance framework is implemented through Shari'ah boards and advisors.

5.1 **Accounting and Auditing Organization for Islamic–Financial Institutions (AAOIFI)**

Pakistan draws support from the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) while framing its own standards on Islamic finance. AAOIFI is an Islamic, international, autonomous, not-for-profit, corporate body that prepares and recommends accounting, auditing, governance, ethics and Shari'ah standards for IFIs and the industry. AAOIFI was established in accordance with the Agreement of Association that was signed by IFIs on 26 February 1990 in Algiers. AAOIFI was registered on 27 March 1991 in Bahrain.

As an independent international organization, AAOIFI is supported by institutional members including central banks, IFIs etc. AAOIFI standards are followed - as part of regulatory requirement or IFIs' internal guidelines - in jurisdictions that offer Islamic finance across Middle East, Asia Pacific, South Asia, Central Asia, Africa, Europe, North America and by Islamic Development Bank Group. The main role of AAOIFIs Shari'ah board is to publish Shari'ah standards in order to harmonize the industry's practices.
5.2 National Shari’ah Boards

The Islamic Non-banking Finance Companies (NBFCs), Mudarabas and Mudarabah companies, issuance of Sukuk, and other Shari’ah compliant company/instruments come under the jurisdiction of the Securities & Exchange Commission of Pakistan (SECP). All matters pertaining to Shari’ah compliance of the NBFCs and other companies/instruments are referred to the Shari’ah Advisory Board (SAB) of SECP for opinion/rulings. The Religious Board for Mudarabas is responsible for giving its opinion/approval of Mudarabas. Similarly, the State Bank of Pakistan (SBP), the central bank, has its own Shari’ah Board that advises and gives rulings on the issues raised by the banking sector.

5.3 Institutional Shari’ah Advisory Structure

Certain IFIs are required to obtain the advice and opinion of a Shari’ah Advisor while issuing any instrument or security that proclaims Shari’ah compliance. SBP has made it mandatory for Islamic Banks operating in the country to have their own Shari’ah Supervisory Boards (SSBs) approved by the SBP Shari’ah Board. The purpose is to ensure that all activities and agreements fulfill the requirements of Shari’ah. Shari’ah boards / advisors of the IFIs have fiduciary responsibilities towards the institution's stakeholders with regard to Shari’ah compliance in the operations of institutions.

6. Types of Islamic Financial Contracts

The main types of Islamic Financial Contracts are described here:

6.1 Mudaraba

"Mudaraba" is a form of Shari’ah-compliant partnership. One party provides funds for business while the other party participates with management expertise and efforts. The party that provides the funds for business is called the "Rabb-ul-Mal" (the provider of capital). The party providing business management skills is called the "Mudarib" (manager). In case of IFIs, depositors are the Rabb-ul-Mal and the IFIs are the Mudarib. In case of Mudaraba funds, the certificate holders are the Rabb-ul-Mal and the management company is the Mudarib.

There are two types of Mudaraba:

- **Al Mudaraba Al Muqayyadah (Restricted Mudaraba)** - Rabb-ul-Mal specifies particular business or particular place for the Mudarib, for investment of funds in that particular business or place.
- **Al Mudaraba Al Mutlaqah (Unrestricted Mudaraba)** - Rabb-ul-Mal gives full freedom to the Mudarib to undertake whatever business the
Mudarib deems fit. Modarib is authorized to do anything, which is normally done in the course of business.

It is necessary for the validity of the Mudaraba that the parties agree on a certain formula of sharing the actual profit at the beginning of the contract. The Shari'ah has prescribed no particular proportion of profit sharing, and it is at the discretion of the parties.

The IFI or the Mudaraba Management Company (MMC) acts as financial intermediary to provide the mechanism for profit and loss sharing. There are two tiers of Mudaraba agreements. First tier of agreement is between the investors /depositors (Rabb-ul-Mal) and FI / MMC (modarib) and governs the mudarib's investment of funds in the project and specifies the profit-sharing ratio. The second tier of agreement is between the IFI / MMC (Rabb-ul-Mal in this case) which provides the funds and the entrepreneur (modarib) who invests the funds in the business; its purpose is to meet the financing needs of the entrepreneur for its Shari'ah-compliant business activities. Profit ratios are pre-determined. All losses are borne by the Rabb-ul-Maal as long as there has been no negligence on the part of the entrepreneur.

**Structure of Mudaraba Based Financing Products—Asset and Liability Side**

1. The depositor deposits a certain amount of money with IFI.
2. The IFI uses the money in various forms of financing.
3. Profit/Loss from the investment.

- X% of the profit goes to the investor.
- 100% loss in borne by the investor.
- Y% of the profit goes to the IFI.

7. **Partnership Based Financing Instruments**

7.1 **Musharaka**

Musharaka financing is a type of partnership financing in which one of the partners is an Islamic financial institution and the other is capital provider. In Musharaka financing, profits and losses are shared among the partners according to a predetermined ratio with the underlying principle that profit sharing need not be based on the proportion of shares owned, but liability is limited to the contributions of the shareholders. In other words, investors cannot be held liable for more than the amount of capital they invest in the
The following are the rules with regard to profit and loss sharing in a Musharaka:

1. The profit sharing ratio for each partner has to be defined at the outset and can be in any proportion i.e. not necessarily based on the proportion of investment by the partners. For example, if A and B invest in the ratio of 50:50, the profit sharing can still be different from this ratio.

2. A particular return on investment cannot be specified. For example, if it is agreed between them that ‘A’ will get 10% return on his investment or Rs. 10,000/- per annum, the contract is not valid.

3. If both partners agree that each will get a percentage of profit based on their capital percentage, whether both work or not, it is allowed.

4. If a partner is working, his profit share could be higher than his capital contribution irrespective of whether the other partner is working or not. For example, it may be agreed that only ‘A’ will work and will get two third of the profit while ‘B’ will get one third.

5. If both partners are working partners, even then profit sharing ratios can be different from the proportion of their investments.

6. If one of the parties is a sleeping partner throughout the term of Musharaka, then his share of profit may be equal or less then the ratio of his investment, but cannot be more.

The partners are entitled to participate in the management and operations of the venture, but it is not mandatory that they do so. In addition, the partners are allowed to charge a fee for any managerial efforts or other forms of labor that they contribute to the project. In practice, most financial institutions closely monitor the venture to ensure that it is well managed.

**Structure of Musharaka Based Financing Products**

1. The IFI and customer enter into a musharakah contract e.g. a construction project based on 50:50 capital contribution

2. Profit/Loss from the joint venture

   - IFI: 40% share in profit
   - Customer: 60% share in profit

   - IFI: 50% share in loss
   - Customer: 50% share in loss
7.2 Diminishing Musharaka

Diminishing Musharaka is a form of partnership that ends in the IFI’s client owning the asset or project being financed by gradually buying the ownership share/units of the other partner (the financial institution) until ownership of the asset is completely transferred to the client.

Differences between Musharaka and Mudaraba

<table>
<thead>
<tr>
<th>Musharaka</th>
<th>Mudaraba</th>
</tr>
</thead>
<tbody>
<tr>
<td>All partners invest.</td>
<td>Only the Rab-al-Maal invests.</td>
</tr>
<tr>
<td>All partners participate in the management of the business and can work for it.</td>
<td>Rab-al-Maal has no right to participate in the management, which is carried out by Mudarib only.</td>
</tr>
<tr>
<td>All partners share the loss to the extent of ratio of their investment.</td>
<td>Only Rab-al-Maal suffers loss because Mudarib does not invest anything. However, this is subject to a condition that Mudarib has worked with due care.</td>
</tr>
</tbody>
</table>

- Liability of the partners is normally unlimited. If the liabilities of the business exceed its assets and the business goes into liquidation, the excess liabilities shall be borne pro rata by all partners. But if the partners agree that no partner shall incur any debt during the course of the business, then the excess liabilities shall be borne by that partner alone who has incurred a debt on the business in violation of the aforesaid condition.

- The goods purchased by the Mudarib are solely owned by Rab-al-Maal and Mudarib can earn his share in the profit only in case he sells the goods profitably.

As soon as the partners mix up their capital in a joint pool, all the assets become jointly owned by all of them according to the proportion of their respective investment. All partners benefit from the appreciation in the value of the assets even if profit has not accrued through sales.

8. Trade Based Financing Instruments

8.1 Murabaha

Murabaha financing is a sale in which the seller discloses the cost of the commodity and the profit being charged on it. The financial institution purchases a specific asset or goods from a supplier at the request of the customer and then sells it to the customer at a predetermined profit. Presently, the majority of financing extended by Islamic financial institutions is based upon Murabaha.

Murabaha is typically used to facilitate short-term financing requirements of customers including:
1. Purchase of raw material, goods-and merchandise of all kinds and description
3. Purchase of equipment
4. Import of goods and merchandise
5. Export financing (pre-shipment)
6. Financing of working capital

An IFI provides Murabaha financing when it has obtained a legally enforceable promise by the client that he or she will buy the goods from the IFI since the IFI has purchased them. The goods must be in possession of the IFI before being sold to the customer for the transaction to be Shari’ah compliant. The IFI takes constructive or physical receipt of the goods before selling them to its customer, and accepts whatever risk (loss, theft, damage, depreciation of value etc.) is inherent in the transaction. Thus, any profit from the transaction is considered to be derived from a sale and is legitimate under Islamic law. The customer’s repayment schedule may be in equal or unequal installments or in lump sum.

**Structure of Murabaha Based Financing Products**

1. The customer identifies the raw material to be purchased.
2. The IFI purchases the raw material from the supplier at PKR 10,000
3. The IFI sells the raw material at PKR 12,000 (Cost plus profit) to the customer on deferred terms.
4. The customer pays the price on the agreed terms date.

The following are the rules governing a Murabaha transaction:

1. The subject matter of sale must exist at the time of sale as its non-existence makes the contract void.
2. The subject matter of sale must be in physical or constructive possession of the seller (IFI) when it sells it to another person. Constructive possession means a situation where the IFI has not taken physical delivery of the commodity yet it has come into its control and all rights and liabilities of the commodity are passed on to it including the risk of its destruction. If the IFI sells something that has not been
acquired, the sale becomes void.

3. The sale must be instant and absolute. A sale attributed to a future date or a sale contingent on a future event is void.

4. The subject matter should have value. Thus, goods having no value cannot be sold or purchased.

5. The subject matter of sale must be specifically known and identified to the buyer. For example, 'A' says to 'B' that he will sell an apartment to B. The sale is void because the apartment to be sold is not specifically mentioned or identified to the buyer.

6. The delivery of the sold commodity to the buyer must be certain and should not depend on a contingency or chance.

7. Price has to be specified.

8. The sale must be unconditional. A conditional sale is invalid unless the condition is recognized as a part of the transaction according to the usage of trade.

8.2 Musawamah

Musawamah is a general kind of sale in which price of the commodity to be traded is agreed between the seller and the buyer without any reference to the price paid or cost incurred by the seller. Thus, it is different from Murabaha in respect of pricing formula. Unlike Murabaha, seller in Musawamah is not obliged to reveal his cost.

8.3 Salam Financing

In Salam, the seller undertakes to supply specific goods to the buyer at a future date in exchange for an advanced price fully paid at spot. The price is in cash but the supply of purchased goods is deferred. In other words, it is a form of sale contract whereby IFIs purchase goods for spot payment with deferred delivery. This mode of financing can be used by IFIs particularly to finance the agricultural sector. Farmers sell their crops prior to harvesting to IFIs in order to get money to purchase seeds and fertilizers.

It can also be used to meet the need of traders for import and export business. Under Salam, the traders are allowed to sell the goods in advance so that they can obtain funds to undertake the business. Salam is beneficial to the seller because he receives the price in advance and is also beneficial to the buyer because normally the price in a Salam is lower than the price in spot sales.

The permissibility of a Salam is an exception to the general rule that prohibits forward sales, and therefore it is subject to strict conditions, which are as follows:
1. It is necessary for the validity of Salam that the buyer pays the price in full to the seller at the time of carrying out the sale as the purpose for allowing a Salam is to fulfill the seller’s instant need.

2. Only those goods can be sold through a Salam contract in which the quantity and quality can be exactly specified. For example, precious stones cannot be sold based on a Salam because stones differ in quality, size, weight and their exact specification is not possible.

3. Salam cannot be effected for a particular commodity or for a product of a particular field or farm (e.g. supply of wheat of a particular field or the fruit of a particular tree) since there is a possibility that the crop is destroyed before delivery and given such possibility, the delivery remains uncertain.

4. All details concerning the quality of goods sold must be clearly specified leaving no ambiguity, which may lead to a dispute.

5. It is necessary that the quantity of the commodity is agreed upon in absolute terms. It should be measured or weighed in its usual measure only.

6. The exact date and place of delivery must be specified in the contract.

7. Salam cannot be effected for things that must be delivered at spot.

8. The Salam price is generally lower than the price of a spot sale. The difference in the two prices may be a valid profit for the IFI.

9. A security in the form of a guarantee, mortgage or hypothecation may be required for a Salam in order to ensure that the seller delivers.

10. The seller at the time of delivery delivers commodities and not money to the buyer.

8.4 Istitna Financing

Istitna is a sale transaction where a commodity is transacted for before it comes into existence. It is an order to manufacturer a specific commodity for the purchaser. The manufacturer uses his own material to manufacture the required goods. In an Istitna, the price must be fixed with the consent of all parties involved. All necessary specifications of the commodity must be fully agreed on. After giving prior notice, either party can cancel the contract before the manufacturing party has begun its work. Once work starts, the contract cannot be cancelled unilaterally. It is not necessary in an Istitna that the date of delivery be fixed. However, the purchaser may fix a maximum time for delivery, and if the manufacturer further delays the delivery, purchaser will not be bound to accept the goods and to pay the price.

Istitna may be used to provide home financing. If the client owns land and
seeks financing for the construction of a house, the financier may undertake to construct the house based on an Iṣlisna. If the client does not own the land and wants to purchase that too, the financier can provide him with a constructed house on a specified piece of land. The financier does not have to construct the house himself. He can either enter into a parallel Iṣlisna with a third party or hire the services of a contractor (other than the client). He must calculate his Cost and fix the price of the Iṣlisna with his client that allows him to make a reasonable profit over his cost. The payment of installments by the client may start from the day when the parties sign the contract of Iṣlisna. In order to secure the payment of installments, the title deeds of the house or land, or any other property of the client may be kept by the financier as a security until the last installment is paid by the client. The financier will be responsible to strictly conform to the specifications in the agreement for the construction of the house. The cost of correcting any discrepancy would have to be borne by him.

Iṣlisna may also be used for similar projects like installation of an air conditioner plant in the client’s factory, building a bridge or a highway. The modern BOT (buy, operate and transfer) agreements may be formalized through an Iṣlisna agreement as well. Therefore, if the government wants to build a highway, it may enter into an Iṣlisna contract with the builder.

9. Leasing Based Financing Instruments

9.1 Ijarah Financing

Ijarah means, "To give something on rent". In Islamic jurisprudence, the term Ijarah is used for two different situations.

- In the first place, it means, to employ the services of a person on wages given to him as consideration for his hired services.
- The second type of Ijarah refers to the transfer of usufruct (entitlement of use) of an asset by the owner to another person for an agreed period and agreed rentals (Ujr).

Under an ijarah financing arrangement, the customer approaches the IFI and expresses his desire for a particular asset/property. The IFI acquires the asset based on an undertaking of the customer to acquire the asset on Ijarah basis. The IFI leases it (transfers the use of the asset and gives physical possession) to the customer for an agreed period of time, and against an agreed amount of rentals. The lease duration usually varies from three months to five years or more, depending on the nature of the asset and lessees requirements. The IFI receives profit from the rental of the asset and retains ownership of the asset. Upon expiration of the lease, the lessee returns the asset to the lessor (the IFI). The IFI may sell the asset to the lessee at the end of the term at a nominal price.
The following main points are considered in the Ijarah transaction:

1. It is necessary for a valid lease that the leased asset is fully identified by the parties. The asset under Ijarah should be valuable, non-perishable, non-consumable, identified and quantified. All those things, which are consumed or perish during their use, cannot become the subject matter of Ijarah, for instance money, wheat etc.

2. As long as the leased asset remains in the ownership of the IFIs, all the liabilities/risks, emerging from the ownership shall be borne by it. The lessee is liable to compensate the lessor (IFI) for any harm to the leased asset caused by any misuse or willful negligence.

3. The lessee (customer) cannot use the leased asset for any purpose other than the purpose specified in the lease agreement. However, if no such purpose is specified in the agreement, the lessee can use it for any legitimate purpose in the normal course.

4. A property jointly owned by two or more persons can be leased out and the rental shall be distributed between all joint owners according to the proportion of their respective shares in the property. A joint owner of a property can lease his proportionate share only to his co-sharer and not to any other person.

5. The rental must be determined at the time of contract for the whole period of lease. It is permissible that different amounts of rent are fixed for different phases during the lease period, provided that the amount of rent for each phase is specifically agreed upon at the time of executing a lease. If the rent for a subsequent phase of the lease period has not been determined or has been left at the option of the lessor,
the lease is not valid. The lessor cannot increase the rent unilaterally, and any agreement to this effect is void.

6. Determination of rental with regard to aggregate cost incurred in purchase of the asset by the lessor, as normally done in financial leases, is not against the rules of Shari’ah, if both parties agree to it, provided that all other conditions of a valid lease prescribed by Shari’ah are fully adhered to.

7. Lease period shall commence from the date on which the leased asset has been delivered to the lessee.

8. If the leased asset has totally lost the function for which it was leased, the contract will stand terminated.

9. The rentals can be based on or benchmarked with some Index as well. In this case, the ceiling and floor rentals would specifically be mentioned in the agreement for validity of lease.

10. At the end of the lease period, the ownership of the property may be transferred to the lessee against a nominal price through a separate sale deed to be executed after the expiry of the lease.

There are two main types of Ijarah Agreements:

**Al-Ijarah Thumma Al-Bai**

Al-ijarah thumma al-bai (AITAB) financing is essentially an ijarah (leasing) contract combined with a bai (purchase) contract. Under the first contract, the purchaser (customer) leases the goods from the owner (the IFI) at an agreed rental price for a specified period. Upon expiration of the leasing period, the purchaser enters into a second contract to purchase the goods from the owner at an agreed price. The transaction can also be referred to as an “ijarah contract ending with purchase.”

**Ijarah Wa Iqtina**

It is allowed in Shari’ah that the lessor signs a separate promise, (but not an agreement or contract) to gift the leased asset to lessee at the end of lease period, subject to the payment of all amounts of rent. There can also be a unilateral promise by the lessee to purchase the asset at the end of Ijarah period.

Alternatively, there may be an undertaking by the IFI to sell the asset to the lessee at the end of the Ijarah period.

However, the validity of this arrangement is subject to two basic conditions:

- The Ijarah agreement should not have a clause regarding the lessor’s
promise to gift or sell the leased property to the lessee at the end of the Ijarah period. There should be a separate document stipulating this promise by the lessor.

- The promise should be unilateral and binding on the promisor only. It should not be a bilateral promise binding on both parties, because in that case the contract will be effective on a future date, which is not allowed in the case of sale or gift.

10. Other Modes of Financing / Contracts

10.1 Wakalah

Wakalah refers to a contract where a person authorizes another to take a certain well-defined legal action on his behalf. It is a contract of agency, which means doing any work or providing any service on behalf of any other person for a remunerative or non-remunerative deed.

10.2 Kafalah

A contract of guarantee is a contract to perform the promise or discharge the liability of a third person in case of his default.

10.3 Rahn

Rahn, or mortgage or collateral, is defined in Islamic jurisprudence as "possessions offered as security for a debt so that the debt will be covered in case the debtor fails to pay back the money owed.

10.4 Hawalah

Hawalah is an agreement by which a debtor is freed from a debt by another person becoming responsible for it. Consequently, once the transferee (new debtor) has accepted the transfer of debt, the original debtor (transferor) is released from any obligation of the debt (and creditor has no recourse). The creditor can now claim his debt only from the transferee.

10.5 Wadiah

Wadiah refers to deposited property. It is the acceptance of sums of money for safekeeping in a Shariah-compliant framework, under which it will be repaid. IFIs use the concept of Wadiah (and Amanah) to accept deposits from customers.

10.6 Ju'la

Performing a given task for a prescribed fee in a given period. Bank charges and commission have been interpreted to be ju'alah by the Muslim jurists and thus
considered lawful.

10.7 Muqasah
Debt settled by contra transaction. This concept is applied in setoff regarding the loans.

10.8 Hiba
Something given voluntarily without payment in return to show favor towards someone, honor an occasion, or make a gesture of assistance.

10.9 Waqaf
An endowment of charitable trust in the meaning of holding certain property, and preserving it for the restricted benefit for a certain charitable objective, and prohibiting any use or disposition of it outside that specific objective.

10.10 Qard-Al-Hasanah
A virtuous loan, which is interest-free and extended on goodwill basis, mainly for welfare purposes. The borrower is only required to pay back the borrowed amount. The loan is payable on demand and repayment is obligatory. The Qur’an encourages people to contribute generously to social welfare and helping the needy in society, and "if the debtor is in difficulty, grant him time till it is easy for him to repay.

10.11 Ibra
Ibra in Islamic Law means to free from responsibility. Under Ibra, a person withdraws his right, i.e., his right to collect payment from a person who has the obligation to repay the amount borrowed. Ibra in a financing agreement is termed the concept of giving a rebate to a customer in case of early settlement.

10.12 Takaful
Takaful is an Islamic insurance concept observing the rules and regulations of Islamic law. Takaful is basically a system of Islamic insurance based on the principle of Ta’awun (mutual assistance) and Tabarru (voluntary contribution), where the risk is shared collectively by the group. It is based on cooperation to provide mutual financial security and assistance for safeguarding participants against a defined risk.

The word Takaful is derived from the Arabic word Kafala, which means to guarantee to help and to take care of one’s needs. This concept has been practiced in various forms for over 1400 years. It is a pact among a group of persons who agree jointly to indemnify against loss or damage that may be
suffered by any one of them, out of the funds they donate collectively.

The Takaful contract so agreed usually involves the concepts of Mudarabah, Tabarru' (to donate for benefit of others) and mutual sharing of losses with the overall objective of eliminating the element of uncertainty.

### 10.12.1 Principles of Takaful

The principles of Takaful are as follows:

- Policyholders cooperate among themselves for their common good.
- Every policyholder pays his subscription to help those that need assistance.
- Losses are divided and liabilities spread according to the community pooling system.
- Uncertainty is eliminated in respect of subscription and compensation.
- It does not derive advantage at the cost of others.

Commercial insurance is not allowed for Muslims as agreed upon by most contemporary scholars because it contains the following elements:

- Al-Gharar (Uncertainty)
- Al-Maisir (Gambling)
- Riba (Interest)

### How Takaful Works

The Takaful system operates in the following manner:

a) The Takaful operator creates a fund called "Waqf Fund" or "Participant Takaful Fund" to which a group of individuals contribute an amount called contribution to protect each other against losses due to defined risks.

b) The Takaful Operator acts as Wakeel of the Waqf Fund and also manages the investments on behalf of the participants on the principle of Wakalatul Istithmar or Mudarabah.

c) In the event any participant suffers losses due to the occurrence of an unfortunate defined event, compensation will be paid to him from the Waqf Fund.

d) At the end of the period, surplus or deficit of the Waqf fund is determined.

e) Surplus arising in the Waqf fund is then distributed to participants as per advice of Shari'ah Advisory Board, whereas in case of a deficit, an
A interest free loan called 'Qard e Hasan' is provided by the operator to fund the deficit arising in the Waqf.

10.13 Models of Takaful

There are two models and several variations on how Takaful can be implemented.

10.13.1 Mudaraba Model

Under this model, the Takaful operator and participants form an equity partnership and share profits earned on the contributions paid by the latter in a predetermined manner.

The Takaful operator acts as a Mudharib (entrepreneur) and accepts payments in the form of contributions from the investors (Takaful participants) acting as Sahib-ul-Mal. The contract specifies how the profit (surplus) from the operations of Takaful managed by the Takaful operator is to be shared, in accordance with the principle of al-Mudharabah, between the participants as the providers of capital and the Takaful operator as the entrepreneur.

In order to eliminate the element of uncertainty in the Takaful contract, the concept of tabarru (to donate, to contribute, to give away) is incorporated. In relation to this concept, a participant must agree to relinquish as tabarru, certain proportion of his Takaful installments or Takaful contributions that he agrees or undertakes to pay, should any of his fellow participants suffer a defined loss.

10.13.2 Wakalah Model

The Arabic word 'Wakalah' means agency. In this arrangement, an agency agreement is formed between the operators and the participants in which the former acts as the agent or "wakil" of the latter to manage their participation in a Takaful product provided by the operator.

The surplus of participants' fund investments net of the management fee or expenses goes to the participants. The Takaful operator charges Wakalah fee from contributions that covers most of the expenses of business. The fee is fixed annually in advance in consultation with the Shari'ah committee of the company. In order to give incentive for good governance, management fee is related to the level of performance.

10.13.3 Wakalah Waqf Model

The most common model used by Takaful operators in Pakistan is an enhancement of a Wakalah model named "Wakala - Waqf" model. It is a Wakala model in which the fund is made a separate legal entity by virtue of it
being a Waqf. The relationship of the participants and the operator is directly with the Waqf fund. The participants contribute to the Waqf fund in a form of Tabarru (donation).

The operator serves as the ‘Wakeel’ or Manager of the Waqf fund and charges a 'Wakalah fee'. The Wakeel also invests the funds available in the Waqf in Shari’ah compliant instruments and hence plays the role of a Mudarib. Profits from the investments of the Waqf fund are shared as per a predetermined ratio.

10.14 Types of Takaful

There are two types of Takaful business, namely General Takaful or Non-life Takaful and Family/Takaful or Life Takaful.

10.14.1 General Takaful/ Non-life Takaful

The General Takaful or non-life Takaful is an alternative to non-life conventional insurance offered by conventional insurance companies. The products offered under general Takaful can be sub-divided into following types:

a. Fire and Property Takaful covering risks to property due to fire and lightning, explosions, burglary, natural calamities etc.

b. Marine Takaful catering to needs of businesses such as traders, shipping agents, courier services and transport related companies. It covers losses pertaining to vessels, aircraft or road transportation.

c. Motor Takaful covering risks relating to motor cars and vehicles against theft, accidental damages, third party liability, riot and strike damages, natural calamities etc.

d. Engineering Takaful provides protection against risks involved in construction work, electrical and electronic equipment, machineries, plants etc.

e. Liability Takaful provides coverage against legal liability to pay compensation to third party for loss or damage of property, life etc.

f. Miscellaneous Takaful covering losses relating to theft/snatch of cash, employer’s liability, and fidelity guarantee etc.

10.14.2 Family Takaful/ Life Takaful

It is the alternative to the life insurance and covers risks associated with life while complying with the Shari’ah principles in respect of financial transactions. It can be further divided into following types:
a) **Individual Family Takaful Products**

The most common individual Family Takaful products being sold in Pakistan are saving products particularly, unit linked family Takaful products that enable the person to invest and save for the future while also obtaining insurance protection for the life of the insured. The savings plan has a maturity period that offers cash values accumulated in the investment accounts of participants at the expiry of their membership period.

Supplementary benefits including hospitalization, medical reimbursements, accidental death or disability, waiver of contribution etc. may also be attached to the Family Takaful plans for nominal Takaful charges.

b) **Group Family Takaful Products**

- **Group Family Plans**

  The Group Family Takaful Plans are sold to corporate organizations and financial institutions for offering life insurance coverage to employees and customers. These products are usually pure protection products, and are available at low cost due to spread of risk between large groups of participants.

- **Group Health Plans**

  These products provide health coverage to a group of persons associated with a company and/or financial institution. Under these plans, compensation is paid to covered persons for expenses incurred for medical treatments covered under the plan.

10.14.3 Banca Takaful

BancaTakaful is defined as the distribution of Takaful products by an IFI. For Takaful operators, distribution through Islamic financial institutions allows easy access to a captive market that only wishes to deal in Shari’ah-compliant insurance solutions. As the size and value of Islamic finance assets has grown in number and value, so has the attractiveness of this channel.

Developing more efficient distribution channels continues to be a prominent issue for Takaful operators, who are always looking for ways of achieving enhanced economies of scale while reaching more consumers. BancaTakaful has been increasing its share of Takaful distribution significantly thanks to the compelling economics of its business model.

IFIs and Takaful operators maximize the opportunities through BancaTakaful arrangements to reach out to segments that are not captured by the traditional agency forces. Strategic alliances in the BancaTakaful market are becoming an important delivery channel for Shari’ah compliant insurance products.
In Pakistan, the rapidly expanding Islamic finance network across the country is encouraging Banca Takaful to play an essential role in building the required volumes and achieving economies of scale in the Islamic insurance segment. SECP issued guidelines for Banca Takaful in June 2010 and aims to regulate the relationship between Takaful operators and IFIs in terms of distribution of products.

**10.14.4 Sukuk - Islamic Bonds**

The word "sukuk" is the plural of the Arabic word "sakk," which means "certificate," so sukuk may be described as certificates of trust for the ownership of an asset, or certificates of usufruct. Sukuk differs from conventional bonds in that they do not pay interest. Islam forbids the payment of interest, but a financial obligation or instrument that is linked to the performance of a real asset is acceptable.

Sukuk are one of the most popular and acceptable modes of financing in the Islamic capital market. Sukuk are relatively new financial instruments, first issued by Malaysia in 2000, they were created in response to a need for Shari'ah-compliant medium-term to long-term financing that would have good liquidity in the marketplace.

The most popular structure is the Sukuk Al Ijara, based on an Islamic leasing transaction.

<table>
<thead>
<tr>
<th><strong>Sukuk</strong></th>
<th><strong>Conventional debt finance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Represent ownership of assets</td>
<td>1. Own interest bearing debt</td>
</tr>
<tr>
<td>2. Entitled: (a) share in revenues generated by the sukuk assets (b) share the proceeds obtained from the realization of the sukuk assets</td>
<td>2. Entitled: (a) timely interest payments (b) repayment of principal on time</td>
</tr>
</tbody>
</table>

**Features**

a) No interest is paid on sukuk.
b) They are asset-backed securities.
c) They have an active secondary market.
d) They represent proportional beneficial ownership in the underlying assets.
e) Their holders are entitled to a share in the revenues earned by the sukuk assets.
10.15 Difference Between Conventional Bond and Sukuk

In its simplest form, a bond is a contractual debt obligation whereby the issuer is contractually obliged to pay to bondholders, on certain specified dates, interest and principal. In comparison, under Sukuk structure, each Sukuk holder has an undivided beneficial ownership in the underlying assets. Consequently, Sukuk holders are entitled to share in the revenues generated by the Sukuk assets as well as being entitled to share in the proceeds of the realization of the Sukuk assets.

Marketability: Sukuk are monetized real assets that are liquid, easily transferred and traded in the financial market.

- Ratability: Sukuk can be easily rated
- Enhancement: Different Sukuk structures may allow for credit enhancements
- Versatility: the variety of Sukuk structures defined in the AAOIFI standards allow for structuring across legal and fiscal domains, fixed and variable income options etc.

The issuance of international Sukuk is one of the most significant mechanisms for raising finance in the international capital markets through islamically acceptable structures. Multinational corporations, sovereign bodies, state corporations and financial institutions use international Sukuk issuance as an alternative to syndicated financing. Sukuk represents an undivided proportionate ownership interest in an asset with the corresponding right to the Islamic ally acceptable income streams generated by the asset. These current income streams are established and translated into tradable securities, which can be issued in the capital markets for investors' participation.

10.16 Benefits and Features

- Tradable Shari’ah-compliant capital market product providing medium to long-term fixed or variable rates of return.
- Assessed and rated by national and/or international rating agencies, which investors use as a guideline to assess risk/return parameters of a Sukuk issue.
- Regular periodic income streams during the investment period with easy and efficient settlement, and possibility of capital appreciation of the Sukuk.
- Liquid instruments, tradable in secondary market.

10.17 Structuring of Sukuk

Sukuk typically involves the structuring of pools of Shari’ah-compliant assets
with or without credit enhancement into securities. The structure is based on a specific contract of exchange that can be made through the sale and purchase of an asset based on deferred payment, leasing of specific assets or participation in a joint-venture business.

The issuance of Sukuk requires an exchange of Shari’ah-compliant underlying asset for financial consideration through the application of various Shari’ah principles such as Ijara, Salam, Iistina, Murabaha, etc. The structure of Sukuk has to be reviewed and approved by Shari’ah advisers to ensure compliance with Shari’ah. In addition, the structuring process may also involve the provision of additional protection for investors against late payment, pre-payments, potential write-offs and other similar risks. Such protection is often provided in the form of credit and/or liquidity enhancement schemes.

Sukuk returns are tied to the cash streams generated by the underlying assets. Sukuk returns are tied to the cash streams generated by the underlying assets held in special purpose vehicles (SPVs) or identified separately by the Originator/Issuer. The cash stream can be in the form of profit from a sale, profit from a rental, or a combination of the two. A SPV is created to acquire the assets that will collateralize the sukuk and to issue financial claims on those assets over the defined term of the sukuk. The asset collateral must be Shari’ah compliant. Sukuk are, therefore, monetized real assets that enjoy significant liquidity and are easily transferred and traded in financial markets. A sukuk issue can be structured in a variety of ways that can offer fixed- and variable-income options.

**10.17.1 Sukuk Based on Ijarah**

One of the most popular types of Sukuk is ijarah-based. The cash flows generated by the lease-and-buyback agreement, a combination of rental and principal payments, are passed through to investors. Ijarah-based sukuk have medium to long-term maturities and can be traded in the secondary market. This type of sukuk has gained increasing acceptance among Shari’ah scholars.

**Structure of Ijarah Sukuk**

The structure of the ijarah sukuk consists of the following:

1. The seller sells the assets to the issuer for a purchase price based on the value of the assets.
2. To finance the purchase, the issuer raises sukuk of an equivalent amount through a combination of senior and junior sukuk. The senior sukuk are subscribed by the investors, whereas the junior sukuk are solely subscribed by the seller.
3. The sukuk represent the beneficial rights in the assets whereby the
sukuk holders have an undivided proportionate beneficial interest in the assets.

4. Subsequent to the purchase, the issuer leases the acquired assets to the lessee under ijarah agreement(s) for an ijarah term.

5. The lessee makes ijarah rental payments to the issuer from the income received from the “off-takers” (tenants/customers of the financed project) arising from the license agreement.

6. The ijarah rental payments for the assets received by the issuer from the lessor are then distributed to the sukuk holders as a periodic income-distribution payment in proportion to their holdings in the sukuk.

7. The seller, in the capacity of service agent, enters into a service agency agreement with the issuer to provide major maintenance services and to maintain insurance for the assets.

10.17.2 Sukuk Based on Musharaka

Another type of Sukuk that is also commonly issued is the Musharaka (joint venture) Sukuk. These issues are called “investment sukuk” or “sukukal-Musharaka.” The structure involves the issuer entering into a joint-venture Musharaka agreement with another party (the investor) and incorporates the use of a SPV. Musharaka involves a partnership arrangement between two or more parties to finance a business venture to which all parties contribute capital, either in cash or in kind, for financing the venture.

11. Types of Islamic Funds

11.1 Islamic Unit Trusts Funds

Islamic Unit Trust Funds more commonly referred to as Shari’ah funds or collective investment scheme. These offer investors the opportunity to invest
in a diversified portfolio of securities that are managed and selected by professional portfolio managers in accordance with Shari'ah principles in a joint pool to earn halal profits.

The subscribers of the fund are issued a certificate or unit certifying their subscription and entitling them to the pro-rata profit actually earned by the funds. The return on units is not fixed, and is based on actual profit earned by the fund. The profit of the funds may be derived from two main sources i.e. dividend income and capital gains (purchase of securities and sale at higher prices). Shari'ah-compliant securities include securities (stocks or sukuk) of Islamic financial institutions, securities of companies operated in accordance with Islamic principles, and securities included in Islamic equity indexes.

Islamic mutual funds (unit trusts) vary by investment type and financing method (Murabaha, Musharaka, Ijarah etc.); field of investment (public works, real estate, or leasing); period of investment (short, medium, or long term); risk involved (low, medium, or high risk); and whether they are open or closed funds. There are many types of Islamic Funds, which include Equity Funds, Ijarah Funds, Commodity Murabaha Funds, Real Estate Investment Trusts (REITs) and Mixed Funds etc.

The participants in the process and management of the fund include:

- Fund: According to Shari'ah the Fund structure is typically Wakala-tul-Istithmar. The management company acts as an investment manager (Wakil Bil Istithmar) of the unit trust. The relation between the asset management company and the unit holders is of "Wakala-tul-Istithmar".
- "Unitholder" means the investor to whom a certain number of units are issued and is the owner of an undivided share in the Trust Property up to his share of investments on pari passu (equal) basis. "Unitholders" are the beneficial owners of the fund.
- "Trustee" means the owner of the Trust property, who acts on behalf of the unit holders.

When an investor purchases a unit of the trust, the investor is actually sharing pro rata with other investors in ownership of the assets held by the trust. The manager receives a management fee under the concept of al-ujrah (or fee) for managing the unit trust.

An equity unit trust is the most common type of Islamic unit trust, but corporate and sovereign sukuk (bond) unit trusts are also available. Certain equity unit trusts invest in assets that closely track a particular index and are known as "index trackers."

Specialist unit trusts invest in a single industry or similar group of industries.
Balanced funds incorporate both equity and sukuk securities, and are rebalanced periodically to retain the initial asset allocation. Islamic fund managers have less autonomy than conventional fund managers do because they are usually accountable to a Shariah committee or adviser who rules on the screening criteria for stock selection, and how the criteria are to be interpreted in changing market conditions and company circumstances.

12. Islamic Exchange-Traded Funds

An exchange-traded fund (ETF) is an open-ended fund composed of quoted securities—stocks or bonds—that are selected to closely mimic a benchmark, rather like an index-tracking mutual fund. Unlike an index mutual fund, an ETF is bought and sold on an exchange. The price of an ETF should closely track the weighted net asset values of its portfolio of securities throughout the trading day. An Islamic ETF is structured exactly like a conventional ETF except that the benchmark used in constructing the fund is an index of Shari’ah-compliant securities; that is, the index includes only those securities that have passed Islamic filters to ensure that companies are primarily engaged in permissible business activities and do not have high levels of debt.

12.1 Islamic REITs

An Islamic REIT invests primarily in physical real estate, but it may also hold sukuk, private companies whose main assets comprise real estate, Shari’ah compliant securities of property and non-property companies, units of other Islamic REITs, Shari’ah compliant short-term deposits, and cash.

Islamic REITs vary from country to country. Islamic REITs (I-REITs) are structurally similar to conventional REITs. They are typically structured as property trusts except that they must hold investments that adhere to the principles of Shari’ah. This requirement means that lease financing (ijarah) is used in lieu of an outright purchase of property. The economic, legal, and tax ramifications are effectively the same as in a conventional REIT.

The key benefits of Islamic REITs include the following:

- Lower transaction costs and greater liquidity because most REITs are listed and traded on stock exchanges
- Scalability, unlike property investment companies and
- Diversification across properties with different lease periods and geographical locations

Islamic REIT returns are earned through rental income, capital appreciation of physical property, and securities held as investments. Islamic REIT investments must be reviewed, monitored, and approved as complying with Shari’ah
principles by a Shari'ah committee or adviser. In addition, an Islamic-REIT is required to use a Takaful (Islamic insurance) scheme to insure the real estate.

12.2 Islamic Commodity Funds

An Islamic commodity fund, like all Islamic financial products must comply with Shari'ah principles. Fund transactions are governed by the following rules:

- The commodity must be owned by the seller at the time of sale because short selling is not permitted under Shari'ah, but forward sales only in the case of bai' salam and bai' istisna, are permitted.
- The commodity traded must be halal (permissible), which means that dealing in for example, wine and pork is prohibited.
- The seller must have physical or constructive possession (that is, actual control without actually having physical control) of the commodity to be sold.
- The price of the commodity must be fixed and known to the parties involved.
- Any price that is uncertain, or that is determinable by an uncertain event, renders the sale invalid.

The advantage of a commodity fund is that it is not highly correlated with equity and fixed-income asset classes. Hence, it acts as a diversifying asset, particularly when the other assets held are equities and bonds. A commodity fund aims to provide investors with regular income over the life of the fund—income that is linked to the performance of commodities through investments that conform to Shari'ah principles. The commodity funds generate income from the potential appreciation in commodity prices.

13. KMI-30 Index

Al Meezan Investment Management, a subsidiary of Meezan Bank in collaboration with the Pakistan Stock Exchange has introduced the first co-branded Islamic index of listed companies - KSE Meezan Index. The objective is to provide investors with a suitable benchmark for comparing returns on their Shari'ah compliant investments.

The Index comprises 30 companies that qualify the Shari'ah screening criteria and are weighted by float adjusted market capitalization. An individual security weightage is capped at 12% at the time of re-composition. An index policy committee comprising Al Meezan Investments and Pakistan Stock Exchange (PSX) representatives reviews, recomposes and rebalances the Index bi-annually. Al Meezan Investments has the mandate for Shari'ah screening of stocks to be included in the Index using principles prescribed by the Shari'ah
Supervisory Board of Meezan Bank, which is chaired by eminent Shari’ah scholar Justice (Retd.) Mufti Muhammad Taqi Usmani. KSE Meezan Index is a total return Index based on free float methodology. The index is maintained and disseminated by PSX.

The Shari’ah screening criteria is as follows:

1) Nature of business of the investee company should be Halal
2) The Interest Bearing Debt to Assets ratio should be less than 37%
3) The ratio of Illiquid Assets to Total Assets should be at least 25%
4) The ratio of Non-Compliant Investments to Total Assets should be less than 33%
5) The ratio of Non-Compliant Income to Total Revenue should be less than 5%. (Gross revenue means gross sales plus other income)
6) Market Price per share should be at least equal to or greater than net liquid assets per share

14. **All Shares Islamic Index (Pakistan Stock Exchange)**

Alongside the KMI-30 Index, All Shares Islamic Index has been developed by a panel of experts representing State Bank of Pakistan, Securities and Exchange Commission of Pakistan, Mutual Funds Association of Pakistan, Meezan Bank Limited and Karachi Stock Exchange (now Pakistan Stock Exchange). The index comprises all companies on the Stock Exchange, which qualify under the Screening Criteria given as under:

1. Business of the Investee Company should be Shari’ah compliant
2. Interest Bearing Debt to Total Assets <37%
3. Non-Compliant Investments to Total Assets, <33%
4. Non-complaint Income to Total revenue, 25%
5. The ratio of Illiquid Assets to Total Assets should be at least 25%.
15. **Practice Questions/MCQs**

1. Which of the following transactions display ribal al-nasiyah?
   a. An immediate exchange of equal amounts of gold
   b. Profit and loss sharing on investment of PKR 100 Million
   c. Extending financing of PKR 100 Million with payback of PKR 110 Million after one year
   d. Exchange of a PKR 100 note now for ten PKR 100 notes later
   e. None of the above

2. In which country is the Accounting and Auditing Organization for Islamic Financial Institutions based?
   a. Sudan
   b. Bahrain
   c. Saudi Arabia
   d. Pakistan
   e. Malaysia

3. B wishes to buy a car now but does not have the funds to buy on spot. The seller is willing to sell the car on installments and offers to lend her enough money to buy the car so long as she pays back the loan within three months. Is this transaction permitted in Islamic law?
   a. Yes, if the lady has a mahram with her at contract time
   b. Yes, if the car has at least three months' warranty
   c. Yes, but only if the loan is interest-free
   d. No

4. An investment manager is considering purchasing shares in a company that manufactures farming equipment. Knowing that AAOIFI standards prohibit purchasing shares in a company that uses interest-bearing debt to finance itself, the investment manager investigates the company accounts. What threshold does AAOIFI specify as the maximum permitted amount of interest-bearing debt as a percentage of market capitalisation when undertaking such an investment?
   a. Nothing is specified
   b. 5%
5. Islamic banking structure is based on
   a. Risk sharing
   b. Interest sharing
   c. a & b
   d. Premium sharing

6. Qur'an forbids
   a. Gambling
   b. Interest sharing
   c. Gharar
   d. All of the above answers are correct

7. What is the mechanism in Islamic law that provides for the progressive transfer of ownership of an asset to the beneficial owners as he/she/they keep paying instalments in buying the asset?
   a. Diminishing Musharakah
   b. Ijarah or Islamic Leasing
   c. Hawalah by transferring debt to a third party
   d. Salam with an advance payment for future delivery

8. A type of partnership where one party offers funds while the other gives expertise and management is
   a. Murabaha
   b. Musharika
   c. Ijarah
   d. Mudarabah

9. A method where payments are prepared in phases to aid stage wise progress in manufacturing/processing/building works is
   a. Istisna
   b. Ijarah Wa Iqtina
c. Takaful
d. Wadiah

10. What are the basic principles which govern Islamic Commodity Funds?

11. What are the three principles which govern Islamic derivative instruments?

12. Stocks are like gambling, but Islam permits stocks yet forbids gambling. Explain why?

13. What are the differences between conventional and Islamic REITs?

14. Describe Shariah stock screening and purification of income.

15. What is the reason for discouraging Riba in Islam? What are the two main types of Riba described and what is their nature?

16. How does Islamic finance support economic activity compared to conventional finance?

17. Cite three important differences between conventional and Islamic finance. How does conventional finance view money as a commodity?

18. What does ‘gharar’ mean and why is it discouraged?

19. What is the role of Islamic financial institution as a financier compared to conventional financial institutions?

20. Describe the major types of financing products offered by Islamic Financial institutions?

21. What are the different kinds of ijarah financing?

22. What is the main difference between conventional leasing and ijarah financing?

23. If you are a Relationship Manager at an Islamic Financial Institution, what Islamic financing product would you offer to your customer for housing finance? How will you explain the difference between housing finance offered by conventional banks and Islamic banks to your customer?

24. A Modaraba arrangement is entered into between an Islamic Financial Institution and depositors. Total Investment is Rs. 150 million of which the depositor’s investment is PKR 100 Million and the IFI invests PKR 50 Million. The IFI will manage the fund, therefore, will receive 10% of the profit as fee and the remaining will be distributed equally amongst
depositors and IFI as per the Modarabah contract. Assume that the Modaraba has made a profit of Rs. 50 Million. Calculate the profit for the IFI and depositors as per Modarabah agreement for their individual roles.

25. Explain the concept of Takaful in Islam and the two principles it is based on.

26. Describe the differences that exist between the objectives of a traditional insurer and a Takaful provider.

27. Explain briefly why the inclusion of interest in insurance business is entirely non-Shariah compliant.

28. Define the meaning of Tabarru and the role that it plays in Islamic insurance (Takaful).

29. Describe the meaning of Ghararin Shariah and explain why it would be entirely non-Shariah compliant if included in an insurance contract.

30. What are the three types of Takaful and what is their underlying concept?

31. Explain briefly the main characteristics of the Mudaraba contract.

32. What is the difference between traditional bonds and Sukuk?

33. What are the different asset classes that typically collateralize Sukuk issues?

34. Why is trading of Sukuks discouraged?

35. What are the main features of Sukuks?
16. Solutions for MCQs

Q1. c  Q2. b  Q3. c  
Q4. d  Q5. a  Q6. d  
Q7. a  Q8. d  Q9. a
1. Introduction to Financial Derivatives

1.1 What are Financial Derivatives?

A derivative is a security with a price that is dependent upon or derived from one or more underlying assets. The derivative itself is a contract between two or more parties based upon the asset or assets. Its value is determined by fluctuations in the value of the underlying asset. The most common underlying assets include stocks, bonds, commodities, currencies, interest rates and market indexes.

Derivatives can either be traded over-the-counter (OTC) or on an exchange. OTC derivatives constitute the greater proportion of derivatives in existence and are unregulated, whereas derivatives traded on exchanges are standardized. OTC derivatives generally have greater risk for the counter party than standardized derivatives.
1.2 Types of Derivatives Products

There are three basic types of contracts: futures and forward contracts, options, and swaps.

1.3 Future and Forward Contracts

These are contracts between parties to buy or sell an asset in the future for a specified price. These contracts are usually written in reference to the spot or today's price. The difference between the spot price at time of delivery and the forward or future price is the profit or loss made by the purchaser. These contracts are typically used to hedge risk as well as speculate on future prices. Futures are standardized contracts that trade on exchanges whereas forwards are non-standard and trade OTC.

### Difference between Future and Forward Contracts

<table>
<thead>
<tr>
<th>Future Contract</th>
<th>Forward Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Traded</td>
<td>Traded on OTC market</td>
</tr>
<tr>
<td>Standardized</td>
<td>Non-Standardized. Private agreements between two parties and are not as rigid in their stated terms and conditions</td>
</tr>
<tr>
<td>Lower default risk</td>
<td>Higher default risk</td>
</tr>
<tr>
<td>Mark to market daily, which means that daily changes are settled day by day until the end of the contract. Furthermore, settlement for futures contracts can occur over a range of dates</td>
<td>Settlement of the contract occurs at the end of the contract</td>
</tr>
<tr>
<td>Frequently employed by speculators, who bet on the direction in which an asset's price will move, they are usually closed out prior to maturity and delivery usually never happens</td>
<td>Forward contracts are mostly used by hedgers that want to eliminate the volatility of an asset's price, and delivery of the asset or cash settlement will usually take place</td>
</tr>
</tbody>
</table>

### Options

These contracts give the right but not the obligation to buy or sell an asset. Investors typically will use option contracts when they do not want to take a position in the asset outright, but they want to increase their exposure in case of a large movement in the price of the underlying asset.

### Difference between Option and Future Contracts

<table>
<thead>
<tr>
<th>Option</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gives the buyer the right, but not the obligation to buy (or sell) a certain asset at a specific price at any time during the life of the contract. Buying an options position requires the payment of a premium.</td>
<td>Gives the buyer the obligation to purchase a specific asset, and the seller to sell and deliver that asset at a specific future date, unless the holder's position is closed prior to expiration. Investor can enter into a futures contract with no upfront cost.</td>
</tr>
</tbody>
</table>
There are different option trades that an investor can employ. The most common are:

- **Long Call**: If you believe a stock's price will increase, you will buy the right (long) to buy (call) the stock. For long call holders the payoff is positive if the stock's price exceeds the exercise price by more than the premium paid for the call.

- **Long Put**: If you believe a stock's price will decrease, you will buy the right (long) to sell (put) the stock. As the long put holder, the payoff is positive if the stock's price is below the exercise price by more than the premium paid for the put.

- **Short Call**: If you believe a stock's price will decrease, you will sell or write a call. If you sell a call, then the buyer of the call has the control over whether or not the option will be exercised. You give up control as the short call position holder or seller of the call option. When the stock price falls below the exercise price of the call option, call options expire worth less and the entire premium from sale is earned. Conversely, if the stock price rises, there is unlimited potential for loss unless the seller of call option owns the security.

- **Short Put**: If you believe the stock's price will increase, you will sell or write a put. If stock price rises above the exercise price, the put option will expire worth less and the entire premium from sale will be earned. However, the writer of put option will start losing money if stock prices fall.

### 1.4 Swaps

These are derivatives where counterparties exchange cash flows or other variables associated with different investments. Many times a swap will occur because one party has a comparative advantage in one area such as borrowing funds under variable interest rates, while another party can borrow more freely at the fixed rate. A “plain vanilla” swap is a term used for the simplest variation of a swap. There are many different types of swaps, but two common ones are:

- **Interest Rate Swaps**: Parties exchange a fixed rate for a floating rate loan. If one party has a fixed rate loan but has liabilities that are floating, then that party may enter into a swap with another party and exchange
fixed rate for a floating rate to match liabilities. Interest rates swaps can also be entered through option strategies. A swap option gives the owner the right but not the obligation (like an option) to enter into the swap.

- **Currency Swaps**: One party exchanges loan payments and principal in one currency for payments and principal in another currency.

## 1.5 Use of Derivatives

Derivatives can be used for hedging, speculation and arbitrage by the investors.

### 1.6 Hedging

It involves taking an offsetting position in a derivative in order to balance any gains and losses in the underlying asset. Hedging attempts to eliminate the volatility associated with the price of an asset by taking offsetting positions contrary to what the investor currently has. For example, a sugar producer in Pakistan can hedge risk of increase in raw material (i.e. cane sugar) price by taking a long (buy) position in sugar futures.

### 1.7 Speculation

The main purpose of speculation is to profit from betting on the direction in which an asset will be moving. Speculators make bets or guesses on where they believe the market is headed. For example, if a speculator believes that a stock is underpriced, he or she may buy stock futures to benefit from future appreciation in price. Speculators are vulnerable to both the downside and upside of the market; therefore, speculation can be extremely risky.

### 1.8 Arbitrage

Arbitrage is a way to make risk-free profits by taking advantage of a market's price differences. Cash-and-carry-arbitrage is a combination of a long position in an asset such as a stock or commodity, and a short position in the underlying futures. This arbitrage strategy seeks to exploit pricing inefficiencies for the same asset in the cash (or spot) and futures markets, in order to make riskless profits. The arbitrageur would typically seek to "carry" the asset until the expiration date of the futures contract, at which point it would be delivered against the futures contract. Therefore, this strategy is only viable if the cash inflow from the short futures position exceeds the acquisition cost and carrying costs on the long asset position.

Consider the following example of cash-and-carry-arbitrage. Assume an asset currently trades at PKR100, while the one-month futures contract is priced at
PKR 104. In addition, monthly carrying costs such as storage, insurance and financing costs for this asset amount to PKR 3. In this case, the trader or arbitrageur would buy the asset (or open a long position in it) at PKR 100, and simultaneously sell the one-month futures contract (i.e. initiate a short position in it) at PKR 104. The trader would then carry the asset until the expiration date of the futures contract, and deliver it against the contract, thereby ensuring an arbitrage or riskless profit of PKR 1.

2. Financial Derivatives Market in Pakistan

2.1 Pakistan Mercantile Exchange (PMEX)

Pakistan Mercantile Exchange Limited (PMEX) is Pakistan’s first and only multi-commodity futures exchange, which is licensed and regulated by the Securities and Exchange Commission of Pakistan (SECP). PMEX was formerly called National Commodity Exchange Limited (NCEL). Its shareholders include National Bank of Pakistan, Pakistan Stock Exchange (PSX), ISE Towers REIT Management Limited, LSE Financial Service Limited, Pak Kuwait Investment Co, Pak Brunei Investment Co and Zarai Taraqiati Bank.

Currently the Exchange offers a variety of domestic and international commodities and financial futures. With a sophisticated infrastructure and state-of-the-art technology, PMEX provides a complete suite of services including trading, clearing and settlement, custody as well as back office functionality.

At PMEX, a comprehensive regulatory framework has been put in place to protect the interest of all the stakeholders. This framework comprises of Futures Market Act 2016, as the primary legislation supported by Futures Exchanges (Licensing & Operations) Regulations 2017, Futures Brokers (Licensing & Operations Regulations), 2018 and PMEX Regulations 2007. PMEX’s international affiliations include Association of Futures Markets (AFM) and Futures Industry Association (FIA).

Further, PMEX has signed Memorandum of Understanding (MoUs) with Borsa Istanbul, Izmir Commodity Exchange, Belarusian Universal Commodity Exchange, Iran Mercantile Exchange, Dubai Gold & Commodity Exchange and Dalian Commodity Exchange.

2.2 Key Features of PMEX

- Pre-Trade Checks

PMEX being a new electronic exchange was able to take advantage of recent advances in technology when building its systems. One major feature has been the ability to perform pre-trade checks before orders are accepted for trading.
by the system. Most developed exchanges of the world still do not have this functionality as they rely on post-trade margining and reliance on clearing brokers. However, given the specific nature of local participants and their practices, having a pre-trade check that does not allow orders to be entered unless there are sufficient margins with the exchange is a crucial functionality.

- Segregation of Client Accounts at Exchange-Level

PMEX is one of the world’s first exchanges to implement a system of segregated reporting of individual end-customer ledgers and accounts at the exchange and clearing house levels. While this feature was necessitated by the absence of strong institutional clearing brokers in the country, it has also resulted in better risk management, greater investor protection and more efficient broker operations.

- Direct Market Access

PMEX is a pioneer in providing direct market access to all participants. Normally, this is a service only provided to large clients by other exchanges but using technology to the fullest provides direct trading terminals to all participants free of cost.

- Direct Funds Model

In order to protect the investors’ funds, PMEX is in the process of implementing the ‘Direct Funds Model’ whereby the clients would directly deposit their funds in PMEX’s designated accounts and similarly PMEX would directly credit all withdrawal requests into the clients account.

- Membership

One important aspect of being a demutualized exchange is that membership of the exchange is separate from trading rights on the exchange. Membership of the exchange does not entitle one to share in the ownership of the exchange and hence the important separation of ownership and trading is preserved. In order to eliminate potential conflicts of interest, it is also necessary that membership of the exchange is kept open for new entrants. Maintaining such an open membership model is an important measure to ensure the true spirit of demutualization. Restrictions on new entrants result in a closed culture of a club where the inherent vested interests of maintaining barriers to entry affects the behavior of members. Such a setup is generally considered suboptimal and counterproductive to the higher objective of having deep and liquid markets.

There are two kinds of memberships at PMEX:
1. Universal Membership

2. Commodity Specific Membership

Universal Membership allows brokers to trade all listed contracts on the exchange whereas commodity specific membership gives access to trade contracts on just one specified underlying commodity. The membership fee currently stands at Rs. 3,500,000 and Rs. 1,000,000 for Universal and Commodity specific memberships respectively. Other than the fee, all other financial requirements, rules and regulations are equally applicable to both categories.

- Trading, Clearing & Settlement

Most futures exchanges have separate trading and clearing roles for brokers. This separation is considered more efficient in terms of risk management and operational efficiency. However, being a new exchange and given the nascent state of futures trading in the country, PMEX operates a unified, trading-cum-clearing membership model. Under this model, all PMEX brokers are responsible for clearing their own trades. 'Own trades' also means all trades of broker's clients. Under the regulatory relationship between a member-broker and the exchange, as written in PMEX General Regulations, the broker is the primary obligor to the exchange for all his as well as his customer’s trades.

Current regulatory setup of PMEX implies that all members of the exchange are clearing as well as trading members. In the future, the exchange may create clearing-only and trading-only memberships but current regulations stipulate that brokers must clear all trades done through their brokerage house. This also makes it important for all brokers to be well acquainted with the rules, obligations and procedures regarding trading, clearing and settlement. Trading, clearing and settlement activities are discussed in detail below.

2.3 Trading

Trading can be defined as the act of placing orders in the market and their subsequent execution. As a function, it can be separated from what happens after a trade happens, which will be discussed later. The broker is said to be involved in 'trading-only' activity if he or his clients execute orders in the market. Functionality can be segregated within a trading-cum-clearing brokerage firm as well as where trading is handled separately by the trading desk of the member.

2.4 Clearing

Clearing is the process of reconciling purchases and sales of securities, as well as the direct transfer of funds from one financial institution to another. The
process validates the availability of the appropriate funds, records the transfer, and in the case of securities, ensures the delivery to the buyer. This matching between the accounts of buyers and sellers is essential in order to complete the obligations of buyers and sellers arising out of the trade.

With advances in technology and operations, it now seems an automatic step from trading to clearing. However, the two steps can be divided distinctly if separate entities are handling the processes. Many exchanges around the world rely on other clearing houses to process trades executed by their systems. Equally prevalent is the system of own clearing. PMEX falls under this category where it has its own clearing house. Having its own clearinghouse, along with a unified system and database, the exchange is able to operate straight through processing. This eliminates discrepancies and risks that were possible in older, manual trading systems.

In terms of futures trading, clearing also involves the inherent process of central counter party novation. Novation involves the clearinghouse becoming counter party to all trades, i.e. a buyer to every seller and a seller to every buyer. The clearing house has no net position and all participants face the clearing house as their counter party.

2.5 Settlement

Settlement is the third part of the transaction, which completes the trading process. It involves the closure of all obligations arising out of the initial transaction resulting in payment and delivery of cash and asset. In modern, straight-through-processing systems, trading and clearing are often integrated with robust pre-trade checks, margining regimes and other risk management measures. Settlement, however, can involve a certain element of manual or out-of-the systems reliance. This can be due to dependence on banking systems that may not be fully integrated with the trading and clearing systems of the exchange and the clearing house.

On the delivery side, often the underlying assets are traded and settled according to trade conventions of the spot market. Depending on how well an exchange's delivery system is integrated with the underlying market, the settlement process can be efficient or cumbersome. At PMEX, the cash settlement process is very advanced and is linked through the Clearing Settlement & Reporting (CSR) system with online banking networks of the exchange designated clearing banks. Transfer of funds takes place in real-time between the broker and the exchange if done through the exchange designated clearing banks.
2.6 PMEX Brokers

A commodity broker is a corporate entity who executes orders to buy or sell commodity contracts on behalf of clients and charges them a commission.

In order to become a PMEX broker, the corporate entity needs to obtain PMEX membership and then get themselves registered with SECP. At present PMEX members stand at over 300 members and PMEX is determined to expand the member network and market penetration even further by focusing on smaller cities across Pakistan.

To open an account with the PMEX broker, the investor has to:

- Fill out the PMEX prescribed Account Opening Form
- Carefully read and sign the Risk Disclosure Document
- Provide the basic know your customer (KYC) details

Information Required for Account Opening at PMEX

<table>
<thead>
<tr>
<th>Individuals</th>
<th>Companies and Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Date of Birth</td>
<td>• Board Resolution</td>
</tr>
<tr>
<td>• Gender</td>
<td>• Certificate of Incorporation</td>
</tr>
<tr>
<td>• Address</td>
<td>• Date of Business commencement</td>
</tr>
<tr>
<td>• Phone No.</td>
<td>• National Tax Number (NTN)</td>
</tr>
<tr>
<td>• Email</td>
<td>• Sales tax registration number</td>
</tr>
<tr>
<td>• CNIC</td>
<td></td>
</tr>
<tr>
<td>• Occupation</td>
<td></td>
</tr>
<tr>
<td>• Annual income in last 3 years</td>
<td></td>
</tr>
</tbody>
</table>

2.7 Types of Orders

A basic concept that must be understood before learning about specific order types is the direction in which a trade can be established. Trades can be entered in two different directions, depending on the anticipation of a rising or falling market. Long trades/positions are the classic method of buying with the intention of profiting from a rising market. Long trades can be conducted through all brokers and do not necessarily require the trader to have a margin account (assuming the account has funds to cover the transaction). The losses from a long trade are considered limited (even though these losses could be extensive). This is because if a long trade is entered at any level, the price can only go as low as PKR 0 if the trade moves in the wrong direction.

Short trades/positions, on the other hand, are entered with the intention of profiting from a falling market. This is accomplished by borrowing a stock, futures contract or other instrument from a broker and then selling them.
Once price reaches the target level, traders buyback the shares (or contracts), or buy to cover, and replace what was originally borrowed from the broker. If price drops, the trade may be profitable (depending on other factors such as slippage and commission); if price rises, the trade will be a loss. Short trading requires a margin account with a broker, since the trader must borrow shares/contracts from the broker in order to complete the transaction. Not all trading instruments can be sold short, and not all brokers offer the same instruments for short sale.

2.8 Market Order

A market order is the most basic type of trade order. It instructs the broker to buy (or sell) at the best price that is currently available. Order entry interfaces usually have “buy” and “sell” buttons to make these orders quick and easy. Typically, this type of order will be executed immediately. The primary advantage to using a market order is that the trader is guaranteed to get the trade filled. If a trader absolutely needs to get in or out of a trade, a market order is the most reliable order type. The downside, however, is that market orders do not guarantee price, and they do not allow any precision in order entry and can lead to costly slippage. Using market orders only in markets with good liquidity can help limit losses from slippage.

Ideally, a market order to buy is filled at the ask price, and a market order to sell is filled at the bid price. It is essential to remember, however, that the last-traded price is not automatically the price at which a market order will be executed. This is especially true in fast-moving or thinly traded markets.

2.9 Limit Order

A limit order is an order to buy (or sell) at a specified price or better. A buy limit order (a limit order to buy) can only be executed at the specified limit price or lower. Conversely, a sell limit order (a limit order to sell) will be executed at the specified limit price or higher. Unlike a market order where the trader can simply press, “buy” and let the market “choose” the price, a trader must specify a desired price when using a limit order. While a limit orders prevents negative slippage, it does not guarantee a fill.
A limit order will only be filled if price reaches the specified limit price, and a trading opportunity could be missed if price moves away from the limit price before it can be filled. Note: the market can move to the limit price and the order still may not be filled if there are not enough buyers or sellers (depending on the trade direction) at that particular price level.

2.10 Stop Order

A stop order to buy or sell becomes active only after a specified price level has been reached (the "stop level"). Stop orders work in the opposite direction of limit orders: a buy stop order is placed above the market, and a sell stop order is placed below the market. Once the stop level has been reached, the order is automatically converted to a market or limit order (depending on the type of order that is specified). In this sense, a stop order acts as a trigger for the market or limit order.

Consequently, stop orders are further defined as stop-market or stop-limit orders. A stop-market order sends a market order to the market once the stop level has been reached; a stop-limit order sends a limit order. Stop-market orders are perhaps the most commonly used since they are typically filled more consistently.

<table>
<thead>
<tr>
<th>Orders</th>
<th>Bid Size</th>
<th>Price</th>
<th>Ask Size</th>
<th>Vol Bars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limit Order to sell</td>
<td>Limit Order to buy</td>
<td>8.93</td>
<td>1000</td>
<td>8.92</td>
</tr>
<tr>
<td>8.91</td>
<td>1900 (2)</td>
<td>8.90</td>
<td>8.89</td>
<td>8.87</td>
</tr>
<tr>
<td>8.86</td>
<td>3400</td>
<td>8.85</td>
<td>7300</td>
<td>8.84</td>
</tr>
<tr>
<td>8.83</td>
<td>11300</td>
<td>8.82</td>
<td>11625</td>
<td>8.81</td>
</tr>
<tr>
<td>8.80</td>
<td>23510</td>
<td>8.79</td>
<td>8.78</td>
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<td>8.76</td>
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<tr>
<td>8.61</td>
<td>8.60</td>
<td>8.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>210452 (11)</td>
<td>8.78</td>
<td>138992 (10)</td>
<td>8.77</td>
<td></td>
</tr>
<tr>
<td>48431 (2)</td>
<td>8.76</td>
<td>8.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36687</td>
<td>v 8.75</td>
<td>8.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36294</td>
<td>8.73</td>
<td>8.72</td>
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<td>34934</td>
<td>8.71</td>
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<td>32505</td>
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<td>18100</td>
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<td>7416</td>
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<td>8748</td>
<td>8.63</td>
<td>8.62</td>
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</tr>
<tr>
<td>8650</td>
<td>8.61</td>
<td>8.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Open Interest

The total number of contracts or futures contracts of a given commodity that have not yet been closed or delivered on a particular day. Each open transaction consists of a buyer and a seller, but in an open interest calculation, only one side of the contract is counted.

Order Durations

One required input for all orders is the information regarding how long the order will remain active in the market. PMEX currently offers two types of parameters for orders:

1. Day Orders

This parameter value is the default setting at PMEX and makes all such orders valid until day end. As the trading day ends, all standing (or working) orders will be cancelled.

2. Good Until Cancelled Orders (GTC)

If a trader flags an order as GTC at the time of entering, the order will remain active in the market until it is cancelled or the contract in which it is placed expires. This category is useful for traders who want to maintain a given order until execution and do not want orders to be cancelled automatically at close of trading day.
**PMEX Screen Shots of Various Types of Orders**

<table>
<thead>
<tr>
<th>Contract/Order Code</th>
<th>Status</th>
<th>Price</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPETT11-DE18</td>
<td>Open</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>CRUDE10-DE18</td>
<td>Open</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>CRUDE11-DE18</td>
<td>Open</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>CRUDE12-DE18</td>
<td>Open</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>CRUDE13-DE18</td>
<td>Open</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>CRUDE14-DE18</td>
<td>Open</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>CRUDE15-DE18</td>
<td>Open</td>
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<td>250</td>
</tr>
<tr>
<td>CRUDE16-DE18</td>
<td>Open</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>CRUDE17-DE18</td>
<td>Open</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>CRUDE18-DE18</td>
<td>Open</td>
<td></td>
<td>250</td>
</tr>
</tbody>
</table>

**BUY ORDER CONFIRM**

<table>
<thead>
<tr>
<th>Contract/Order Code</th>
<th>Status</th>
<th>Price</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPPER10-DE18</td>
<td>Open</td>
<td>2,6850.92</td>
<td>2,6850.92</td>
</tr>
<tr>
<td>PLATINUM10-DE18</td>
<td>Open</td>
<td>845,946.5</td>
<td>250</td>
</tr>
<tr>
<td>SILVER10-DE18</td>
<td>Open</td>
<td>13,947,13,946</td>
<td>250</td>
</tr>
</tbody>
</table>

**Time Stamp**

<table>
<thead>
<tr>
<th>Time Stamp</th>
<th>Alert</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>03:08 PM</td>
<td>Info</td>
<td>Status [STREAMING]</td>
</tr>
<tr>
<td>03:09 PM</td>
<td>Info</td>
<td>Status [CONNECTING]</td>
</tr>
<tr>
<td>03:10 PM</td>
<td>Info</td>
<td>NEXT Ready</td>
</tr>
</tbody>
</table>

**Message Window**

<table>
<thead>
<tr>
<th>Time Stamp</th>
<th>Alert</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>03:08 PM</td>
<td>Info</td>
<td>Status [STREAMING]</td>
</tr>
<tr>
<td>03:09 PM</td>
<td>Info</td>
<td>Status [CONNECTING]</td>
</tr>
<tr>
<td>03:10 PM</td>
<td>Info</td>
<td>NEXT Ready</td>
</tr>
</tbody>
</table>

**Notes:**
The SKY1000H, SELL1000H, SELL1000H, SELL1000H, SELL1000H and SELL1000H orders are resultant Composite Order Trading (COT) functionality symbols.
Margining

In the futures market, margin has a definition distinct from its definition in the stock market, where margin is the use of borrowed money to purchase securities. In the futures market, margin refers to the initial deposit of "good faith" money into an account in order to enter into a futures contract. This margin is referred to as good faith because it is this money that is used to debit any day-to-day losses.

PMEX margining regime works on an efficient paradigm that aims to maintain a balance between margins and needs of participants. Margins should be set according to the underlying risks of the traded contract. Lower margins can lead to defaults whereas excessive margining also harms market liquidity and can be a catalyst for defaults. While the exchange requires same level of minimum margins from all participants, brokers have the authority to charge higher margins from clients according to their risk profile. Brokers can also distinguish between clients in terms of margins and are allowed to have different margins for different clients. This is based on the view that a broker is the best person to judge the riskiness of a client as opposed to the exchange. Exchange requires a minimum level of margin from all brokers as all brokers are treated equal by the exchange. Brokers, on the other hand, can distinguish between clients.

There are two primary levels of margins at PMEX that a broker has to deposit, Clearing and Initial Margins.

Clearing Margins

Clearing margins, also referred to as clearing deposits, are required from all active brokers of the exchange. The minimum level of clearing deposit required is Rs. 500,000. Brokers can deposit higher clearing margin as well. PMEX specifies a clearing margin for each commodity. A broker's clearing deposit held at the exchange should always be enough to cover the overall exposure taken by all clients of a broker on a gross basis. There is no netting across clients or with broker's own proprietary positions. Under the regulations, a broker is the primary obligor for all his as well his clients' trades. Adequate clearing deposit paid to the exchange is a testimony to a broker's ability to carry out business and financially support the exposures of all his clients.

As clearing margin is different for each commodity contract, the amount of exposure a broker can take will also vary according to what commodities are being traded.
Initial Margins

The initial margins are specifically designed to cater for market risk of open positions. Initial margins are required for each trading account separately with no netting across clients. Initial margins are considered the first line of defense in clearing house risk management, with clearing margins acting as the second line of defense. Initial margin is the minimum amount the exchange expects all participants to pay to the clearing house. It is the obligation of the brokers to collect margins from clients and pass on to the exchange. In order to help brokers in managing client risks, exchange regulations provide powers to brokers for asking higher margins according to their own assessments. Initial margins are required before an order can be accepted for trading in the system.

Other margins as detailed below:

Variation Margins

All accounts are marked-to-market according to exchange specified rules and times. After mark-to-market calculations are complete, the value of each account is updated in the official ledgers of the exchange. The purpose of mark-to-market exercise is to determine the correct value and profit & loss of each account. Once losses have been identified and applied to loss-making accounts, their margin requirements are recalculated. Losses are debited straight away from account value, after which the margin requirements are recalculated and wherever there is a shortfall in margin requirement, a margin call is issued. The requirement to pay the extra amount in order to keep the minimum level of initial margin is effectively the variation margin.

PMEX Screen Shot of Marking to Market
Delivery Margins

For certain contracts, the exchange specifies extra margins nearer the expiry. This is especially the case in deliverable contracts where risks associated with physical delivery are greater and the exchange wants to curb excessive speculation. In order to ensure that genuine traders who are interested and capable of making and taking delivery of commodities are active towards the end of the contract delivery margins are required. For those participants who are only interested in price risk management, imposition of delivery margins acts as a catalyst for rolling over positions to the next contract month. This practice also ensures that prices correctly reflect the underlying market and a natural convergence occurs at the expiry of the contract. Delivery margins can be imposed towards the end of the trading of a contract or after expiry but before final settlement. Delivery margins can be in addition to initial margins or they can replace initial margins, depending at what stage of a contract they become applicable. Applicability of delivery margins is mentioned in contract specifications document and other relevant circulars issued by the exchange.

Special Margins

The exchange can impose other types of margins as well if required by specific circumstances. These can relate to periods of excessive volatility, price inconsistencies, illiquidity, demand-supply mismatch or any other factor deemed by the exchange as warranting additional margins. PMEX General Regulations give the exchange powers to impose additional margins as deemed appropriate. These are further defined through contract specifications or circulars.

Auto Liquidation

In order to provide better risk management tools to brokers, PMEX also provides an auto-liquidation facility. This essentially performs the same function as a stop-loss order. The difference is that in a stop-loss order, the trader specifies a specific price at which the order is activated. In auto-liquidation, brokers assign a specific account value (either in rupee terms or in percentage terms) at which all positions are liquidated. Auto-liquidation can be considered as an overall, account-level stop-loss order, which liquidates all open positions of an account in order to preserve its value and stop it from going into negative.

3. Commodity Future Contracts Offered in Pakistan

PMEX offers products that cater to the needs of all types of market participants such as investors who invest in commodities for long term, traders who work with the aim of earning profit based on their market strategy and hedgers who
trade to mitigate their risk, using commodity futures market.

There are two kinds of contracts offered at PMEX.

1. **Deliverable Contract**: This is a contract, which is settled through giving/taking the actual delivery of the underlying commodity on final settlement after the expiry day. However, the investor/trader has the right to square off their open positions at any time before expiry and book their profit/losses in term of cash.

2. **Cash Settled Contract**: There is no obligation of giving/taking deliveries of underlying commodities after the expiry of contracts. The profit/loss transferred into the respective traders accounts on final settlement day if their positions remained open on expiry. However, the investor/trader has the right to square off their open positions at any time before expiry and book their profit/losses in term of cash.

3.1 **Types of Contracts Traded on PMEX**

There are four main categories of commodities being offered for trade at PMEX as under:

- Metals (Gold, Silver, Platinum, Palladium, Copper)
- Agricultural (Wheat, Rice, Palm Oil, Cotton, Red Chili, Corn, Soybean & Sugar)
- Energy (WTI Crude Oil, Brent Crude Oil, & Natural Gas)
- Financial Futures (KIBOR, Currencies & Indexes)

<table>
<thead>
<tr>
<th>Physicals</th>
<th>Cash Settled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metals</td>
<td></td>
</tr>
<tr>
<td>Mini Gold Contract</td>
<td>Gold 100gm</td>
</tr>
<tr>
<td>Total Gold Contract</td>
<td>Gold Kilo</td>
</tr>
<tr>
<td>Milli Tola Gold Contract</td>
<td>Gold 50 &amp; 100 Tola</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
</tr>
<tr>
<td>Total Gold Contract</td>
<td>Gold (1oz, 10oz, 100oz) US$ D*</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
</tr>
<tr>
<td>Milli Tola Gold Contract</td>
<td>Silver (10oz, 100oz, 500oz, 5000oz) US$ D*</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
</tr>
<tr>
<td>Milli Tola Gold Contract</td>
<td>Platinum (5oz, 50oz) US$ D*</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
</tr>
<tr>
<td>Milli Tola Gold Contract</td>
<td>Copper (1000lbs, 25000lbs) US$ D*</td>
</tr>
<tr>
<td>Metals</td>
<td></td>
</tr>
<tr>
<td>Milli Tola Gold Contract</td>
<td>Palladium (100oz) US$ D*MilliOunce Gold Contract in USD, EUR, GBP, JPY, AUD, CAD and CHF</td>
</tr>
<tr>
<td>Energy</td>
<td></td>
</tr>
<tr>
<td>IRRI-6 Rice Futures Contract</td>
<td>WTI Crude Oil (10, 100 &amp; 1000 barrels) US$ D*</td>
</tr>
<tr>
<td>Weekly IRRI-6 Futures Contract</td>
<td>Brent Crude Oil (10, 100 &amp; 1000 barrels) US$ D*</td>
</tr>
<tr>
<td>Sugar</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td></td>
</tr>
<tr>
<td>Red Chilli Weekly &amp; Long Dated Futures Contracts (various Grades)</td>
<td>KIBOR Futures Contracts Indexes (DJ, SP500, NASDAQ100, JPYEQTY1 &amp; JPYEQTY5) US$ D*</td>
</tr>
</tbody>
</table>


N.B. All contracts listed on PMEX (both PKR & USD Denominated) are settled in Pak Rupees.
Within each commodity, the Exchange provides different contracts in terms of currency denomination, contract size and tenor. Although the Exchange offers various commodities for investment/trading, bulk of the trade comes from gold, silver and crude oil.

**PMEX Screen Shot of Contract Profiles**

Products traded on PMEX can also be distinguished based on the price benchmark used i.e. global or local. Globally benchmarked products are cash settled whereas local products are physically deliverable.

- **Globally Benchmarked - Cash Settled**

<table>
<thead>
<tr>
<th>Metals</th>
<th>Energy</th>
<th>Agricultural / Petro Chemical</th>
<th>Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>WTI Crude Oil</td>
<td>I – Cotton</td>
<td>FX</td>
</tr>
<tr>
<td>Silver</td>
<td>Brent Crude Oil</td>
<td>I – Wheat</td>
<td>Indexes</td>
</tr>
<tr>
<td>Platinum</td>
<td>Natural Gas</td>
<td>I – Corn</td>
<td></td>
</tr>
<tr>
<td>Palladium</td>
<td></td>
<td>I – Soybean</td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With global price benchmarking of USA and Europe the above-mentioned products serve the need of hedging and trading by exporters, importers, traders, exchange companies, oil marketing companies, petrol pumps, refineries, airlines, etc.
• **Locally Benchmarked**

<table>
<thead>
<tr>
<th>Metals</th>
<th>Agricultural</th>
<th>Financials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>IRRI-6 Rice</td>
<td>KIBOR</td>
</tr>
<tr>
<td></td>
<td>Palm Olein</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sugar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Red Chilli</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fennel Seeds</td>
<td></td>
</tr>
</tbody>
</table>

This market segment is linked to the local economy. The trade carried out on the exchange aims to bring efficiency in price and quality to the entire agriculture value chain from farmers, traders, processors and exporters.

### 3.2 Products in Pipeline

Products to be introduced in the near future include the following:

- **Murabaha** — To serve the need of liquidity management for Islamic Financial Institutions, PMEX has developed an online Shariah Compliant Trading Platform (SCTP). The SCTP enables Islamic Banks to conduct Murabaha Transactions with other banks, corporate entities or individuals in an efficient, transparent, convenient and Shariah Compliant manner. The SBP had allowed PMEX to launch this platform as a pilot from Nov 2017 till Mar 2018 (extended till Oct 2018). PMEX chose High Speed Diesel as the underlying commodity for Murabaha trade. After necessary approvals PMEX plans to launch the product on full scale basis in 2019.

The Exchange is also working on the following products: Mill Specific Sugar, Milli Ounce Gold Contracts denominated in Swiss Franc, Canadian Dollar and Australian Dollar, Platinum and Natural Gas.

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**Product Timeline at PMEX**

- 2007: Gold & Rice contracts were launched
- 2010: Crude Oil, KIBOR and Silver contracts were launched
- 2012: Sugar contract was launched
- 2013: Wheat and ICotton contracts were launched
- 2015: Currencies (COTS) & Red Chilli contracts were launched
- 2017: Nikkei, Palladium, iSoybean, iWheat, iCorn contracts were launched

No. of Contracts: >40
3.3 Key Points for Futures Contract Investors

All futures market investors are required to pay attention to the following to avoid any problem/fraud while investing in futures contract:

1. Verify authenticity of brokerage house and broker/agent
2. Never sign any blank document or cheque
3. Verify if the margins paid to the broker have been remitted to PMEX
4. Obtain the account balance statement from the brokerage house/broker on daily, weekly or quarterly basis to know the current position of the holding maintained in the account. The same may also be collected from PMEX to countercheck the broker's record; and
5. Keep documentary evidence of the following:
   i. Certified duly signed copy of Account Opening Form.
   ii. Copy of document evidencing payment made to and received from the brokerage houses/brokers.

4. Risks Involved for the Investor

The following discussion highlights some major risks in trading commodity futures:

4.1 Unlimited Liability Risk

Perhaps the main cause of risk in futures trading is the fact that trading futures exposes the trader to unlimited liability. Unlimited liability means that losses can accumulate beyond trader’s committed capital or even the amount of cash in the futures trading account as long as the price of the underlying asset continues to move against the future’s position. For instance, if the trader is long in a futures contract, losses will accumulate for as long as the price of the underlying asset keeps moving downwards.

In futures trading, trader needs to only commit capital equal to a small-predetermined fraction of the position value, known as the "Initial Margin" in order to put on a futures position. Any losses made are deducted from the initial margin and then a margin call is issued if initial margin becomes too low. If a loss is big enough to wipe out the entire initial margin deposited and there is not enough money remaining in the trading account to cover the loss, trader would end up owing money to the broker, which can lead to bankruptcy in case of inability to pay. This is completely different from options trading (in the case of buying options) where option premium is the maximum amount a trader can lose. Hence, the liability is limited in case of long position in options.
Unlimited liability means that a strict stop loss and risk management policy needs to be in place when trading futures and that kind of sophistication may be lacking in new futures traders, which is one of the factors that makes futures trading risky for most amateur traders.

4.2 Leverage Risk

Compounding the problem of unlimited liability is the leverage that is involved in futures trading. Depending on the ratio of initial margin, futures trading can give the trader anything between 5 to 100 times leverage. Leverage works positively when prices are moving in your favor, allowing you to make a leveraged return. However, leverage is a double-edged sword and cuts both ways. When the price of the underlying asset moves unfavorably, the trader will start making leveraged losses.

Assuming only PKR 100 is required as initial margin towards a PKR 1000 asset, when the price of that asset goes down by PKR 100, instant 100% loss is incurred on your initial margin while the price of the underlying asset has moved down only by 10%. Indeed, leverage is one of the risks of futures trading that makes it almost impossible for any futures trader to commit every cent into a single futures position. Hence, position sizing is crucial in futures trading, which is yet another aspect of sophistication that is lacking in beginners.

4.3 Daily Settlement Risk

Daily settlement is supposed to be a risk control measure, which prevents losses from building up to default levels and helps lower risk on the exchange's end. However, daily settlement is detrimental to futures traders, as all losses must be settled at the end of each trading day. This can lead to a situation whereby a futures position which is eventually profitable gets closed out prematurely due to losses on short-term whipsaw. Assuming you are bullish on an asset priced at PKR 1000 for an initial margin of PKR100. The asset turned out bullish as expected rallying to PKR 1200 but whipsawed down to PKR 900 on the first day of the trade before rising to that level. If you did not have enough capital to fulfill margin call requirements on that first whipsaw day, your futures position could be forcefully liquidated for that loss on the first day even before that asset has the chance to move to PKR 1200. The only way to overcome such a situation is to make sure that there is enough cash to back up each futures position in the event of temporary price volatilities and that is again, where the art of position sizing comes in.

4.4 Trading Related Risks

Trading related risks of futures trading have to do with the ability to make the correct futures trading decisions and actions. This means being able to make
accurate trend and price analysis as well as prediction, deciding on the correct futures strategy to take advantage of the prediction and executing the trades without mistake. Yes, one can make correct predictions and trading decisions and still make execution mistakes such as choosing the wrong order, clicking on the wrong expiration month or setting an advanced order wrongly resulting in unforeseen losses. Another trading related risk is the risk of futures broker filling futures order at a price slightly more expensive than the trader would like. This is known as "Slippage".

4.5 Market Related Risks

Market related risks that apply to all trading activities apply to futures trading as well. Market related risks consist of two main aspects: Systemic Risk and Secondary Risk.

Systemic Risk, also known as Market Risk, is the risk of the overall market trend moving unfavorably, taking the futures position along with it. This means that no matter which specific futures contract one chooses to trade and no matter how stable one thinks the specific asset and industry is, there still exists risk of the overall market trend moving against the futures position. For instance, if trader is long in a futures contract, he is exposed to the risk of the overall market turning bearish due to an economic crisis. Systemic risk is one risk that cannot be overcome by diversification and all futures traders will be exposed to it unless market neutral futures strategy such as futures arbitrage is used.

Unsystemic Risk, also known as Industry/Sector Risk, is the risk of the specific industry trend moving against the trader. If one is trading futures only in a specific industry, such as crude oil, then one is not only exposed to the systemic risk of global economic performance but also risks specific to the oil market. Unsystemic risk can be overcome through diversification by trading futures in multiple markets.

4.6 Brokerage Risk

Brokerage risk refers to the risk that the futures broker with whom futures trading account has been opened and capital deposited, closes down for whatever reason taking all money with them. This is why it is important to open your futures trading account with large, reputable futures brokers who may be more expensive, but will ensure the safety of your money. Further to protect the investors funds, PMEX is in process of implementing 'Direct Funds Model' whereby the clients would directly deposit the funds in PMEX's designated accounts and similarly PMEX would directly credit all withdrawal requests into the clients account.
4.7 PMEX Risk Disclosure Document

This document should be read by all prospective clients before entering into commodity futures trading and should be read in conjunction with regulations of PMEX. The document is attached as Annexure for reference.
5. Annexure

PMEX Risk Disclosure Document

THIS DOCUMENT SHOULD BE READ BY EACH AND EVERY PROSPECTIVE CLIENT BEFORE ENTERING INTO COMMODITY FUTURES TRADING AND SHOULD BE READ IN CONJUNCTION WITH REGULATIONS OF THE PAKISTAN MERCANTILE EXCHANGE LIMITED ("PMEX").

PMEX has not passed the merits of participating in this trading segment nor has PMEX passed the adequacy or accuracy of this disclosure document. This brief statement does not disclose all of the risks and other significant aspects of trading. In light of the risks, you should undertake such transactions only if you understand the nature of the Futures Contracts (and contractual relationships) into which you are entering and the extent of your exposure to risk. Risk of loss in trading in Commodity Futures Contracts can be substantial. You should carefully consider whether trading is appropriate for you in light of your experience, objectives, financial resources and other relevant circumstances.

Futures trading thus require not only the necessary financial resources but also the financial and emotional temperament. In case of any consequences or loss in the Futures segment, the Client shall be solely responsible for such loss and the Exchange shall not be responsible for the same and it will not be open for any Client to take the plea that no adequate disclosure was made or he was not explained the full risk involved by the Broker. The Client will be solely responsible for the consequences and no contract can be rescinded on that account.

RISKS INVOLVED IN TRADING IN FUTURES CONTRACTS

Effect of "Leverage" or "Gearing"

The amount of margin is small relative to the value of the Commodity Futures Contract so the transactions are 'leveraged' or 'geared'.

Commodity Futures trading, which is conducted with a relatively small amount of margin, provides the possibility of great profit or loss in comparison with the principal investment amount. However, transactions in Futures carry a high degree of risk.

You should therefore completely understand the following statements before actually trading in Commodity Futures Contracts and also trade with caution while taking into account your circumstances, financial resources, etc. If prices move against you, you may lose a part of or the whole margin equivalent to the principal investment amount in a relatively short period of time. Moreover, the
loss may exceed the original margin amount.

I. Commodity Futures trading involves daily settlement of all positions.

Every day the open positions are marked to market based on the settlement price. If the settlement price has moved against you, you will be required to deposit the amount of loss (notional) resulting from such movement. This margin will have to be paid within a stipulated time frame, generally before commencement of trading next day.

II. If you fail to deposit mark to market losses and additional margin by the deadline or if an outstanding debt occurs in your account, the Broker may, without further notice to the Client, liquidate a part of, or the whole position, in order to bring the margin to the required level. In this case, you will be liable for any losses incurred due to such closeouts.

III. Under certain market conditions, an investor may find it difficult or impossible to execute transactions. For example, this situation can occur due to factors such as illiquidity i.e. there are insufficient bids, offers, or suspension of trading due to price limit or circuit breakers etc.

IV. In order to maintain market stability, the following steps may be adopted: changes in the margin rate, increases in the cash margin rate or others. These new measures may be applied to the existing open interests. In such conditions, you will be required to put up additional margins or reduce your positions.

V. You must ask your Broker to provide full details of the Commodity Futures Contracts you plan to trade i.e. the contract specifications and the associated obligations and ensure that your Broker takes no positions without your express written authorization if you deem it necessary.

Risk-Reducing Orders or Strategies

The placing of certain orders (e.g., "stop-loss" orders, or 'stop-limit' orders), which are intended to limit losses to certain amounts, may not be effective because market conditions may make it impossible to execute such orders. Strategies using combinations of positions, such as "spread" positions, may be as risky as taking simple "long" or 'short" positions.

Suspension or restriction of trading and pricing relationships

Market conditions (e.g., illiquidity) and/or the operation of the rules of certain
markets (e.g., the suspension of trading in any contract or contact month because of price limits or "circuit breakers") may increase the risk of loss due to inability to liquidate/offset positions.

**Deposited cash and property**

You should familiarize yourself with the protections accorded to the money or other property you deposit particularly in the event of a firm insolvency or bankruptcy. The extent to which you may recover your money or property may be governed by specific legislation or local rules. In case of any dispute with the Broker, the same shall be subject to arbitration as per the Regulations of the Exchange.

**Commission and other charges**

Before you begin to trade, you should obtain a clear explanation of all commission, fees and other charges for which you will be liable. These charges will affect your net profit (if any) or increase your loss.

**Trading facilities**

The Exchange offers electronic trading facilities, which are computer-based systems for order routing, execution, matching, registration or clearing of trades. As with all facilities and systems, they are vulnerable to temporary disruption or failure. Your ability to recover certain losses may be subject to limits on liability imposed by the system provider, the market, the clearing house and/or Broker firms. Such limits may vary; you should ask the firm with which you deal for details in this respect.

This document does not disclose all of the risks and other significant aspects involved in trading on a Futures market. The Client should therefore study Futures trading carefully before becoming involved in it.

I hereby acknowledge that I have read and understood this risk disclosure statement.

Customer Signature
(If Corporate, or other signatory, then attest with company seal)
Date-Month-Year
6. **MCQs/Practice Questions**

1. Currently PMEX offers
   a) Futures only
   b) Futures and options
   c) Futures, options and swaps

2. An order to buy (or sell) at a specified price or better is called a:
   a) market order
   b) limit order
   c) stop order

3. Under which type of order, the broker is instructed to buy (or sell) at the best price that is currently available:
   a) market order
   b) limit order
   c) stop order

4. In the futures market, margin refers to the:
   a) initial deposit of "good faith" made into an account in order to enter into the futures contract
   b) use of borrowed money to purchase securities
   c) none of the above

5. The commodities being offered for trade at PMEX can be clubbed into the following main categories:
   a) precious metals, agricultural, energy and financial futures
   b) precious metals, energy and financial futures
   c) agricultural, energy and financial futures

6. Although the Exchange offers various commodities for investment/trading, bulk of the trade comes from:
   a) gold, silver and crude oil.
   b) gold, silver and cotton
   c) gold, cotton and wheat

7. Products to be introduced at PMEX in the near future include Murabaha:
   a) True
   b) False
8. Market related risks consist of:
   a) systemic risk
   b) secondary risk
   c) both a) and b)

9. All prospective clients before entering into commodity futures trading should read:
   a) PMEX Risk Disclosure Document
   b) Broker Rules and Regulations
   c) PMEX Handbook

10. Risk control measure which prevents losses from building up to default levels is termed as:
    a) daily settlement
    b) leverage
    c) netting
7. Solutions for MCQs

Q1. c  Q2. b  Q3. a  
Q4. a  Q5. a  Q6. a  
Q7. a  Q8. c  Q9. a  
Q10. a
1. The Concept of Risk and Risk Management

Risk is the likelihood or possibility of an unforeseen event, which may result in a gain or loss. No one really knows what the future holds. You may fall ill tomorrow or you may not. There may be theft at home or may not be. There may be a catastrophe tomorrow, or there may not be.

Risks can be of two types—speculative risk and pure risk. 'Speculative risk' involves three possible outcomes—gain, loss or no change. For example, if you open a new business, your business could be successful and you could end up increasing your wealth, or you could make some bad decisions and end up losing your money, or you could just break-even on your investment. 'Pure risk' is a risk where there is no gain at all. For example, a person could be badly injured in an accident. If that happens, that person's financial loss would involve the cost of recovery (medicine, doctor's fee, etc.) and a loss of income in case of a job loss, if permanently disabled. On the other hand, that person may not have an accident at all, in which case, the person will have neither gain, nor loss. Insurance only covers pure risk, where there is no possibility of financial gain.

Risk management is the process of identifying and measuring risk and taking steps to eliminate or reduce this risk. There are four ways people manage risk.

1) Avoiding risk—you can avoid a car accident by not going out of the house at all. Alternatively, you can avoid a financial loss on investment, by not investing. However, there will most likely be instances where avoiding risk is not an option or practical. For example, in order to avoid the risk of fire, you cannot simply stop using the kitchen stove to cook food.

2) Controlling risk—everyone can try controlling risk by taking certain measures. Driving carefully is a way of controlling accidents. Having fire extinguishers around the house can control the damage in case of
Eating healthy food and hygiene care can reduce instances of illnesses.

3) Transferring risk—you can transfer the risk of financial loss to someone else. Insurance is all about business and individuals transferring risk to the insurance companies. In case of damages, the insurance company bears the loss of value, while the insured recovers (sum-insured) value of the damaged property from the insurance company.

4) Accepting risk—this occurs when you retain all the financial responsibility for a risk. Any risk that is not avoided, controlled or transferred is automatically accepted risk.

1.1 What is Insurance

Insurance is the most commonly used risk management technique. In this, an individual or a business transfers out the risk of financial loss from instances such as accidents, thefts, fires, illnesses and death. The company that accepts risks is called an 'insurer' or an 'insurance company'. The person / business who/which transfers out his/its risk is known as the 'insured'. The insured enters into a contract with an insurance company to compensate the insured in case of a specific incidence. This contract is known as 'insurance policy' or an 'insurance contract'. The financial benefit that an individual or business derives from an insurance company in case of a loss is called 'policy benefit'. There is always a cost involved in insurance. The insured has to pay a certain fee/charge to the insurance company to assume the loss. This is known as the 'insurance premium' or simply 'premium'.

There are three types of pure risks that can be insured:

1) Personal risk: This is the loss associated with health, personal injury or death. This type of risk comes under the ambit of 'Life and health insurance companies'. Personal risks can either be insurance under the 'individual insurance company', where the insured persons are individually identified. Alternatively, it can be insured as 'Group Insurance' where a specific group of people (such as a company's employees) are insured, without identifying each individual covered under the policy.

2) Property damage risk: This is the loss resulting from damage to a person's property from occurrences such as theft, fire, accidents, etc.

3) Liability risk: This covers the risk of unintentional damage / loss to a third party (personal injury or property damage) from the insured person's property or actions. For example, a customer may sue a shop
owner for any accident that might occur in his shop due to his negligence. In this case, the shop owner’s liability cover will help pay the medical bills of the injured customer.

1.2 Managing Risk through Insurance

Many times, people are willing to pay a small amount of money to transfer the risk of a bigger loss to insurance companies. On the other hand, insurance companies collect these small amounts of monies from a large pool of customers, knowing that only a small number of risks will actually materialize.

For example, a general insurance company collects car insurance premiums, which is only a small percentage of the actual value of the car. However, the insurance company collects these premiums from a large number of clients, knowing that within the validity of the insurance contract/policy, only a small percentage of insured cars are likely to be stolen or subject to accidents.

Example

Suppose there are 500 houses in the area, each worth Rs. 100,000. History shows that within a year, only 4 houses burn down accidentally and hence total loss incurred by the insurance company is Rs. 400,000. Suppose each household pays Rs. 900 as premium to the insurance company.

At the end of the year, the insurance company has collected Rs. 900 x 500 = Rs. 450,000 worth premium.

Due to fire, the insurance company has paid claims worth Rs. 100,000 x 4 = Rs. 400,000. In addition, has a net gain of Rs. 50,000.

During this time, the risk of 4 houses being burnt down is shared/divided over 500 households, reducing the cost of insurance for each house. That is, one household only pays Rs. 900 to insure their house.

Insurance companies decide what risks they are willing to insure. In general, insurable risks have the following features.

1) The loss must occur by chance—for example, a car accident may or may not happen. Alternatively, a person may or may not be injured. In case of life insurance companies, while death is a certain event, the timing of a person’s death is not known and hence life is also classified as an insurable risk.

2) The loss must be defined in terms of a) timing and b) amount of payment

   a. The payment normally becomes due at the time of occurrence of loss. For property and health insurance, the timing is usually limited to the validity of the contract. An insurance company becomes liable to pay for the financial loss, if the loss occurs within the validity of the insurance contract.

   b. The amount of payment that becomes due at the occurrence of loss
is subjective. This amount is normally determined through the terms and conditions of the insurance policy. For example, a health insurance policy may cover the actual amounts of medical bills in case of hospitalization, subject to a maximum amount.

3) The loss must be significant—it only makes sense to purchase insurance to cover for a potentially large financial loss.

4) Loss rate must be predictable—the insurance company must be able to predict the number and timings of occurrence of loss within a type of insurance cover. For example, in case of a life insurance company, based on historical life expectancy rates, an insurer should be able to tell the probable number of instances of death within a certain age group or within a certain geographical area. These predictions are based on historical data available.

5) Loss from a single insurance should not be catastrophic for the insurer—an insurance company can only insure a loss, which it is financially capable of paying.

2. Basic Principles of Insurance

2.1 Essentials of a valid contract

A contract is a legally enforceable agreement between two parties. An insurance policy / contract is an agreement between an insurance company and the insured / policyholder. An insurance policy defines the terms of the contract.

A valid contract has the following conditions.

1) Mutual Consent—both the parties to the contract must give their mutual consent to the agreement. It must define the obligations of both parties to the contract and their agreement to be bound by the legal contract.

2) Adequate consideration—the parties to the contract must exchange legally adequate consideration. In case of an insurance contract, the insured pays a premium to the insurance company, while in return, the insurance company promises to cover for the agreed financial expenses/loss in case of occurrence of the stipulated incidence.

3) Legal purpose—the contract should cover a legal purpose—the contract can only be valid if the underlying purpose is lawful and is not against any public interest.

4) Contractual capacity—the two parties under the contract must have
the legal capacity to enter a contract. For example, an individual can enter a contract if he/she is of mature age and is mentally competent. An insurance company can issue an insurance policy, only if it is licensed to insure under the jurisdiction of the country.

2.2 Utmost good faith

- When it comes to insurance, both the insurer and the insured must show good faith to each other in their dealings. This means that all facts that could potentially affect the willingness of the other party to enter into the insurance contract under the agreed terms need to be disclosed to each other.

- An insurance contract may become void or the liability of the insurer may reduce if the insured failed to make material disclosures or has made a misrepresentation to the Insurer before entering into an insurance contract.

- After the commencement of the insurance policy, the insured may not alter the insured property, move it away from the premises (except as agreed under the policy), or use it in any ways that could increase the risk of loss. In case this happens, it is the duty of the insured to inform the insurer immediately.

2.3 Indemnity

Indemnity is the payment against loss incurred. The principle of indemnity states that an insurance claim, paid by the insurance company should not exceed the insured's economic loss. The intent of this principle is to bring back the insured to the same financial standing that existed before the loss or damage occurred. This principle does not apply to life insurance policies.

2.4 Subrogation

The principle of subrogation comes into play when a third party is involved in the loss / damages incurred. Subrogation is a principle of substitution and recovery. When a third party causes a loss to the insured, the insurance company will pay for the damages to the insured and can pursue recovery of this loss from the third party involved. This principle gives the right to an insurance company to pursue legal methods and recover loss from a third party that caused the loss.

2.5 Contribution

This principle comes into play when an insured has entered into an insurance contract with more than one insurance company for the same risk. This
principle prevents an insured from collecting 100% of the loss from more than one policy. It, however, allows insurance companies to share the claim in proportion to their sum insured so that the total amount paid to the insured is equal to the loss incurred.

Suppose, three insurance companies have issued a policy against the same risk, each having insured Rs. 200m, then in case of a loss amounting to say Rs. 150 million, contribution of each company will be as follows:

<table>
<thead>
<tr>
<th>Contribution amount of A</th>
<th>Contribution amount of B</th>
<th>Contribution amount of C</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\frac{200m \times 150m}{600m} = Rs. 50m$</td>
<td>$\frac{200m \times 150m}{600m} = Rs. 50m$</td>
<td>$\frac{200m \times 150m}{600m} = Rs. 50m$</td>
</tr>
</tbody>
</table>

2.6 Insurable interest

An insurable interest is one that the insured owns or has an interest in. The interest can be a person as in case of health or life insurance or it can be a thing, such as a factory, car or home. Thus the principle of ‘insurable interest’ stops a person from getting insurance or from making a claim for a person he does not have a relationship with or thing that he does not possess.

2.7 Proximate cause

Proximate means nearby or close, and ‘proximate cause’ refers to the most direct cause of an event. This principle comes into play when a loss occurs due to a series of causes. The proximate cause, in this case, would mean the biggest cause of loss is taken into consideration. Proximate cause does not apply to life insurance.

2.8 Overinsurance

This is a situation where an insured has bought so much coverage that it exceeds the actual cash value of the property insured. Over insuring, a property means that the policyholder will be paying more than he needs to for the policy. For the insurance company over insurance constitutes a moral hazard because the insured may be tempted to make a fraudulent claim to profit from a loss.

2.9 Underinsurance

Inadequate insurance coverage by the holder of a policy may result in economic losses to the policyholder, since the claim would exceed the maximum amount that can be paid out by the insurance policy. While under insurance may result in lower premiums paid by the policyholder, the loss arising from a claim may far exceed any marginal savings in insurance
premiums. Under insurance can cause a severe financial burden, depending on the asset that is insured and the extent of the shortfall in insurance. For example, assume a shop and its contents are insured against all risks for Rs. 20,000,000, but the cost to replace the shop and contents is Rs. 30,000,000. Subsequently in case the shop and its contents are destroyed, say in a fire, the shop owner will have to bear the difference of Rs. 10,000,000 from his own resources.

3. Types of Insurance

3.1 General Insurance

General insurance is an insurance policy that protects you against losses and damages of property. Some of the categories of general insurance offered in Pakistan are:

3.2 Fire Insurance

Fire insurance protects people from the loss incurred by fires. The insurance company pays out in the event that the property covered under the fire insurance is damaged or destroyed by fire. Depending on the agreed terms of the policy, the insurance may pay the actual value of the property, or it may pay the replacement value.

- An actual cash value policy covers the structure, less depreciation.
- In a replacement value policy, the structure will be replaced in the event of fire, whether it has depreciated or appreciated.

Most policies limit the amount of coverage. Some policies may cover the structure as well as the contents of the property being insured. These added clauses in an insurance policy will increase the cost of insurance (the premium), since they require the insurance company to pay higher amounts in case of fire damages. However, in Pakistan, these options are not available.

The cost of fire insurance varies widely. Some of the factors resulting in variance of fire insurance costs include:

- The use of fire alarms, sprinkler systems, and other safety measures, which can decrease the policy cost.
- The region of the property may cause the insurance to vary. For instance, areas prone to fire risk will have higher insurance cost.

Insured needs study what risks are covered in the policy. A fire caused by a terrorist activity or an earthquake may not be covered under general fire insurance and may require an additional insurance at the cost of higher
premiums.

### 3.3 Marine Insurance

Marine Insurance covers the loss or damage to ships, cargo, terminals, and any transport by which property is transferred, acquired, or held between the points of origin and final destination. Marine also includes Onshore and Offshore exposed property (container terminals, ports, oil platforms, pipelines), Hull, Marine Casualty and Marine Liability.

Following products are commonly available from the insurers:

- Marine Hull Coverage—this policy covers losses to the vessel caused by oceanic perils. This may include (but not limited to) fire and explosion, piracy and theft, earthquake or lightning, accidents in shifting cargo, machinery / hull defects, negligence of crew or pilots, etc.

- Marine Cargo Coverage—Marine Cargo coverage provides protection against damages to cargo during transit by sea, air, road and rail.

- Marine Umbrella Coverage—Marine Umbrella Liability is a broad-spectrum cover offering protection against liabilities to shipping / logistics and transport related companies. This coverage is normally used by institutions such as ship or vessel operators, freight forwarders, railway operators, airlines, and terminal operators.

### 3.4 Motor Insurance

This is the insurance associated with automobiles. There are two basic types of auto insurance coverage:

- Comprehensive Insurance—under this cover, the insured is protected against financial losses including accidental loss to vehicle, car theft, fire, etc.

- Third Party Motor Vehicle Insurance—this cover protects the policyholder from all financial losses arising due to accidental damage liability of all forms to third party, including property damage or bodily injury and death.

### 3.5 Miscellaneous Insurance

Some of the types of insurances that are classified under the miscellaneous insurance are as follows:

- Cash Insurance—the policy can cover Cash in Safe, Cash in Transit and Cash in Counter.
• Fidelity Guarantee Insurance—this policy covers fraud committed by a permanent employee of the organization during the course of his employment.

• Householder’s Comprehensive—this insurance policy provides cover to building and the entire furniture, fixture, electronic items, carpets, etc.

• Travel Insurance—Travel Insurance covers medical expenses and financial and other losses incurred while traveling, either within one's own country, or internationally.

• Other—This may include Workmen Compensation, General Public Liability, Product Liability, Aviation Insurance and Baggage Insurance etc.

4. Life Insurance

Life insurance or life assurance is a contract between the insured/policyholder and the insurance company, under which the insurance company agrees to pay a sum of money to a nominated beneficiary upon the assured person's death, disability or critical illness. In return, the policyholder agrees to pay to insurer a premium, either regularly or as a one-time lump sum amount.

A life insurance policy has two major components. These are:

• Protection - Financial support to the dependents of assured after his death. This type of product is designed to provide a lump sum payment, if a specified event occurs. 'Term insurance' policy comes under this category.

• Investment - Return on premiums invested with the insurer. The main objective of such policies is to facilitate the growth of capital by investing regular or single premiums. Common forms of this category are whole life, universal life, and variable life policies.

4.1 Factors to Consider When Buying Life Insurance

Life insurance can also be one of many ways you plan for the future. Some of the factors that one should consider when buying Life cover are as follows:

• What are your future needs?
• When do you need the money?
• How much you can afford to pay?
• What kinds of policies will meet your needs? This will depend upon your economic conditions and the protection your dependents will need in case of early death, or benefits you will require in case of long life.

• What are your financial liabilities?

4.2 Types of Life Insurance

There are a number of factors that can vary from policy to policy. For example, some policies provide lifetime coverage, while others provide benefit for a fixed number of years. Some define the benefit that you will get, while others build up cash values. Some policies may offer other benefits while you are still living. Below are the various types of life insurances that are available.

Term Insurance

Term Insurance provides covers for a term of one or more years and pays a death benefit only if you die in that term. It does not build up a cash value and the premiums are fully consumed up to the completion of term. Term insurance is significantly less expensive than an equivalent permanent policy but will cost more with age. In most cases, a policyholder is able to renew his term insurance policies for one or more terms even if his health deteriorates. However, each time he renews his policy for a new term, premiums charged by the insurance company may be higher. While signing up for a term insurance, a policy holder needs to ask the insurer what the premiums will be if they wish to renew the policy and until what age they will be given an opportunity to renew the policy. The policy may allow you to convert a term insurance policy into a cash value during a conversion period, though premiums for the new policy will likely be higher than term insurance.

Decreasing Term Insurance

Decreasing term insurance is a type of annual renewable term life insurance that provides a death benefit that decreases at a predetermined rate over the life of the policy. Premiums are usually constant throughout the contract, and reductions in policy pay out typically occur monthly or annually. Term lengths can range anywhere between 1 and 30 years.

Decreasing term insurance is a more affordable option. The death benefit of the policy is designed to match the amortization schedule of a mortgage or any other personal debt that may be too large to be serviced from remaining household income in the event of the policyholder’s death. Because decreasing term insurance offers a pure death benefit without cash accumulation, this insurance option is normally the least expensive.
**Mortgage Protection Insurance**

This is the type of insurance that one may choose in case a property has been bought on a mortgage. Mortgage Protection Insurance covers some or all of the monthly mortgage payments in the event the policyholder loses his job or becomes disabled, for various lengths of time. Most of these policies will also pay off the entire loan in case of the policyholder’s death.

**Group Life Insurance**

Group life insurance is a type of life insurance in which a single contract covers an entire group of people. The policyholder is normally an employer and the policy covers the employees of the employer. Group life insurance is often provided as part of an employee’s compensation benefit. In most cases, the cost of group coverage is far less than what the employees or members would pay for a similar amount of individual protection. As the policyholder, the employer keeps the actual insurance policy, known as the master contract. The employees who are covered receive a certificate of insurance that serves as proof of insurance but is not actually the insurance policy. As with other types of life insurance, group life insurance allows you to choose your beneficiary.

Group life insurance is normally a type of term insurance and is typically provided in the form of yearly renewable term insurance. When group term insurance is provided through your employer, the employer usually pays for most (and in some cases all) of the premiums. The amount of coverage is typically equal to one or two times your annual salary. Group term coverage remains in force until your employment is terminated or until the specific term of coverage ends.

**Cash Value Life Insurance**

Cash Value Life Insurance is a type of insurance where the premiums charged are higher than that charged for the same amount of term insurance. A portion of the premium charged is used to cover the cost of insurance, while the remaining amount is invested by the insurance company to build up a cash value. This cash value can be used by the insured to borrow from the insurance company (also called policy loan). In case an insured is not able to pay back the loan and interest thereon, the same is deducted from the benefits when the insured dies. Cash value can be used to increase one’s income on retirement or to help pay for needs such as a child’s tuition without cancelling the policy. Whole life, universal life and variable life are all types of cash value insurance.

**Whole Life Insurance**

Whole life insurance covers the insured for his whole life, provided all premium
payments have been made. The premium amount per year normally remains the same throughout the life. Hence, in this type of insurance, premiums are comparatively higher at the beginning of the term, relative to the term insurance premiums, while they become comparatively lower at a later stage.

**Universal Life Insurance**

In Universal life insurance, an insured can vary his premium payments. He is able to adjust the face amount of his coverage. The premiums paid (less expense charges) go into a policy account that earns profit. If the yearly premium payment plus the profit in one's account is less than the yearly charges, the account value decreases. If it keeps dropping, eventually the coverage will end. To overcome this, one may need to continue making premium payments, increase the premium amount, or alternatively lower the death benefits. Continuing to pay premiums also leads to a build-up in cash value.

**Variable Universal Life Insurance**

Variable life insurance is a kind of insurance where the death benefits and cash values depend on the investment performance of one or more separate accounts. These may be invested in mutual funds or other investments allowed under the policy. One will have higher death benefits and cash value if the underlying investments do well. The benefits and cash value may be lower if the investments choice does not do as well as expected.

**Participating versus non-participating Life insurance policies**

A participating insurance policy is a policy (usually a whole life policy) that pays dividends (sometimes also called bonus) out of the insurance company's profits. These dividends are paid to the policyholders as if they are shareholders. The policyholders have a variety of options on what to do with these dividends. They may take these payments in cash. Alternately, they have an option to apply the dividends towards their premium payments, hence reducing their costs. They may place the money with the insurance company, which treats the dividends like a savings account, accruing interest for the policyholders. Most participating policies pay a final dividend at the policy's maturity, and some have a guaranteed dividend, which is determined in the insurance contract.

A life insurance policy in which the policyholder does not have the right to receive a portion of the insurance company's profits is a non-participating policy. Under this life insurance policy, the policyholder makes his/her premiums and, in exchange, receives a lump sum on the policyholder's death.
4.3 Health insurance

Health insurance has become a norm due to the ever-increasing medical costs. There are three basic types of health insurance:

• **Individual health insurance**— While purchasing individual health you will have to pass medical examinations and answer certain questions concerning your health where as the other two types of health insurance do not require such inputs.

• **Family health insurance**— This is designed to provide medical coverage for married couples and their children.

• **Group health insurance**— This type of insurance is considered the most affordable and is usually provided by employers to their staff. Under group health insurance, employees can add their spouse and save a considerable amount of money.

4.4 Takaful Versus Conventional Insurance

Takaful is perceived as mutual insurance, where members (policyholders) contribute a certain sum of money to a common pool. Takaful upholds the principle of “bear one another’s burden” and the purpose of the insurance is not to profit.

The principles of Takaful are as follows:

• Policyholders cooperate among themselves for their common good.
• Policyholder’s contributions are considered as donations to the fund pool.
• Every policyholder pays his subscription to help those who need assistance.
• Losses are divided and liabilities spread according to the community pooling system.
• Uncertainty is eliminated concerning subscriptions and compensation.
• It does not derive advantage at the cost of others.

Takaful is implemented under four models. These include:

1. Mudarabah
2. Wakala
3. A combination of Mudarabah and Wakalah and
4. Al Waqf
Mudarabah Model

The Mudarabah model is based on the principle of profit and loss sharing, whereby the manager shares profits and losses with the policyholders. Under the pure Mudarabah model, the Takaful operators and the participants share direct investment income only, and participants are entitled to 100% share of the profit. However, under the modified Mudarabah model, the Takaful income is ploughed back into the Takaful fund and the Takaful company shares the surplus with the participants of the Takaful fund.

Al-Mudarib (Takaful) operator accepts payment of the Takaful contributions (premium) termed Ra’s–ul-Mal from the providers of capital or fund (Takaful participants), who are the Sahib-ul-Mal. The contract specifies how the profits (surplus) from the Takaful operations managed by the Takaful operator will be shared between the participants and the Takaful operator. The sharing maybe in the ratio of 50:50, 60:40, 70:30, or any mutually agreed ratio between the contracting parties.

In order to eliminate the element of uncertainty in the Takaful contract the element of Tabarru (to donate, to contribute, and to give away) is incorporated. Under this concept, the participant agrees to relinquish as Tabarru, a certain proportion of his Takaful contributions that he agrees to pay if any of his fellow participants suffer a defined loss. The sharing of profit is made only after the obligation of assisting the fellow participants has been fulfilled.

Wakalah Model

In Wakalah Model the surplus of policy holders, funds' investment net of the management fee and expenses goes to the policyholders. The operator charges Wakalah fee from contributions that cover most of the expenses of business. The fee rate is fixed annually in advance in consultation with the Shariah committee of the company.

Policyholders share all underwriting risk. The operator is paid a fixed fee to cover expenses, and this is expressed as a percentage of the premium and Takaful fund under management. The operator is also required to fund policyholder deficits interest free until repaid from profits.

Wakalah Waqf Model

This is an extension of the Wakalah Model in which the risk related component of the Takaful contributions is pooled in a separately formed Waqf Pool. The overall Takaful contract is administered by the Wakalah operator as a Wakeel under the Wakalah arrangement. The Takaful operator as Mudarib administers the investment portion of the Waqf Pool under the Mudarabah agreement.
5. **Reinsurance**

An insurance company insures itself by passing a portion of the risks it covers to another insurance company. These insurance companies are also known as Reinsurers or Reinsurance Company. This way the insurance company reduces the likelihood of having to pay a large amount from its own funds in case there is a large insurance claim. By reinsuring, the insurance company spreads the risks. The reinsurer charges a fee to assume the risk on its books. This fee is normally a portion of the premium that the insurer receives for underwriting a policy. The portion of the risk that the reinsurer assumes is called the "ceded risk," and the portion that the insurance company keeps is referred to as "retention."

Reinsurance has a number of benefits for the insurance company:

1. It reduces the volatility of underwriting results. This in turn protects the insurance company's capital base that can be affected by large claims.

2. It allows insurance companies to accept more business with the same amount of capital base. An insurance company's ability to take on risks is limited by its balance sheet (this test is also known as the solvency margin). When the solvency margin reaches its limit, an insurer will have to stop writing more insurance, until it can raise additional capital. By reinsuring, the insurance company passes on a portion of the risk to the reinsurer and hence, does not need to allocate capital to the reinsured portion.

3. An insurance company benefits from the experience and expertise of a reinsurer, which is normally a much larger company having extensively diversified operations across more than one region.

There are two types of reinsurances:

1. **Treaty Reinsurance**

This is a reinsurance contract in which a reinsurer agrees to accept all risks of a particular type or class from the insurance company over a specified period. Reinsurers in a treaty contract are obliged to accept all risks outlined in the contract. There are two types of treaty reinsurance, namely 'Proportional' and 'Non-proportional'.

Proportional reinsurance allows primary insurers and reinsurers to share a proportionate share of premiums and risks. For example, in a fire insurance, under a proportional treaty, if the insurance company cedes 20% of the
premium to the reinsurer, the reinsurer will pay 20% of the value of the claim in case of loss.

With non-proportional reinsurance (also called 'Excess of loss reinsurance'), the reinsurer's liability is not triggered until the insurance company's losses exceed a specified monetary amount, called the "retention." If losses to the insurance (ceding company) are less than the retention, the reinsurer owes nothing.

Non-proportional treaty is normally contracted for car/auto reinsurances. In this case, a reinsurance company pays small auto claims from its own financial resources. However, in case of large losses, say in excess of Rs. 200,000, the insurance company will pay claims up to Rs. 200,000 and the reinsurer will pay anything in excess of this amount. Since the probability of large claims in auto insurance is usually low (normally only in case of theft or total loss in an accident) and the reinsurer does not participate in every loss, the cost of non-proportional treaty is lower than that of the proportional treaty.

2. Facultative Reinsurance

Facultative reinsurance is reinsurance for a single risk. Each individual risk is submitted separately for approval of the reinsurer. This allows the reinsurance company to review individual risks and determine whether to accept or reject the risk. Facultative reinsurance is normally more expensive for the insurer. This type of reinsurance is used for large risks, which the reinsurer may not accept under the treaty reinsurance.

5.1 SECP Regulations for Reinsurance

The reinsurance requirements chalked out by SECP for the sector are very stringent. A minimum of 80% treaty reinsurers must be "A" rated by internationally reputable rating agencies and only 20% can be "BBB" rated. In addition, non-life Insurance Companies are required to offer a government owned reinsurer, Pakistan Reinsurance Company Limited, up to 35% share in the treaties.

6. What to Look For When Purchasing Insurance Policies?

There are a number of factors that need to be considered:

1) Insurance company—one needs to consider the background of the insurance company. Some of the factors that you need to look at while deciding on the insurance company include:

   a. Insurer's Financial Strength rating, which shows the insurer's
capacity to meet policyholders and contract obligations. For local companies operating in Pakistan, this is independently assessed by the two rating agencies in Pakistan, namely 'JCRVIS Credit Rating Company Limited' and 'Pakistan Credit Rating Agency'.

b. Is the insurance company registered with the Securities and Exchange Commission of Pakistan (SECP)? Does the company have valid license to operate?

c. How long has the insurance company been in operations? Does the insurer specialize in the insurance cover that you need?

d. Are company representatives easily accessible, does the company have good after sales services and a quick support system?

e. Are insurance claims processed quickly? Are the policy issuance and claims processing procedures easy?

2) **Price**—one needs to determine if the policy prices/premium are within one’s budget. What is the amount of deductibles? Are there any other costs that you will need to pay? In case of a life insurance policy, which involves a regular stream of premiums to be paid to the insurance company, it is important to check the affordability of the premium over an extended period.

3) **Coverage**—how well does the insurance plan cover the insurance that you desire?

7. **Distribution Channels in the Insurance Sector**

Insurance companies employ a number of selling and distribution means some are identified below

**Direct Sales Force**

Direct selling is the marketing and selling of products directly to consumers. Employing a direct sales force involves setting up a network of distributors to sell your products.

**Bancassurance**

The bank insurance model is called Bancassurance. It involves partnering of a bank and an insurance company, whereby the insurance company uses the bank sales channel to sell its insurance products. This way an insurance company can sell its products to the bank’s client base. Bancassurance allows the insurance company to maintain smaller direct sales teams as their products are sold to bank customers by bank employees. Bank staff are advised
and supported by the insurance company through product information, marketing campaigns and sales training. The bank and the insurance company share the commission. Once sold, the insurance policies are processed and administered by the insurance company.

**Web sales**

Web sales involve selling insurance products through the internet website.

**Telesales**

Telesales involve selling an insurance product through the telephone. This is normally done when an insurance company has an established customer database.

### 7.1 Insurance Intermediaries

Insurance intermediaries serve as the crucial link between insurance companies seeking to place insurance policies and consumers seeking to procure insurance coverage. Insurance intermediaries facilitate the placement and purchase of insurance, and provide services to insurance companies and consumers. Insurance intermediaries are normally categorized as either insurance agents or insurance brokers. The difference between the two relates to the manner in which they work.

Insurance intermediary's services also include record keeping and modelling for insurers, providing advice to clients on selecting insurers, and assisting with claims settlement. They play a key role in providing underwriting information to insurers. They normally solicit quotations from more than one insurance company and help clients make decisions by comparing price, coverage, services and the financial strength of the insurer.

**Insurance Broker**

Insurance brokers typically work for the policyholder in the insurance process and act independently from the insurers. Brokers assist clients in decision making by presenting them with alternative quotes from more than one insurer. In this case, they are acting as 'agent' for the customer. They assess the terms and negotiate with insurance companies on behalf of their clients.

**Insurance Agent**

Insurance agents are licensed to conduct business on behalf of one insurance company. Agents represent the insurer in the insurance process and usually operate under the terms of an agency agreement with the insurer.
Third Party Administrators

Third-party administrators (TPAs) are organizations that are normally employed to help process insurance claims. This can be viewed as 'outsourcing' the administration of the claims processing, since the TPA is performing a task traditionally handled by the insurance company itself.

7.2 Insurance Surveyors

Insurance risk surveyors determine the possible financial risk posed by offering insurance cover for personal items, properties or sites. They conduct surveys, prepare and present reports for insurance underwriters. These reports determine whether insurance cover should be offered and provide advice on improvements that can help reduce the risk of loss. In case a claim is lodged by the insured, an insurance company can hire one or more surveyors, who visit the site of loss, report the cause of the accident, analyze the extent of damage, the compliance of terms and conditions, and assess the amount of loss.

8. Complaint Mechanism

8.1 SECP's role

The Securities and Exchange Commission of Pakistan (SECP) plays a facilitating role by taking up complaints with the respective insurers. However, only cases of delay/non-response regarding matters relating to policies and claims are taken up by SECP with the insurers for speedy disposal. SECP does not carry out any legal dispute resolution and the policyholders are advised to contact the available quasi-judicial / judicial channels including the Insurance Ombudsman, Consumer Protection Forum or the Civil courts for such complaints.

Only complaints from the insurance policyholders themselves are entertained and SECP does not entertain complaints written by advocates or agents or any third parties on behalf of policyholders.

The following are to be followed in case of a complaint:

1. First contact the insurance company—Policyholders who have complaints against insurers are required to first approach the Grievance/Claims/Complaints Cell of the concerned insurer.

2. Contact SECP—if they do not receive a response from insurer within a reasonable period or are dissatisfied with the response of the company, they may then approach SECP for the resolution. There are two methods that can be used to approach SECP.
a. Complaints can be lodged online via SECP’s Service Desk Management System (SDMS) by visiting web-portal https://sdms.secp.gov.pk or call at 0800-88008.

b. Complaints can be mailed to the following address:
   The Executive Director,
   Insurance Division,
   Securities & Exchange Commission of Pakistan
   NIC Building, 63 Jinnah Avenue, Islamabad, Pakistan

c. It can be emailed to complaints@secp.gov.pk. Where complaints are sent through e-mail, complainants are requested to submit complete details of the complaint with history of correspondence with the insurer and their outcome, without which SECP will not be in a position to take up the complaint with the insurer.

8.2 Federal Insurance Ombudsman

The appointment of the Insurance Ombudsman by the Federal Government is required under section 125 of the Insurance Ordinance, 2000 for the purpose of quick disposal of the grievances of the insured. This office plays an important role for the protection of policyholders' interests and in building their confidence in the system. The office of the Insurance Ombudsman is an autonomous national dispute resolution body, which independently and impartially resolves insurance disputes, between insurance policyholders and participating companies, free of cost. The office of the Insurance Ombudsman is operational since May 2006.

8.3 Jurisdiction, Functions and Power

Section 127, of the Insurance Ordinance, 2000 formulates operational parameters of the Office of the Insurance Ombudsman. The jurisdiction, functions and powers of the Insurance Ombudsman are summarized as under:

- On request/complaint of the aggrieved person, the Insurance Ombudsman may undertake any investigation into any allegation of mal-administration, on part of any insurance company, provided that the matter is not with the Wafaqi Mohtasib (Federal Ombudsman), court of competent jurisdiction, tribunal or board in Pakistan. Mal-administration is defined by the Insurance Ordinance, 2000 as corruption, nepotism, neglect, inattention, inordinate delay, incompetence, inefficiency and ineptitude in the administration or discharge of duties and responsibilities.

- Complaints brought in by the Insurance Companies, which relate to the
contract of reinsurance or such sort, are not accepted by the Insurance Ombudsman office for investigation.

- The Insurance Ombudsman office does not investigate complaints by an employee of an insurance company, concerning any personal grievance relating to the employee’s service in the insurance company.

- For determining the root causes of corrupt practices, the Insurance Ombudsman is permitted to arrange studies/research and may recommend appropriate steps for their eradication.

8.4 Procedure For Making Complaints

The procedure for making complaints with the Insurance Ombudsman is laid down under Section 129 of the Insurance Ordinance, 2000 and is summarized as follows:

1) Contact insurance company first before making a complaint. The complainant is required to inform the concerned insurance company in writing of his intention of filing a complaint.

2) If the insurance company either fails to respond, within a period of one month or gives a reply, which is unsatisfactory, the complainant may file a complaint at any time after that within a further period of three months.

3) A complaint should be made on solemn affirmation or oath in writing addressed to the Insurance Ombudsman.

4) The complaint shall set out the full particulars of the complaint matter and the name and address of the complainant.

5) Copy of the notice sent to the insurance company along with postal/courier receipt should also be attached with your complaint.

6) Three complete sets of the complaint are required to be sent to the Ombudsman, at the address and phone numbers as under:

Insurance Ombudsman Secretariat
Plot No.197/5, 2nd Floor
Pakistan Red Crescent Society, Annex Building
Dr. Daud Pota Road
Near Cantt. Station
KARACHI.
Contact Nos.: 021-99207762/63
8.5 Insurance Tribunals

Insurance Tribunal is a body, constituted under the Insurance Ordinance by the Federal Government, with the authority to judge, adjudicate on, or determine claims or disputes. In essence, it is a specialized court formed for the disposal of cases pertaining to the Insurance business.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of Session Court</th>
<th>Territorial Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>District &amp; Session Judge Lahore</td>
<td>Whole Province of Punjab</td>
</tr>
<tr>
<td>2.</td>
<td>District &amp; Session Judge Karachi (Central)</td>
<td>Whole Province of Sindh</td>
</tr>
<tr>
<td>3.</td>
<td>District &amp; Session Judge Peshawar</td>
<td>Whole Province of Khyber Pakhtunkhwa</td>
</tr>
<tr>
<td>4.</td>
<td>District &amp; Session Judge Quetta</td>
<td>Whole Province of Baluchistan</td>
</tr>
</tbody>
</table>

According to the Insurance Ordinance, 2000 the Tribunal consists of a Chairperson who is a serving or retired judge of the High Court, with two or more members having ability and integrity to enable them to discharge the duties and functions of the Tribunal.

In October, 2006, the Federal Government, in consultation with the Chief Justices of Sindh High Court, Lahore High Court, Peshawar High Court and Baluchistan High Court, conferred powers in each province on the District and Session Courts to exercise territorial jurisdiction as specified below:

8.6 Powers of the Insurance Tribunal

The Insurance Ordinance, 2000 gives the following powers to the Insurance Tribunal:

- The Tribunal has all the powers vested in a civil Court under the Code of Civil Procedure, 1908.
- In its criminal jurisdiction, the Tribunal has the same powers as are vested in the Court of Sessions under the Code of Criminal Procedure, 1898.
- The jurisdiction of a Tribunal shall not extend to appeals to the Appellate Bench and Courts, as mentioned in the section 33 and 34 of SECP Act 1997.

8.7 Appeal against the Insurance Tribunal

The decision of the Tribunal on any application is final and cannot be questioned in any Court or before any other authority. If the amount of the claim is more than Rs. 100,000, the aggrieved may file an appeal to the High Court, within a period of thirty days from the date of such decision. An appeal is heard by a Bench of more than two judges of the High Court, having territorial jurisdiction over the relevant Tribunal.
8.8 Small Dispute Resolution Committee

In January 2016, SECP also constituted three small dispute resolution committees (SDRCs) at Islamabad, Lahore and Karachi under section 117 of the Ordinance with a view to expeditiously resolving the grievances pertaining to claims within the prescribed pecuniary limits defined in the SDRC (Constitution and Procedure) Rules, 2015.

The three committees formed under the above-mentioned rules have the authority to arbitrate disputes having pecuniary limits given in the following table:

<table>
<thead>
<tr>
<th>Nature of underlying exposure</th>
<th>Maximum Sum Insured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Life Contract</td>
<td>Rupees 2.5 Million only</td>
</tr>
<tr>
<td>Domestic Insurance Policy</td>
<td>Rupees 5 Million only</td>
</tr>
<tr>
<td>Private motor Insurance policy</td>
<td>Rupees 2.5 Million only</td>
</tr>
</tbody>
</table>

Procedure to lodge complaint with SDRCs.

- A policyholder having a dispute with an insurer shall make an application to the SDRC in a form annexed with the SDRC Rules.
- The SDRC has the power to call for written submissions from the parties to the dispute allowing the parties under dispute a time frame of at least 14 days from the date of dispatch for submission of their written statements.
- The parties shall be bound to provide written submission, if any, to the SDRC within the allowed time frame.
- The SDRC may call for an expert or professional opinion to resolve the dispute.
- The SDRC may also call the parties to the dispute to appear in person for a hearing before the SDRC.
- The SDRC has to resolve the issue within 30 days unless an expert opinion is sought in which case the time frame for dispute resolution may be extended for such additional period as may be required by the SDRC to obtain such opinion.
- The SDRC shall communicate its decision in writing to each party to the dispute and file its decision with SECP on the same day.

9. Insurance Sector in Pakistan

The Securities and Exchange Commission of Pakistan (SECP) regulates the insurance industry in Pakistan, having taken over this responsibility from the
Controller of Insurance in 2001. SECP is committed to protecting the interest of the policy-holders, and has been focusing on developing and strengthening the regulatory framework for all types of insurances, including general insurance, life insurance, Micro-insurance and takaful Insurance. The Insurance Division of SECP regulates, supervises and promotes development of all the players in the insurance sector, including insurance companies, Takaful operators, insurance surveyors and intermediaries. In addition, SECP has also been making efforts to develop micro-insurance, conduct insurance awareness programs and improve the image of the insurance companies.

The industry is divided into four segments that comprise Conventional Life, Conventional Non-Life, Family Takaful and General Takaful respectively.

For Regulatory purposes, conventional life business is further divided into four classes as under:

1) Capital redemption business  
2) Pension funds business  
3) Accident and health business and  
4) Ordinary Life business

For regulatory purposes, conventional non-Life business is further divided into nine classes that include:

i. Marine, aviation and transport business  
i. Motor third party compulsory business  
i. Liability business  
i. Workers' compensation business  
v. Credit and surety ship business  
vi. Accident and health business  
vii. Agriculture insurance including crop insurance and  
ix. Miscellaneous business

Takaful are schemes formed in compliance with the provisions of Islamic Shariah and are based on mutual assistance in case of occurrence of certain contingencies, whereby the participants mutually agree to contribute to the common fund for that purpose.

The table below highlights the number of companies operating in these segments and total Gross Premium written under each segment.

SECP has authorized 13 non-life insurers and 4 life insurers to transact general
and family window takaful business respectively, in Pakistan.

<table>
<thead>
<tr>
<th></th>
<th>Conventional</th>
<th>Takaful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Life Insurance</td>
<td>Non-Life Insurance</td>
</tr>
<tr>
<td>Number of companies</td>
<td>7</td>
<td>38</td>
</tr>
<tr>
<td>Gross premium written (Rs. Billion)</td>
<td>122</td>
<td>62</td>
</tr>
</tbody>
</table>

Source: Insurance Association of Pakistan-Year Book 2014-15

In addition, Pakistan also has one re-insurance company, Pakistan Reinsurance Company Limited, which offers reinsurance to the conventional Non-Life insurance companies.

As of May 2015, there were three local insurance brokers and seven foreign insurance brokers operating with a valid license in Pakistan. Rule 13 of the Insurance Rules, 2002 requires a minimum paid-up share capital of not less than Rs. 10 million for a local broker and US$0.3 million for a foreign insurance broker to be registered in Pakistan.

A list of active licensed insurance surveying companies and authorized surveying officers is also available on SECP website for ready reference.

The insurance industry in Pakistan is regulated under the following Rules and Laws:

i. Unit Linked Product and Fund Rules, 2015
ii. Bancassurance Regulations, 2015
iii. Micro insurance Rules 2014
iv. Insurance Ordinance 2000
v. Insurance Rules 2002 and its subsequent amendments/additions
vi. SEC (Insurance) Rules 2002 and its subsequent amendments/additions
vii. Companies Act 2017
viii. Takaful Rules 2012
ix. The Insurance Companies (Sound and Prudent Management) Regulations, 2012

All insurance companies have to be registered with SECP, before they can legally offer insurance cover. The Insurance Ordinance 2000 stipulates the following pre-requisites for establishing and operating an insurance company.

- Maintain a Statutory Deposit at 10% of the Paid up Capital with SECP (Provided that the Commission may, subject to achievement of levels of solvency as required by the Ordinance, abolish the requirement for this deposit by reducing the required minimum amount to zero) are as under:
### Minimum Paid-up Capital Requirement

<table>
<thead>
<tr>
<th>Type of Insurer</th>
<th>Year 2015</th>
<th>Year 2016</th>
<th>Year 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31st December</td>
<td>30th June</td>
<td>31st December</td>
</tr>
<tr>
<td>Life Insurers</td>
<td>500</td>
<td>550</td>
<td>600</td>
</tr>
<tr>
<td>Non-life insurers</td>
<td>300</td>
<td>350</td>
<td>400</td>
</tr>
</tbody>
</table>

- Comply with the Solvency Requirements as required under the Insurance Ordinance 2000 and Insurance rules.
- Have the ability to meet its liabilities.
- Have the ability to meet the criteria set under The Insurance Companies [Sound & Prudent Management] Regulations 2012.
- Appoints a statutory auditor as approved by the Commission.
- In case of a life insurance company, appoints an actuary.
- The insurer is likely to continue to be able to comply with such provisions of the Insurance Ordinance 2000.
- Once the Certificate of Registration is granted to an insurer for conducting insurance business, the life insurer is allowed to underwrite all classes of life insurance business and a non-life insurer is allowed to underwrite all classes of non-life insurance business subject to the extent it is allowed in the Certificate of Registration.

#### 10. Introduction to Annuities

An annuity is a contract where an insurance company promises to make payments to an annuity holder over a specified period of time or for life. One of the purposes for an annuity is to make sure a person does not outlive his income. An annuity is a type of insurance to protect against the risk of financial hardship during retirement.

An annuity contract has two distinct phases, the accumulation phase and the payout phase. The accumulation phase is the first phase where all the premiums are paid into the annuity and the money grows. The second phase is the payout phase, which is when the annuity actually starts to pay the benefits to the annuity owner.

#### 10.1 Methods of Premium Payment

There is more than one way to fund an annuity contract.

- **Single Premium** — a single, lump-sum payment that fully funds the contract.
- **Fixed Premium** — a systematic investment program that requires the contract
owner to make equal payments of a specific Rupee amount at regular intervals over a given period until the contract is fully funded.

Flexible Premium—an arrangement that largely permits owners to make premium payments whenever and however they choose, above a certain minimum amount. Owners of flexible premium contracts may still opt to make a systematic investment, but they are free to amend the terms of this program at any time, provided the contracts have or will exceed the required minimum investment amount. They are also free to add other money at any time as well.

10.2 Various Types of Annuities

Fixed annuity—this type of annuity accumulates interest on the funds deposited into the annuity on a fixed rate basis. Every fixed annuity has a current interest rate and a minimum guaranteed interest rate. The current interest rate (normally declared on an annual basis) will always be equal to or higher than the minimum guaranteed interest rate. With a fixed annuity, the insurance company assumes the risk of paying at least the minimum guaranteed interest rate.

Variable annuity—a variable annuity pays varying rates of interest on the funds placed inside the annuity based upon the investment options chosen by the annuity owner. If the investment choices do well, the annuity will do well. If the investment choices do poorly, the annuity will not grow as well or even lose value. The insurance company does not guarantee the growth of a variable annuity; the contract holder assumes the risk.

Immediate annuity—this type of annuity begins paying a benefit, usually within 30 days to one year after it is purchased, and requires a lump sum payment.

Indexed annuity—indexed annuities pay an interest rate that is tied to the performance of a common or well-known index such as the KSE100 Index, the CPI, KIBOR, etc. The growth of an indexed annuity is based upon the participation rate of the index it is tied to. For example, if an indexed annuity has a defined participation rate of 70 percent and the index it follows goes up by 10 percent, the annuity’s accumulation value will increase by 7 percent (10 percent increase times the 70 percent participation rate). Most indexed annuities also specify a “floor” that the annuity growth rate cannot go below or offer a minimum interest rate.

11. Methods of Payout

There are several different options that the annuity owner can choose from when deciding on the method of income payment. These are:
Straight Life — the contract pays out to the annuitant (annuity owner) as long as he or she lives, regardless of whether the contract value is exhausted or not. If there is any principal remaining upon the annuitant’s death, however, it goes back to the insurance company that issued the contract. Usually, a straight life payout is higher than any other payout option, but it also has the highest risk of forfeiture upon death.

Life Income with Refund — the annuitant receives income for life, but if there is any principal remaining upon death, it goes to the beneficiary instead of the insurance company. This removal of forfeiture found in straight-life payouts results in a lower initial actuarial payout to the annuitant.

Life Income with Period Certain — the annuitant receives income for life but is guaranteed a certain number of payments regardless of whether the annuitant lives that long. For example, if the period certain is twenty years, and the annuitant dies after thirteen years, the beneficiary will receive the last seven years of payments. Again, the initial payout is less than with a straight life contract.

Joint Life — this arrangement is just like straight life, except that there are two annuitants, and payments will only continue as long as both of them are living. Upon the death of either, payments will cease. This payout option is not commonly used.

Joint Survivor Life (Or Joint and Survivor Annuity) — this is a much more popular option as payments will continue as long as both annuitants are living. Only upon the death of the second annuitant does the contract pass to the beneficiary.

Period Certain — this is probably the simplest of all options. Payments simply continue for a certain period of time, then stop, at which point the contract value is exhausted.

Joint Survivor Life with Period Certain — payments continue until both annuitants are dead, at which time the beneficiary receives the remainder of the contract if the death of the second annuitant transpires within the period certain.

Fixed Amount — the annuitant receives a fixed payment until the contract value is exhausted, regardless of when that will be. If the annuitant dies before the contract is depleted, the beneficiary receives the remainder.

Interest Income Only — the annuitant receives all or part of the interest or gain from the contract without depleting the principal.
12. Practice Questions, MCQs

1. Risks can be of two types
   a. Speculative risk and unforeseen risk
   b. Speculative risk and pure risk.
   c. Pure risk and good risk
   d. Pure risk and business risk

2. Pure risk is where there is
   a. Possibility of gain
   b. Possibility of loss
   c. Possibility of gain and loss
   d. Possibility of neither gain nor loss

3. Risk management is the process of
   a. identifying risk
   b. measuring risk
   c. taking steps to eliminate/reduce risk
   d. all of the above

4. While insuring risk, the company that accepts the risk is called
   a. an 'insurer'
   b. an 'insurance company'
   c. both of the above
   d. none of the above

5. The person who transfers out his risk is known as
   a. the 'insured'
   b. a 'business'
   c. an 'insurer'
   d. a 'contractor'

6. An insurance policy is also known as an insurance contract.
   a. True
   b. False

7. A fee that an insured has to pay to the insurance company to assume the loss is known as the 'premium'.
   a. True
   b. False
8. People are normally willing to pay a large sum of money to transfer small risk to the insurance companies.
   a. True
   b. False

9. Insurance companies collect moneys from a large pool of customers, knowing that only a small number of risks will actually materialize.
   a. True
   b. False

10. A contract is a legally enforceable agreement between
    a. One party
    b. Two parties
    c. At least three parties.

11. An insurance policy/contract is an agreement between
    a. An employer and an employee
    b. An insurance company and the insured.
    c. Two insurance companies
    d. The government and the insurance company

12. A mutual consent implies that
    a. The parties to the contract must agree to be bound under a legal contract
    b. The obligations of the parties to the contract must be defined
    c. Both of the above
    d. None of the above

13. An individual can only enter into a contract if
    a. He is of mature age
    b. He is mentally competent
    c. Both of the above
    d. None of the above

14. An insurance contract may become void or the liability of the insurer may reduce if
    a. The insured failed to make material disclosures
    b. The insured has made a misrepresentation to the insurer before entering into an insurance contract.
    c. Both of the above
d. None of the above

15. Subrogation
   a. Comes into play when a third party is involved in the loss
   b. Is a principle of substitution and recovery
   c. Both of the above
   d. None of the above

16. The principle of subrogation gives the right to an insurance company to pursue legal methods and recover loss from a third party, which caused the loss
   a. True
   b. False

17. Four insurance companies have insured the same property, each having a sum insured of Rs. 500 million. A fire has erupted on the property causing a damage worth Rs. 400 million on the property. How much will each insurance company pay to the insured?
   a. 110 Million
   b. 80 Million
   c. 100 Million

18. Over insuring, a property means that the policyholder will be paying more than he needs to for the policy.
   a. True
   b. False

19. Fire insurance
   a. Protects fires
   b. Protects people from the loss incurred by fires
   c. Provides fire brigade services
   d. None of the above

20. Under fire insurance, the insurance may pay the actual value of the property, or it may pay the replacement value, depending on the agreed terms of the policy.
   a. True
   b. False

21. Fire policies
   a. May cover the structure as well as the contents of the property being insured.
b. May cover the structure but never covers the contents of the property being insured.
c. May cover the contents of the property but never the structure.
d. Neither covers the structure nor the contents of the property being insured.

22. A policy that covers losses to the vessel caused by oceanic perils, including fire and explosion, piracy and theft, etc. is a
   a. Marine Hull Coverage policy
   b. Fire Coverage Policy
   c. Marine Cargo Coverage Policy
   d. Marine Motor Coverage Policy

23. A policy that provides protection against damages to cargo during transit by sea, air, road and rail is a
   a. Marine Hull Coverage Policy
   b. Travel Coverage Policy
   c. Marine Cargo Coverage Policy
   d. Marine Motor Coverage Policy

24. Third Party Motor Vehicle Insurance does not cover financial loss due to bodily injury to third party.
   a) True
   b) False

25. Which of the following insurances are classified under "Miscellaneous insurance"?
   a. Travel Insurance
   b. Fire Insurance
   c. Marine Insurance
   d. None of the above

26. Cash Insurance covers
   a. Cash in Safe
   b. Cash in Transit
   c. Both of the above
   d. Does not cover theft

27. Which of the following policy covers fraud committed by a permanent employee of the organization during the course of his employment
   a. Fiduciary Guarantee Insurance
b. Fidelity Guarantee Insurance
c. Fraud Guarantee Insurance
d. None of the above

28. 'Householder’s Comprehensive’ which provides cover to building and the entire furniture, fixture, electronic items, carpets, etc. comes under
   a. Fire insurance
   b. House insurance
   c. Miscellaneous Insurance
   d. All of the above

29. Travel Insurance covers medical expenses and financial losses incurred only for international travel.
   a. True
   b. False

30. A life insurance policy has two major components.
   a. Protection and Prevention
   b. Protection and Investment
   c. Investment and Savings
   d. Premium and Investment

31. Term Life Insurance provides covers for a term of one or more years and pays a death benefit only if you die during that term.
   a. True
   b. False

32. Term insurance is significantly less expensive than an equivalent permanent policy but will become higher with age.
   a. True
   b. False

33. Decreasing term insurance is
   a. a type of annual renewable term life insurance
   b. provides a death benefit that decreases at a predetermined rate over the life of the policy
   c. is a policy where premiums are usually constant throughout the contract
   d. all of the above

34. Group life insurance is a type of life insurance in which a single contract covers an entire group of people.
35. Under the Group Life Insurance, the policyholder is normally an employee of the company and the policy covers the employer.
   a) True  
   b) False

36. Group life insurance does not allow the employee to choose his/her beneficiary.
   a) True  
   b) False

37. Group life insurance
   a. is a type of term insurance
   b. is a yearly renewable term insurance
   c. remains in force until your employment is terminated or until the specific term of coverage ends
   d. All of the above

38. Whole Life Insurance covers the insured for his whole life, provided all premium payments have been made.
   a. True  
   b. False

39. In Universal Life Insurance, an insured can vary his premium payments.
   a. True  
   b. False

40. A non-participating insurance policy is a policy that pays dividends (sometimes also called bonus) out of the insurance company's profits.
   a. True  
   b. False

41. In a nonparticipating life insurance policy, the policyholder pays his/her premiums and, in exchange, receives a lump sum upon the policyholder's death. This sum does not increase or decrease depending on the performance of the insurance company's portfolio.
   a. True  
   b. False

42. Group health insurance
   a. Is considered to be the most affordable
b. Is usually provided by employers to their staff
c. Can cover an employee’s family too
d. All of the above

43. Under the Mudarabah model, a takaful operator is called
   a. Ra’s-ul-Mal
   b. Sahib-ul-Mal
   c. Al-Mudarib
   d. None of the above

44. Takaful contributions (premiums) are also known as
   a. Ra’s-ul-Mal
   b. Sahib-ul-Mal
   c. Al-Mudarib
   d. None of the above

45. Takaful participants are also called
   a. Ra’s-ul-Mal
   b. Sahib-ul-Mal
   c. Al-Mudarib
   d. None of the above

46. The Mudarabah contract specifies how the profits (surplus) from the
takaful operations will be shared between the participants and the takaful
operator.
   a. True
   b. False

47. In Wakalah Model, the surplus of policyholders’ funds’ investments - net of
the management fee or expenses goes to the shareholders.
   a. True
   b. False

48. In Wakalah Model, policyholders share all underwriting risk.
   a. True
   b. False

49. Wakalah Waqf Model is
   a. An extension of the Wakalah Model
   b. Where risk related component of the Takaful contributions is pooled in
a separately formed Waqf Pool.
c. Both of the above
d. None of the above

50. An insurance company does not need to insure itself.
   a. True
   b. False

51. An insurance company passes a portion of the risks to the reinsurers.
   a. True
   b. False

52. The portion of the risk that the reinsurer assumes is called the "ceded risk," and the portion that the insurance company keeps is referred to as "retention."
   a. True
   b. False

53. A fire insurance in which, the reinsurer will pay 20% of the value of the claim against 20% of the premium ceded to it is an example of:
   a. Non-proportional treaty reinsurance
   b. Proportional treaty reinsurance
   c. Facultative reinsurance
   d. None of the above

54. Non-proportional treaty reinsurance is also called
   a. Excess of loss reinsurance
   b. Excess of profit reinsurance
   c. Facultative reinsurance
   d. None of the above

55. Facultative reinsurance is reinsurance for
   a. A group of risk
   b. A single risk
   c. The entire insurance company
   d. None of the above

56. Facultative reinsurance is normally less expensive for the insurer.
   a. True
   b. False

57. Which of the following are important factors to consider before insuring risks
58. A distribution method, which uses banking network and client base, is known as
   a. Direct sales
   b. Bancassurance
   c. Web sales
   d. Telesales

59. Insurance intermediaries
   a. Facilitate the placement and purchase of insurance
   b. Provide services to insurance companies and consumers
   c. Both of the above
   d. None of the above

60. Insurance intermediaries can be categorized as insurance agents or insurance brokers.
   a. True
   b. False

61. Insurance brokers solicit quotations from more than one insurance company and help clients make decisions by comparing price, coverage, services and the financial strength of the insurer.
   a. True
   b. False

62. An insurance agent typically works for the policyholder in the insurance process and acts independently from the insurers.
   a. True
   b. False

63. Insurance agents are licensed to conduct business on behalf of one insurance company.
   a. True
   b. False

64. Insurance risk surveyors
   a. Determine the possible financial risk posed by an insurance cover
b. Conduct surveys, prepare, and present reports for insurance underwriters.
c. Both of the above
d. None of the above

65. SECP does not take cases of delay/non-response of the insurers.
   a. True
   b. False

66. SECP does not carry out any legal dispute resolution.
   a. True
   b. False

67. The policyholders are advised to contact the quasi-judicial / judicial channels including the Insurance Ombudsman, Consumer Protection Forum or the civil courts for complaints relating to legal disputes.
   a. True
   b. False

68. An insured needs to contact the grievance complaint cell of the insurance company first, before contacting SECP for complaint redressal.
   a. True
   b. False

69. The office of the Insurance Ombudsman is an autonomous national dispute resolution body, which independently and impartially resolves insurance disputes, between insurance policyholders and participating companies.
   a. True
   b. False

70. How many insurance tribunals are there in Pakistan?
   a. One
   b. Two
   c. Four
   d. Five

71. The decision of the Tribunal on any application is final and cannot be questioned in any Court or before any other authority.
   a. True
   b. False

72. Rule 13 of the Insurance Rules, 2002 requires a minimum paid-up share
capital of not less than Rs. 10 million for a local broker and US$0.3 million for a foreign insurance broker to be registered in Pakistan.

73. An insurance company needs to maintain a Statutory Deposit at 10% of the Paid up Capital with SECP.
   a. True
   b. False

74. An annuity is a contract where an annuity holder promises to make payments to an insurance company over a specified period of time or for life.
   a. True
   b. False

75. A fixed annuity
   a. Accumulates interest into the annuity on a fixed rate basis.
   b. Has a current interest rate and a minimum guaranteed interest rate.
   c. The current interest rate will always be equal to or higher than the minimum guaranteed interest rate.
   d. All of the above

76. With a fixed annuity, the insurance company does not assume the risk of paying the minimum guaranteed interest rate.
   a. True
   b. False

77. An annuity which pays rates of interest on the funds based upon the investment options chosen by the annuity owner is a
   a. Variable annuity
   b. Fixed annuity
   c. Immediate annuity
   d. Indexed annuity

78. Since the growth of a variable annuity is not guaranteed by the insurance company, the contract holder assumes the risk.
   a. True
   b. False

79. Indexed annuities pay an interest rate that is tied to the performance of a well-known index such as the KSE100 Index, the CPI, KIBOR, etc.
80. Identify and explain any five-annuity income payment methods.
81. Name the four ways of managing risk. Which of these risk management technique involves insuring the risk?
82. What are the most commonly used methods for eliminating/ reducing risk?
83. Name the three types of pure risks that can be insured?
84. Define personal risk?
85. What is property damage risk?
86. What is liability risk?
87. Name the four conditions of a valid contract.
88. What is insurable interest? What does this principle stop a person from doing?
89. What does 'proximate' mean? What is 'proximate cause'? Does proximate cause apply to life insurance?
90. When does over insurance occur? Why can it be a moral hazard?
91. What is general insurance?
92. Name the four broad classes of risks that can be insured under the general insurance?
93. What is the difference between an actual cash value policy and the replacement value policy?
94. What is marine insurance cover?
95. Name the two basic types of auto insurance covers.
96. Which one of the types of auto insurance represent the minimum legal insurance requirement?
97. What is 'Comprehensive Auto Insurance' cover?
98. List the factors that need to be considered when buying Life cover.
99. In a few sentences, explain what is 'Cash Value Life Insurance'.
100. How does Variable Life insurance work?
101. List three ways a policyholder can utilize the dividends received by the policyholder under the participating insurance policy.
102. Which type of health insurance requires a policyholder to undergo medical examination?
103. What is 'Takaful'?
104. List the six principles of 'Takaful'
105. Name the four models under which takaful is implemented.
106. Name the two types of reinsurances.
107. What is direct sales method?
108. Who are 'Third Party Administrators'?
109. Explain the procedure for making complaints with the Insurance Ombudsman.
110. What are insurance tribunals?
111. List the powers of insurance tribunals.
112. Explain the procedure to lodge complaint with Small Dispute Resolution Committees (SDRCs).
113. Identify the four segments of the insurance industry
114. Identify the four segments of the conventional life business
115. Name and briefly explain the two distinct phases of annuity.
116. How can an annuitant make premium payments? Briefly explain the three options available.
13. Solutions for MCQs

Q1. b  Q2. d  Q3. d  Q4. c  Q5. a  Q6. a  Q7. a  Q8. b  Q9. a  Q10. b  Q11. b  Q12. c  
Q13. c  Q14. c  Q15. c  Q16. a  Q17. c  Q18. a  Q19. b  Q20. a  Q21. a  Q22. a  Q23. c  Q24. b  
Q25. a  Q26. c  Q27. b  Q28. c  Q29. b  Q30. b  Q31. a  Q32. a  Q33. d  Q34. a  Q35. a  Q36. b  
Q37. d  Q38. a  Q39. a  Q40. b  Q41. a  Q42. d  Q43. c  Q44. a  Q45. b  Q46. a  Q47. a  Q48. a  
Q49. c  Q50. b  Q51. a  Q52. a  Q53. b  Q54. a  Q55. b  Q56. b  Q57. d  Q58. b  Q59. c  Q60. a  
Q61. a  Q62. b  Q63. a
Q64.  c  Q65.  b  Q66.  a
Q67.  a  Q68.  a  Q69.  a
Q70.  c  Q71.  a  Q72.  a
Q73.  a  Q74.  b  Q75.  d
Q76.  b  Q77.  a  Q78.  a
Q79.  a
1. Introduction

Just as in other aspects of your life, setting financial goals is a tried-and-tested way for reaching your financial goals. You can create a list of your financial goals on your own or you can work with an investment professional who has experience in this area. To make the most of this exercise, assign each of your financial goals a price tag and a period. Then, identify the kinds of savings and investing strategies that may be appropriate for meeting your goals.

One advantage of working with an investment professional is that he or she may provide the encouragement you need to move from thinking about your goals to actually listing them out, and taking steps to achieve them.
There are essentially four steps to creating a strategy for meeting your goals that will work for just about every person and situation:

- Identify your most important short, medium and long-term financial goals.
- Estimate how much each of your goals will likely cost.
- Choose a professional investment advisor.
- Set up separate savings or investment accounts for each of your major goals.
- Choose investments suited to meeting each of your goals based on your period and your tolerance for risk.

2. Investment Management

Investment management is the service of professionally investing money for clients. An investment manager’s revenue is fee driven; primarily, fees are based on a percentage of the average amount of assets under management (AUMs). Fees of an investment manager are also dependent on the types of investment vehicles used. Generally, the fee is 1% or lower for money market funds, whereas it is in the range of 2% to 3% for equity market funds. Specialized investment management firms called asset management companies (AMCs) manage funds for both individual as well as institutional clients. Institutional investors are entities such as pension funds, endowments, insurance companies, banks, corporates, etc. Investment policy decisions of institutional investors are typically made by investment committees or trustees, with members of the committee having professional background in finance. The committee members bear a fiduciary relationship to the funds for which they have investment responsibility and are subject to legal standards governed by SECP regarding processes and decisions of investments. Investment management companies employ portfolio managers, analysts and traders/dealers, as well as marketing and support personnel. Portfolio managers may use both outside research produced by sell-side analysts (analysts employed by brokerage houses) and research generated by in-house analysts called buy-side analysts (analysts employed by AMCs).

3. Individual Investor Life Cycle

Understanding where you are in the individual investor life cycle is an important element of managing an effective investment portfolio. The investor life cycle refers to the different stages of investment ownership, from the initial purchase, to the sale of the investment. The most commonly used investor life cycle includes the accumulation phase, the consolidation phase and spending and gifting phases. The asset allocation decisions are usually different at the
various stages of the investor life cycle. We have all heard that we should invest in more equities when we are young. However, while age is important for asset allocation, its importance is relevant only because our conditions and resources change over time. Individuals at different stages of the investor life cycle can be of the same age, but would still need to have different asset allocation strategies.

3.1 Accumulation Stage (Saving)

Individuals at a certain stage in life accumulate many things to meet their immediate needs and their longer-term goals. These include homes, cars, furniture, college education for children and retirement. At this stage, developing an early investing habit is very important. Setting aside money to invest on a regular basis is also important at this stage. Individuals at the accumulation phase of investor life cycle have a longer time horizon, and should be willing to make higher-risk investments.

3.2 Consolidation Phase (Transition Stage)

At the consolidation phase, outstanding debt would have been paid off. At the very least, the funds to pay off these loans can be identified. Funds can also be identified at this stage to pay off the children’s college bills. Capital preservation is extremely important in this phase, and the investor is usually able to set aside a greater portion of earnings.

3.3 Spending and Gifting Stage (Withdrawal Stage)

The spending and gifting stage of the investment life cycle is somewhat a reward to the investor for disciplined investment practices over the years. This stage usually occurs at retirement, where the investor would be receiving income from possibly an employer retirement plan as well as income from their investment portfolio. Wealth accumulated over many years of saving and investing is finally distributed to the owner and/or her beneficiaries. During this phase, capital preservation is paramount, although investing for growth is still critical—though less important.

This is where the investor reaps the benefit of proper asset allocation and a structured investment portfolio. The investor feels comfortable at this stage, knowing that living expenses are taken care of. The investor at this stage is at the end of his earning years and depends solely on income from his investment portfolio and other retirement plans. Unlike in previous phases, where investing towards some goal was the primary concern, the spending/gifting phase places emphasis on preserving one's wealth as an income supplement and ultimately passing that wealth along to future generations. Estate planning, charitable giving and gifting all come to the fore during the
spending/gifting phase. The gifting stage runs concurrent with the spending stage. This is where excess assets if any will be used to provide financial assistance to relatives and friends, or even to charities.

4. **Portfolio Management**

Portfolio Management is the art of making investment decisions about asset allocation for individuals and institutions keeping in view their risk appetite and time horizon. It is away to take decisions regarding one's savings in a very logical and orderly manner to be able to come up with the desired result. Portfolio management can be thought of as a continuous and systematic process of investment decisions with feedback loops for monitoring and rebalancing. It involves three major steps:

1. Plan
2. Execute
3. Feedback and performance evaluation

You cannot do this on your own. It is recommended that you hire the services of a professional fund manager to assist you in making a plan, help you execute it and finally monitor its results through a feedback process.

4.1 **Plan**

The planning step involves the following:

4.2 **Determining Investor's Objectives and Constraints**

Investment objective is the outcome desired by you as an investor through your investment, whereas constraints are the limitations attached with your circumstances. Risk and return are inherently interdependent; you cannot expect very high returns and still avoid high risk. In other words, the risk objective limits how high the investor can set the return objective.

4.3 **Risk Objective**

In formulating a risk objective, you must address the following questions:

1. How do you measure risk?
2. How much risk are you both willing and able to bear?
3. What are the risk objectives?
4. How should you allocate risk in your capital allocation decisions?
4.4 Return Objective

Similarly, in formulating a return objective, the investor must address the following four questions:

1. How is return measured?
2. How much return do you want and whether it is a realistic objective?
3. How much return do you want to achieve on average?
4. What are the specific return objectives?

Your return objective should be consistent with your risk objective. A high return objective may suggest an asset allocation with an expected level of risk that is too high in relation to the risk objective. If a return objective is not consistent with the risk tolerance level of an investor, other adjustments may need to take place, such as increase in savings or modifying wealth objectives.

<table>
<thead>
<tr>
<th>Type of retail investor</th>
<th>Return requirement</th>
<th>Risk Tolerance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual investor in</td>
<td>To meet his living standard and some</td>
<td>Mediocre</td>
</tr>
<tr>
<td>early 30s</td>
<td>savings</td>
<td></td>
</tr>
<tr>
<td>Individual investor in</td>
<td>Has high saving, growth of capital</td>
<td>High</td>
</tr>
<tr>
<td>mid 40s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual investor in</td>
<td>At retirement age, need funds for living</td>
<td>Low</td>
</tr>
<tr>
<td>early 60s</td>
<td>expenditure</td>
<td></td>
</tr>
</tbody>
</table>

4.5 Time Horizon

You will need to set a period for your financial goals. It is important to know the “when” of your financial goals, because investing for short-term goals differs from investing for long-term goals. Your investment strategy will vary depending on how long you can keep your money invested.

4.6 Short-term Goals

The closer you get to your goal; the less risk you generally want to take with the money you have already accumulated to pay for your short-term goals. With short-term goals in mind you want to focus more on safety and liquidity rather than growth in your short-term portfolio because growth strategy will require you to deploy your investment for longer time of more than three years. This means you will be more inclined to put your money into money market funds or cash equivalent investments, which are not likely to lose much value in six months or a year. Liquid investments such as Treasury bills, money market accounts and funds, and other low-risk investments that pay interest can be sold easily with little or no loss of value if these investments have short maturity dates. For example, T-bills have maturity dates of 3 months to 12 months.
You may also want to consider alternatives that do not impose potential penalties or fees for accessing your money before a maturity date. For example, a three-year money market fund might be safe, but the early withdrawal penalty is likely to cut into the money you are counting on for a short-term goal such as a down payment on a home you want to buy next year or tuition payment that is due next January.

Cash investments typically pay lower interest rates than longer-term bonds—sometimes not enough to outpace inflation over the long term. However, since you plan to use the money relatively quickly, inflation should not have much of an impact on your purchasing power. In addition, keep in mind that some cash investments offer the added security of government guarantee.

4.7 Mid-Term Goals

Choosing the right investments for mid-term goals can be more complex and tricky than choosing them for short or long-term goals. That is because you need to strike an effective balance between protecting the assets you have worked hard to accumulate while at the same time achieving the growth that can help you build your assets and offset inflation.

Mid-term goals are typically those for which you need time to accumulate the money. The more time you have the more risk you can probably afford to take with your money. For example, you might want to invest some of your assets in stocks, either directly or through mutual funds because of the potential for a higher return that would allow you to reach your goals sooner.

4.8 Long-Term Goals

For many people, the number one long-term goal is a financially secure retirement. In our society, we have other long-term goals such as getting children married or sending them abroad for higher education. When your goal is paying for university, for example, you think in terms of paying costs for four years or perhaps longer for a post-graduate or professional degree. However, when you think about retirement, you have to think in terms of managing expenses for 15, 20, 30, or maybe even 40 years that you will be living after retirement. Since you will need income for that entire period, it is important to make your money work for you, and this means earning a rate of return that outpaces inflation and allows your principal investment to grow overtime.

The general rule is that the more time you have to reach a financial goal, the more investment risk you can afford to take. For many investors, that can mean allocating most of the principal you set aside for long-term goals to growth
investments, such as individual stock or stock mutual funds or even real estate. Over time, you can gradually shift a greater percentage of your accumulated account value into income-producing investments such as bonds.

While past performance is no guarantee of future results, historical returns consistently show that a well-diversified stock portfolio can be most rewarding over the long term. It is true that over shorter periods say less than 10 years investing heavily in stock can lead to portfolio volatility and even to losses. But when you have 15 years or more to meet your goals, you have a good chance of being able to ride out market downturns and watch short-term losses eventually be offset by future gains.

In addition, some investors successfully build the value of their long-term portfolios buying and selling bonds to take advantage of increases in market value that may result from investor demand. Others diversify into real estate or real estate investment trusts (REITs). The larger your portfolio and the more comfortable you are making investment decisions, the more flexible you can be. As you begin thinking seriously, about what your goals are, you will need to be specific about your period for meeting them.

You may find it helpful to put your ideas down in writing, perhaps in a chart form like this:

<table>
<thead>
<tr>
<th>Short Term Goals</th>
<th>Medium Term Goals</th>
<th>Long Term Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay for university degree</td>
<td>Pay for kids education</td>
<td>Pay for children’s wedding</td>
</tr>
<tr>
<td>Buy a new car</td>
<td>Pay for Credit Card Bill</td>
<td>Payoff personal loan</td>
</tr>
<tr>
<td></td>
<td>Buy a new house</td>
<td></td>
</tr>
</tbody>
</table>

4.9 Know Your Net Worth

As you prepare to invest, you will need to assess your net worth. It is not hard: Add up what you own and subtract what you owe. Creating a net worth statement, and updating it each year, will help you monitor your financial progress towards meeting your financial goals. It will also enable you to calculate how much you have (or do not have) to invest.

The first step in this process is to determine the total amount of your assets. Assets are your possessions that have value—for example, money in bank accounts, stocks and bonds, personal property, your home or other real estate.
Once you have calculated your assets, determine the total amount of your liabilities. Liabilities are financial obligations, or debts. Examples include credit card balances, personal or auto loans.

Once you have calculated the total amount of your assets and liabilities, subtract the total amount of liabilities from the total amount of assets. If your assets are more than your liabilities, you have a "positive" net worth. If your liabilities are greater than your assets, you have a "negative" net worth. If you have a negative net worth, it is probably not the right time to start investing. You should re-evaluate your finances and determine how you can decrease liabilities for example, by reducing your credit card debt. If you have a positive net worth and cash flow, you are probably ready to start an investment plan.

Here is a simple net worth worksheet that can help you get started. It is good practice to calculate your net worth on a yearly basis.

### 4.10 Sample Net-Worth Calculation Sheet for an Individual

**Assets**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash in hand</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Cash at bank</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Investments</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Property</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Provident Fund</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Life Insurance Policy</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Other</td>
<td>Rs. ________</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>Rs. ________</td>
</tr>
</tbody>
</table>

**Liabilities**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Card Dues</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Personal Loans</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Unpaid Medical Bills</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Car Loans</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Unpaid Taxes</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Mortgage</td>
<td>Rs. ________</td>
</tr>
<tr>
<td>Others</td>
<td>Rs. ________</td>
</tr>
</tbody>
</table>
4.11 Calculate Cash Flow

Calculating your monthly cash flow will help you evaluate your present financial status, so you know where you stand financially as you prepare to invest.

Begin by looking at your monthly net income—the money you take home every month after taxes. This includes your salary and other steady and reliable sources of income, such as income from a second or part-time job. If you already own some investments, you may be receiving dividend or interest payments.

Then calculate your average monthly expenses. These include your rent, car lease or loan, personal loan, credit card and child education expenses. Also, include money for groceries, utilities, transportation and insurance. Do not forget money that you spend on items that are "discretionary," rather than necessary—for example, cable television subscriptions, gym fees, clothing, gifts, and the like. Average your actual expenses over a three-month period to come up with a reliable monthly estimate for your total expenses. Subtract your monthly expense figure from your monthly net income to determine your leftover cash supply. If the result is a negative cash flow, that is, if you spend more than you earn, you will need to look for ways to cut back on your expenses. Similarly, if the result is a positive cash flow, but your spending nearly equals your earnings, it might be too soon to start investing right now.

To invest, your net income must exceed your expenses—with some to spare. If this is not the case, look for expenses you could eliminate or reduce. Maybe some of your discretionary expenses are luxuries that you could give up. A financial professional may be able to help you with these matters.

4.12 Monthly Income and Expenses Sample Worksheet

Income

<table>
<thead>
<tr>
<th>After Tax Salary</th>
<th>Rs. ______________</th>
</tr>
</thead>
</table>

Less

<table>
<thead>
<tr>
<th>Total Liabilities</th>
<th>Rs. ______________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Worth</td>
<td>Rs. ______________</td>
</tr>
</tbody>
</table>
Investment Income Rs. ____________
Interest on Savings Rs. ____________
Dividend Income Rs. ____________
Other income Rs. ____________
**Total Income** Rs. ____________

**Household Expenses**
- Food Rs. ____________
- Healthcare Rs. ____________
- Education Rs. ____________
- Transport Rs. ____________
- Utilities Rs. ____________
- Insurance Rs. ____________
- Repairs & Maintenance Rs. ____________
- Property Taxes Rs. ____________
- Recreation Rs. ____________
- Gifts Rs. ____________
5. Intermediaries You May Have to Deal With

5.1 Brokers

Brokers, technically known as registered representatives, buy and sell securities—stocks, bonds, mutual funds and other investment products—for their customers, including individual investors.

5.2 Investment Advisors/Portfolio Managers

Investment advisers are individuals or companies that provide advice about securities tailored to the needs of their clients. Common names for this type of a professional include asset managers, investment advisors, investment managers, portfolio managers and wealth managers.

5.3 Insurance Agents

Insurance agents sell life, health and property insurance policies, and other insurance products, including annuities. Agents can work exclusively for one insurance company or they can represent multiple companies and try to find you the best coverage for your needs. It is important to deal with registered financial intermediaries to safeguard yourself against any fraud. It is also important to consider the following aspects before choosing whom you want to deal with.

5.4 Identifying, Selecting and Contracting with Portfolio Managers

A qualified investment professional can help you make sound investment decisions, assist with financial goal setting and keep you informed about how the economy and financial markets are affecting your investment portfolio. There are many types of investment professionals—including brokers, investment advisers and financial planners. The person or team of professionals you work with will depend on the type of financial help you seek.

5.5 Predictive Power of Past Performance

Anyone who invests in the stock market is well aware that the best performing stock or sector in any given year is rarely the best performer in the following year. The same way rather than giving a lot of importance to fund manager’s past performance you should place considerable weight on his or her
investment process and the strength of his or her organization. A good investment record achieved by the same set of fund managers over a long period, following consistent investment disciplines, is more likely to indicate future satisfactory results for you.

5.6 Consult

Ask friends, family and colleagues who already invest for the names of people they have used. Moreover, beyond gathering names, ask direct questions, such as how long they have dealt with the investment professional, the types of services that were provided, how much they have relied on the professional's advice and what drove them to choose that particular person or firm. Also, ask if they have ever had any problem with that person and, if so, how well and quickly it was resolved. Identify and meet them. Even if you get a good recommendation, you should always carry out your own independent review of the investment professional to make sure he or she is the right person to meet your needs.

5.7 Work with Registered Firms and Individuals

A vital step in selecting an investment professional is to check to see if the person and his or her firm are registered. When it comes to buying and selling stocks, bonds and other securities products deal only with individuals and firms registered with the Securities and Exchange Commission of Pakistan (SECP). Go to SECP’s website and confirm whether the individual or firm is registered. The website provides an overview of an individual's work history, as well as the firm's history and other important information such as regulatory actions, criminal convictions and customer complaints involving the investment professional.

5.8 Ask Key Questions

Before you hire an investment professional to manage your portfolio, or purchase any securities or services, ask the following questions, the list is not exhaustive but these are some of the important ones:

Q1. What experience do you have working with people like me?

Q2. What professional licenses do you currently hold?

Q3. Are you registered with SECP and since how long?

Q4. Do you have any disciplinary actions, arbitration awards or customer complaints? If so, please explain; compare responses to information found on SECP’s website and other third-party sources.
05. Do you or your firm have an overarching investment philosophy? What type of investment products and services do you offer? Are there any products or services you do not offer? Why?

Q6 Do you or your firm impose any minimum account balances on customers? If so, what are they? What happens if my portfolio falls below the minimum?

Q7 How are you paid? Do you receive commissions on products, I buy or sell? A percentage of the amount of my assets you manage, a flat fee? Any other method?

Q8 Can you provide me with any customer references?

Q9 Are there conflicts of interest that we have not discussed. What are they and how do you resolve them?

5.9 Fee Structure

You should look into the fee structure of your investment manager. There could be a fixed fee structure based on value or you can have performance-based fee structure. A performance-based fee structure is usually specified by a combination of a base fee plus sharing percentage of any excess return over the benchmark set. A fee-cap limits the total fee paid regardless of performance and is frequently put in place to limit the wealth manager's incentive to aim for very high returns by taking a high level of risk.

5.10 Shortlist the Names of Suitable Manager Candidates

It is a sound investment principle to diversify within and among different asset classes (owning a variety of stocks and bonds, for instance). Investors can also choose to diversify assets among different types of accounts (such as bank accounts, brokerage accounts, mutual fund accounts and college savings accounts).

5.11 Do your Homework

It is important to know that all investments carry some degree of risk, and that different investment products carry different types of risk. For instance, bond carry interest rate risk: if interest rates rise, bond prices are likely to fall. Stocks are subject to market fluctuation, the risk that prices will move up and down, sometimes significantly and quickly. Because risks tend to vary across different types of investments, it is sound strategy to diversify across a number of investments categories. Spend time learning about the basic principles of investing and investment products before you engage an investment professional or purchase a securities product.
5.12 Know the Warning Signs of Fraud

Financial fraudsters set their sights on people who have money. Often, you can avoid fraud by asking questions and researching any investment professionals you are considering. Know the warning signs of fraud—including promises of quick profits, "guaranteed" returns or pressure to send money immediately. In addition, an investment professional should never ask to borrow money from you or encourage you to name them as a beneficiary or executor of your estate.

5.13 Creating the Investment Policy Statement

Once you have specified your objectives and constraints, you will formulate an investment policy statement (IPS) with the help of your investment manager. The IPS will serve as the governing document for all investment decision making. A typical IPS would include:

- a brief client description
- the purpose of establishing policies and guidelines
- the duties and investment responsibilities of your fund manager if you are using his or her services
- the statement of investment goals and constraints
- the schedule for review period of performance
- any special consideration to be taken into account e.g. some of us may not be comfortable to invest in non-Shariah compliant stock
- investment styles whether we want to be an active investor or passive buy and hold investor
- any guidelines for rebalancing the portfolio based on feedback
5.14 Forming Capital Market Expectations

A professional fund manager will guide you in forming capital market expectations. Short run and long run forecasts may differ massively as your risk taking appetite increases manifolds when you are able to deploy funds for a longer period. Having unrealistic return expectations in the short run can lead to making wrong investment decisions.

5.15 Creating the Strategic Asset Allocation

The final task in the planning process is determining the strategic asset allocation. Here with the help of a fund manager you will combine the IPS and capital market expectations to determine target asset class weights, maximum and minimum permissible asset class to take advantage of certain situations or to avoid any unnecessary risks. For example, in the wake of extreme political uncertainty you may not be too comfortable to touch the maximum limit of your investment in stocks and rather choose to keep it to the minimum and divert those excess funds to fixed income portfolio.

5.16 Execution

You should build your portfolio after going through the above steps and once it is done you should execute. When you hire the investment advisor or wealth manager only for advisory, you will be responsible for the execution of your trades. On the other hand, if you have invested the money through any asset management company then you give them the right to advise as well as execute on your behalf. In both cases, normal account opening procedures must be followed as mentioned in the law. The portfolio implementation decision is as important as the portfolio selection/composition decision. Poorly managed executions result in transactions costs that reduce performance. Transaction costs include all costs of trading, including explicit transaction costs, implicit transaction costs and missed trade opportunity costs. Explicit transaction costs include commissions paid to brokers, fees paid to exchanges and government taxes. Implicit transaction costs include bid-ask spreads and market price impacts of large trades. Missed trade opportunity costs can arise due to price changes that prevent trades from being executed.

5.17 Feedback and Performance Appraisal

Feedback and control are two essential elements in reaching your required rate of return. Monitoring and rebalancing involve the use of feedback to manage ongoing exposures to available investment opportunities so that your current objectives and constraints continue to be looked into and satisfied. You will have to monitor investor related factors which are peculiar to your own circumstances and economic and market input factors. Your personal
circumstances may require a review of your portfolio an IPS should list down the occurrence of such changes as a basis for appropriate portfolio revision.

Changes in economic and market input factors give rise to the regular need for portfolio revision. Disciplined rebalancing will have a major impact on the attainment of investment objectives.

At the same time, investment performance must be periodically evaluated to assess progress towards the achievement of your investment objective. It essentially means whether or not your portfolio is on target against the benchmark used for comparison.
6. Practice Questions, MCQs

1. Gifting and Spending age is the time when you can take the maximum risk in investing
   a) True
   b) False

2. When building your portfolio following factors should be considered
   a) Risk
   b) Return
   c) Time Horizon
   d) All of the above

3. Cash Investments typically earn you more than stocks in the long run.
   a) True
   b) False

4. When calculating your Net Worth, you will not consider the following:
   a) Property you plan to buy next year
   b) Cash in hand
   c) Current investment in stocks
   d) Life Insurance Policy you own

5. You should borrow and invest even if you monthly expenses exceed your monthly income
   a) True
   b) False

6. Following does not fall in the long-term goals of an investor
   a) Paying for higher education fees of kids when they reach university age
   b) Buying a bigger home when your son gets married
   c) Paying your credit card bill

7. Transaction cost does not include
   a) Commission paid to brokers
   b) Fees paid to exchanges
   c) Bill of lunch done by your portfolio manager with representative of the company he wants to invest your money in.
8. The following conditions give rise to the regular need for portfolio revision
   a) Change in economic conditions
   b) Change in market input matters
   c) Change in personal circumstances that will affect your risk-taking ability
   d) All of the above

9. Briefly, describe the different stages in individual investor’s life cycle?

10. What do you understand by short-term and long-term goals, list down your own short-term and long-term goals?

11. Calculate your current net worth using the proforma as a sample. You can use fictitious numbers.

12. Make your monthly income and expenditure worksheet using the proforma given in the text. You can use fictitious numbers.

13. What are key factors you should consider when hiring a portfolio manager?

14. What are the key areas addressed in the Investment Policy Statement (IPS)?

15. Is it important to review Investment Policy Statement and why do you think that it is?

16. Why is it important to deal with registered intermediaries?
7. Solutions for MCQs

Q1. b Q2. d Q3. b
Q4. a Q5. b Q6. c
Q7. c Q8. d
**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AFM</td>
<td>Association of Futures Market</td>
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<tr>
<td>AFS</td>
<td>Available for Sale</td>
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<tr>
<td>AMC</td>
<td>Asset Management Company</td>
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<tr>
<td>CDC</td>
<td>Central Depository Company of Pakistan Limited</td>
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<tr>
<td>CDS</td>
<td>Central Depository System</td>
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<tr>
<td>CEF</td>
<td>Closed-End Fund</td>
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<td>CGT</td>
<td>Capital Gain Tax</td>
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<td>CRA</td>
<td>Credit Rating Agency</td>
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<td>CVT</td>
<td>Capital Value Tax</td>
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<tr>
<td>FATCA</td>
<td>Foreign Account Tax Compliance Act</td>
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<tr>
<td>IFM</td>
<td>Institute of Financial Markets (Former Institute of Capital Markets)</td>
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<td>IFRS</td>
<td>International Financial Reporting Standards</td>
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<tr>
<td>KYC</td>
<td>Know Your Customer</td>
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<tr>
<td>MUFAP</td>
<td>Mutual Funds Association of Pakistan</td>
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<td>NAV</td>
<td>Net Asset Value</td>
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<tr>
<td>NBFC</td>
<td>Non-Banking Finance Companies</td>
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<tr>
<td>PSX</td>
<td>Pakistan Stock Exchange</td>
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<tr>
<td>PMEX</td>
<td>Pakistan Mercantile Exchange</td>
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<td>NCCPL</td>
<td>National Clearing Company of Pakistan Limited</td>
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<td>GoP</td>
<td>Government of Pakistan</td>
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<td>REIT</td>
<td>Real Estate Investment Trust</td>
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<td>SECP</td>
<td>Securities and Exchange Commission of Pakistan</td>
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<tr>
<td>SBP</td>
<td>State Bank of Pakistan</td>
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<tr>
<td>TFC</td>
<td>Term Finance Certificates</td>
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<td>VPS</td>
<td>Voluntary Pension System</td>
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<tr>
<td>CSR</td>
<td>Clearing, Settlement and Reporting</td>
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<tr>
<td>FIA</td>
<td>Futures Industry Association</td>
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<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
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<tr>
<td>OTC</td>
<td>Over the Counter</td>
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<tr>
<td>SDRC</td>
<td>Small Dispute Resolution Committee</td>
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