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ENT 331

INVESTMENT MANAGEMENT ANALYSIS I

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ENT 331

INVESTMENT MANAGEMENT ANALYSIS I

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UNIT 1 THE ROLE OF INVESTMENT

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1.0 INTRODUCTION

This unit introduces the student to the basic definition of investment. The unit discusses the motive behind investments and why people take the risk of investing in various instruments.

Investment has assumed the centre stage in today's business world. Studying this section will help you to understand this increasingly important subject and to make the most of your financial resources.

2.0 OBJECTIVES

After studying this unit, you should be able to:

- * Define and explain the nature of investments
- * Understand why people take the risk of investing their resources

3.0 MAIN CONTENT

The need to invest resources into instruments and projects arises in response to man's quest to make gains increase his resources. Therefore the desire to multiply ones wealth lies at the centre of investment. However, the practice of investment goes with risk meaning that an investor must be circumspect in making investment decisions. We will start by giving the definition of investment.

3.1 Definition of Investment

An investment is simply any instrument into which you place your funds with the expectation that you will generate increased income or profit in the future. If you deposit money in a savings account in a bank, you already have an investment to your because the bank will pay you interest on the money you deposited.

The rewards or returns from an investment can be received in form of current income or increased value to your asset. For example, if you invest money in a bank's savings account, you will receive current income in the form of periodic interest payments. On the other hand, if you buy a piece of land or building, this investment will give you increased value in future over and above what you spent in buying. It is a simple logic. Landed property (land and building) appreciates in value as the area where the property is located urbanizes or develops.

3.1.2 Types of Investments

When you invest in an organization, whether it is a company or government entity, the organization offers you an expected future benefit in exchange for the current use of your funds. A wise investor invests in that organization that offers the highest interest or value. However, different investors judge desirable benefits differently. As a result, investments of every type are available, from “sure outcome” such as earning 3 percent interest on your bank’s savings account. For the possibility of tripling your money fast, you may decide to invest on land adjacent to a planned inter-state highway. What investments you choose will depend on a combination of your resources, your goals, and your personality. There are various types of investments and each has its own peculiar feature.

Securities and Property:

Investments that represent debt or ownership or the legal right to acquire and sell an ownership interest are called securities. The common securities we have are stocks and bonds, and options.

Property, on the other hand consists of investment in real assets or tangible personal property. When we talk of real assets, we are referring to land and building, and that which is permanently affixed to the land. Tangible personal property includes items such as gold, artwork and antiques.

Direct and Indirect Investments:

Direct investment is that in which an investor directly acquires a claim on a security or property. If you buy a stock, a bond, a parcel of real estate, or a rare coin in order to earn income or preserve value, you have made a direct investment.

An indirect investment is an investment made in a portfolio or collection of securities or properties, typically constructed to meet one or more investment goals. You may purchase a share of a mutual fund which gives you a claim on a fraction of the entire portfolio rather than on the security of a single firm.

Debt, Equity or Derivative Securities:

Usually an investment represents either a debt or an equity interest. Debt is funds lent in exchange for interest income and the promised repayment of the loan at a given future date.

When you buy a Usually an investment represents either a debt or an equity interest debt

instrument like a bond, in effect, you have lent money to the issuer, who agrees to pay you a stated rate of interest over a specified period of time, at the end of which the original sum will be returned.

Equity represents on-going ownership in a specific business or property. An equity investment may be held by title to a specific property or as a security. The most popular type of security is common stock.

Derivative securities are neither debt nor equity. They derive their value from and have characteristics similar to those of an underlying security or asset. Options are an example: An investor essentially buys the opportunity to sell or buy another security or asset at a specified price during a given period of time. Options and other derivative security investments, though not so common as debt and equity investments, have grown rapidly in popularity during recent years.

3.1.3 Low and High Risk

Investments are sometimes differentiated on the basis of risk. As used in finance, risk refers to the chance that the value or return on an investment will be less than its expected value or return. In other words, risk is the chance that an investment will earn less than expected. The broader the range of possible values or returns associated with an investment, the greater its risk.

Investors are confronted with a continuum of investments that range from low to high risk. Although each type of investment vehicle has a basic risk characteristic, the actual level of risk depends on the specific instrument. For example, stocks are generally believed to be more risky than bonds. However, it is not difficult to find high-risk bonds that are in fact more risky than the stock of a financially sound firm. High-risk investments are considered speculative. Their levels of income and future value are highly uncertain. Simply stated, **speculation** offers highly uncertain earnings and future value, so it is high-risk investment. Of course, because of this greater risk, the returns associated with speculation are expected to be greater. Both investment and speculation differ from gambling, which involves merely playing games of chance.

The life of an investment can be described as either short- or long-term. Short-term investments typically mature within 1 year. Long-term investments are those with longer maturities or perhaps, like common stock, with no maturity at all. As will become clear later, it is not unusual to find investors matching the maturity of an investment to the period of time over which they wish to invest their funds.

3.2 The Structure of the Investment Process

The investment process is the mechanism for bringing together suppliers of extra funds with demanders who need funds. Suppliers and demanders are most often brought together through a financial institution or a financial market. Financial institutions are organizations that channel the savings of governments, businesses and individuals into loans or investments. Banks and insurance companies are financial institutions. Financial markets are for a in which suppliers and demanders of funds make financial transactions, often through intermediaries . They include securities, commodities, and foreign exchange markets.

The dominant financial market in most major economies throughout the world consists of the securities markets, which include stock markets, bond markets, and options markets. Similar markets exist in most major economies throughout the world. Their common feature is that the price of an investment instrument at any point in time results from an equilibrium between the forces of supply and demand. As new information about returns, risk, inflation, world events, etc. becomes available, the changes in the forces of supply and demand may result in a new equilibrium or market price. Financial markets streamline the process of bringing together suppliers and demanders of funds, and they allow transactions to be made quickly and at a fair price. They also publicize security prices.

3.2.1 Participants in the Investment Process

Government, business and individuals are the three key participants in the investment process. Each may act as a supplier and a demander of funds. Funds must be available to qualified individuals and to government and business for the economy to grow and prosper. If individuals began suddenly to hide their excess funds under floorboards rather than putting them in financial institutions or investing them in the financial markets, then government, business, and other individuals in need of funds would have difficulty obtaining them. As a

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result, government spending, business expansion, and consumer purchases would decline, and economic activity would be greatly retarded.

3.2.2 Government. All levels of government – Federal, State and Local government areas – Require vast sums of money. Some go to finance capital expenditures: Long-term projects related to the construction of public facilities such as schools, hospitals, public housing, and highways. Usually the financing for such projects is obtained by issuing various types of long-term debt securities.

Another demand for funds comes from operating needs – the money required to keep the government running. At the federal level, for example, these funds are used to pay employee and other costs associated with national defence, education, public works, welfare, provision of medical treatment, payment of interest on national debt, etc. These operating costs are usually paid from tax revenue and fee collections. However, when operating expenditures exceed government revenues or when there is a timing mismatch between government receipts and payments, the government borrows funds, typically by issuing g short-term debt securities.

Occasionally, governments are also suppliers of funds. If a state has temporarily idle cash, it may make a short-term investment to earn a positive return, rather than just hold these resources in a checking account. In general, though, government is a net demander of funds, that is, it demands more funds than it supplies. The financial activities of governments, both as demanders and suppliers of funds, significantly affect the behaviour of financial institutions and financial markets.

3.2.3 Business Most business firms require large sums of money to support operations. Like government, business has both long- and short-term financial needs. On the long-term side, businesses seek funds to build plants, acquire equipment and facilities, and develop products. Their short-term needs centre on obtaining funds to finance inventory and accounts receivable and to meet other operating costs. Businesses issue a wide variety of debt and equity securities to finance these needs.

Businesses also supply funds when they have excess cash. In fact, many large business firms have sophisticated cash-management operations and are major purchasers of short-term securities. But like government, business firms in general are net demanders of funds.

Individuals You might be surprised to learn that the individual investor's role in the investment process is significant. Most individuals are more aware of their need to borrow than they are of the ways in which they put money into the financial system. They frequently

demand funds in the form of loans to finance the acquisition of property typically cars and houses. The activities of individual investors help to satisfy the net demands of government and business for funds in a variety of ways: They place funds in savings accounts, buy debt or equity instruments, buy insurance, make retirement contributions and purchase various types of property.

3.3 Types of Investors

When we refer to individuals in the investment process, we do so to differentiate household from government and business. We can further characterize the participation of individuals in the investment process in terms of who manages the funds. Individual investors manage their personal funds in order to achieve their financial goals. The individual investor usually concentrates on earning a return from idle funds, building a source of retirement income and providing security for his family. The sole activity of many individual investors involves selecting the investment instrument to be included in their employer retirement plan or individual portfolio.

Individuals with large sums of money to invest and those who lack the time and expertise to make investment decisions often employ **institutional investors**, that is, investment professionals who are paid to manage other people's money. They trade large volumes of securities for individuals, businesses and governments. Institutional investors include financial institutions, and large non-financial corporations. Financial institutions invest large sums in order to earn significant returns for their customers. For example, a life insurance company invests its premium receipts to earn returns that will permit payments to policy holders or beneficiaries.

Both individual and institutional investors apply similar fundamental principles.. However, institutional investors usually invest larger sums on behalf of others and therefore are often more sophisticated in both investment knowledge and investment methods.

3.3.1 Short-Term Instruments

Short-term instruments include savings instruments that usually have lives of one year or less. Short-term instruments generally carry little or no risk. Often such instruments are used to “warehouse” idle funds and earn a return while suitable long-term instruments are being evaluated. They are also popular among conservative investors, who may use short-term instruments as a primary investment outlet. The most important of these are various types of deposit accounts, such as, treasury bills, certificates of deposit (CDs), commercial papers, banker’s acceptances, and money market mutual funds.

In addition to their “warehousing” function and their use by conservative investors, short-term instruments provide liquidity – they can be converted into cash quickly and with little or no loss in value. Provision for liquidity is an important part of any financial plan. As a rule of thumb, financial planners often suggest that anywhere from 3 to 6 months’ worth of after-tax income should be held in short-term instruments.

3.3.2 Common Stock

Common stock is an equity investment that represents ownership in a corporate organization. Each share of common stock represents a fractional ownership interest in the firm. For example, one share of common stock in a company that has 10,000 shares outstanding would represent 1/10,000 ownership interest. Next to short-term instrument and home ownership, common stock is the most popular form of investment instrument.

The return on common stock investment comes from either of two sources: Dividends, which are periodic payments made by the company to its shareholders from its current and past earnings, and capital gains, which results from selling the stock at a price above that originally paid. For example, say you purchased a single share of Adams Company common stock for N40 per share. During the first year you owned it, you received N2.50 per share in cash dividends; at the end of the year, you sold the stock for N44 per share. If we ignore the costs associated with buying and selling the stock, you earned N2.50 in dividends and N4 in capital gains that is (N44 sale price – N40 purchase price).

4.0 CONCLUSIONS

In this unit, we looked at the basic meaning of investment and people are willing to invest their resources in assets and projects. The desire to make more profits and gains is the driving force behind every investment move. We also studied the various types of investment. Some investment opportunities are more profitable than others. But then each investor has to weigh the risks against the benefits derivable from any investment option.

5.0 SUMMARY

This unit has taught us that investment is something that is common with individuals especially people in business. To invest successfully, one has to choose the investment opportunity that is more advantageous in terms of the benefits accruing from such investment. Every investment has risks in it. The investor must take into account the level of risks he is assuming in each investment. Short term and long term investments exist. Long-term investments carry more risks but then they are more profitable in the long run. Participants in the investment process include government, business organizations and individuals.

6.0 TUTOR-MARKED ASSIGNMENT

Define the word “investment.” Why do people stick out their necks to invest?
Discuss two types of investors you know.

7.0 REFERENCE/FURTHER READING

Bodie, Z. et al. (2001) Essentials of Investment (Fourth Edition)
Published by McGraw-Hill Company Inc., 1221 Avenue, New York, U.S.A.

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UNIT 2 FIXED-INCOME SECURITIES

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1.0 INTRODUCTION

We discussed in unit 1 , basics of investment and why people undertake various types of investment. Unit 2 looks at the investment instruments that carry fixed income. That means, the investor is sure of his income at the end of the period, come rain, come sunshine.

2.0 At the end of this unit, you should be able to:

- * Distinguish between fixed and non-fixed income investments
- * Understand the concept of derivative securities

3.0 MAIN CONTENT

3.1 Securities with Fixed-Income

Securities having fixed-income are a group of investment instruments that offer fixed periodic return. Some forms offer contractually guaranteed returns; others have specified, but not guaranteed returns. Because of the fixed nature of the returns, fix-income securities tend to be popular investments during periods of high interest rates when investors seek to “lock-in” investments with high returns. The most popular fixed-income securities are bonds, preferred stock, and convertible securities.

3.1.1 Bonds

Bonds are long-term debt instruments issued by corporations and governments. A bond-holder has a contractual right to receive a known interest return, plus return on the bonds face value, i.e. the stated value given on the certificate at maturity (say after 15 or 20 years). If you purchase a N1,000 bond paying 9% interest in semi-annual installments, you would expect to be paid N45 (i.e. $9\% \times \frac{1}{2} \text{ year} \times N1000$) every six months; at maturity, you would receive the N1,000 face value of the bond. An investor may be able to buy or sell a bond prior to maturity.

3.1.2 Preferred Stock

Like common stock, preferred stock represents an ownership interest in a corporation. Unlike common stock, preferred stock has a stated dividend rate; payment of this dividend is given preference over common stock dividends of the same firm. It is important to note that preferred stock has no maturity date. Investors typically purchase it for the dividends it pays, but it may also provide capital gains.

3.1.3 Convertible Securities

A convertible security is a special type of fixed income obligation. It could be bond or preferred stock but with a feature or condition permitting the investor to convert it into a specified number of shares of common stock. Convertible bonds and convertible preferred stock provide the fixed-income benefit of a bond interest or a preferred stock dividend while offering the price appreciation possibility by way of earning capital gain.

3.2 Derivative Securities

As noted earlier, derivative securities derive their value from that of an underlying security or asset. They typically possess high levels of risk, because they usually have uncertain returns or unstable market values. Because of their above-average risk, these instruments also have high levels of expected return. The most popular derivative securities are options and futures.

3.2.1 Options

Options are generally securities that give the investor an opportunity to sell or buy another security or property at a specified price over a given period of time. Most often, options are purchased in order to take advantage of anticipated decrease or increase in the price of common stock. However the purchase of an option is not a guarantee on any return and could even lead to a loss of the entire amount invested because the option is not attractive enough for use. Aside from the speculative use of options, they are also sometimes used to protect the existing investment positions against losses. The three common types of options are “puts and calls,” “rights,” and “warrants.”

3.2.2 Futures

Futures are legally binding obligations stipulating that the sellers of such contracts will make delivery and the buyers of the contracts will take delivery of a specified commodity or financial instrument at some specified date in the future at a price agreed upon at the time the contract was entered into.

3.2.3 Mutual Funds

A company that raises money from the sale of its shares and invests money and professionally manages a diversified portfolio of securities is called a mutual fund. Investors in the fund own an interest in the fund’s portfolio of securities. All mutual funds issue and repurchase shares of the fund as demanded at a price that reflects the value of the portfolio at the time the transaction was made.

3.3 Other popular Investment Instruments

Various other investment instruments are also widely used by investors. The most common are real estate, tangibles, and tax-advantaged instruments.

3.3.1 Real Estate

The term real estate refers to entities such as residential homes, empty land, and variety of forms of income property, including warehouses, office and apartment buildings. As a result of generally increasing values and favourable tax treatments in many countries since the end of World War II, real estate has become a popular investment instrument. Historically, the appeal of real estate investment stemmed from the fact that it offered returns in the form of rental income and capital gains that are not easily available from alternative investment instruments. Furthermore, real asset (land and building) are the only form of assets that appreciate in value as towns and cities develop. Other assets like machinery and equipment depreciate over time.

3.3.2 Tangibles

Tangibles are investment assets, other than real estate, that can be seen or touched. They include gold and other precious metals, gemstones, and collectibles such as coins, stamps, art-work and antiques. These assets are purchased as investments in anticipation of price increases. During the keeping or ownership period, some of them may also provide the investor with psychological or esthetic enjoyment and prestige.

4.0 CONCLUSIONS

In this unit, we looked at fixed-income securities and explained the fact that income yield from them are fixed and constant over a given period of investment. Fixed income securities include bonds, preferred stock and convertible securities. The unit discussed other popular investment instruments such as real estate and tangibles. Real estate, especially land and building have investment advantage of maintaining continuous rise in value as towns and cities develop.

5.0 SUMMARY

Most investors who are averse to risk prefer fixed-income securities where they are sure of earning their interests at the end of the investment period. Due to fixed returns, fix-income securities tend to be more popular in time of high interest rate regime when investors seek to lock-in and hold tight to their high returns. The unit identified bonds, preferred stock and convertible securities as the key forms of fixed-income securities. Derivative securities derive their value from that of an underlying security or asset.

6.0 TUTOR-MARKED ASSIGNMENT

- * Discuss the feature of fixed-income securities
- * What are the advantages of investment in real estate?

7.0 REFERENCE/FURTHER READING

Bodie, Z. et al. (2001) Essentials of Investment (Fourth Edition)

Published by McGraw-Hill Company Inc., 1221 Avenue, New York, U.S.A.

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Glorious Hope Printers, Glorious Hope House, 53 Jagunmolu Street, Bariga, Lagos.

UNIT 3 SECURITY MARKETS

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1.0 INTRODUCTION

In this unit, we will study the markets, the exchanges, the transactions, and the regulations that surround financial careers. The topics presented here are designed to make you a more intelligent investor whether you choose a career in finance or not.

2.0 OBJECTIVES

After studying this unit, you should be familiar with:

- * The different types of security markets
- * Type of instruments traded in each of the security markets

3.0 MAIN CONTENT

Security markets provide avenue for that makes it possible for suppliers and demanders of securities to make financial transactions. They permit such transactions to be made quickly and at a fair price. In this section, we will look at the various types of markets, their organization, and their general behaviour.

3.1 Types of Security Markets

Security markets may be classified as either money markets or capital markets. In the money market, short-term securities are bought and sold. In the capital market, transactions are made in longer-term securities such as stocks and bonds. In this unit, we will devote most of our attention to the capital market, through which stock, bond, options, futures, and mutual fund investments can be made. Capital markets can be classified as either primary or secondary market depending on whether securities are initially being introduced by their issuing company or by intervening owners.

3.1.1 The Primary Market

The market in which new issues of securities are sold to the public is the primary market. It is the market in which the proceeds of sales go to the issuer of the securities. The main instrument in the primary market is the initial public offer of the instrument. This means, the first public sale of a company's stock. Before securities can be offered for public sale, the issuer must register them and obtain approval from the Securities and Exchange Commission. This federal regulatory agency must confirm the adequacy and accuracy of the information provided to potential investors before a security is publicly offered for sale.

To market its securities in the primary market, a firm has three choices:

- (1) To market the securities as public offering, in which the firm offers its securities for sale to the general public.
- (2) To market the securities by rights offer, in which the firm offers shares to existing stockholders on a pro rata basis.
- (3) To market the securities by private placement, in which the firm sells new securities directly, without SEC registration, to selected groups of investors such as insurance companies and pension funds.

3.1.2 The Role of the Investment Banker

Most public offerings are made with the assistance of an investment banker. An investment banker is a financial intermediary that specializes in selling new security issues. The main activity of the investment banker is underwriting. This process involves purchasing the security issue from the issuing firm at an agreed price and bearing the risk of reselling it to the public at a profit. The investment banker also provides the issuer with advice about pricing and other important aspects of the issue.

In the case of very large security issues, the investment banker brings-in other bankers as partners to form an underwriting syndicate, and thus spread the financial risk associated with buying the entire issue from the issuer and reselling the new securities at a profit to the public. The originating investment banker and the syndicate members put together a selling group, normally made up of themselves and a large number of brokerage firms. Each member of the selling group accepts the responsibility for selling a certain portion of the issue and is paid a commission on the securities it sells.

3.1.3 Compensation for underwriting

The compensation for underwriting and selling services comes in the form of a discount from the sale price of the securities. For example, an investment banker may pay the issuing firm N25 per share for stock that will be sold for N26 per share. The investment banker may then sell to members of the selling group for N25.25 per share. In this case, the original investment banker earns N1.25 per share (i.e. N25.25 sale price – N24 purchase price), and the members of members of the selling group earn N0.75 on each share they sell (i. e N26 sale price – N25.25 purchase price).

3.2 Secondary Markets

The market in which securities are traded after they have been issued is called the secondary market. The secondary market exists because some purchasers of securities already issued may wish to sell them and others may wish to buy them. In the secondary market, unlike the primary market, the company whose securities are traded is not involved in the transaction. Instead money and securities are exchanged between investors, that is, the seller exchanges securities for cash paid by the buyer. The secondary market gives security purchasers liquidity. It also provides a mechanism for continuous pricing of securities to reflect their value at each point in time, on the basis of the best information then available.

3.2.1 Over-the Counter Market

Included among secondary markets are the various organized securities exchanges and the over-the-counter market. Organized securities exchanges are centralized institutions in which the forces of supply and demand for securities already outstanding are brought together. Organized securities exchanges are like auction market in which price is determined by the flow of buy and sell orders or requests.

The Over-the-Counter (OTC) market is a widely scattered telecommunications network system through which transactions are made in both initial public offerings and securities already outstanding. The over-the-counter markets use a quote system in which negotiation quote and dealer quote determine the price.

3.2.2 Trading Volume

Normally, securities traded on organized securities exchanges account for about 59 per cent of the total Naira volume of domestic shares traded. All trading at a given exchange is carried out in one place, for example, the Nigerian Stock Exchange at Lagos and Abuja. Trading is generally guided by a broad set of rules by persons who are members of that exchange.

3.2.3 Most organized securities exchange are modeled after the Nigerian Stock Exchange (NSE). In order to be a member, an individual or firm must own or lease a "seat" on the exchange. The word "seat" is used only figuratively, because members trade securities standing up. The majority of sit holders are brokerage firms, and each most of the time own more than one seat. Membership is often divided into broad classes based on the members' activities. Although the majority of members make purchase and sale transactions on behalf of their customers, some members specialize in making transactions for other members or for their own account.

3.3 Trading Activity

Trading is carried out by members on the floor of the organized exchanges. Trading operation follow almost the same pattern in all the exchanges. Sometimes different posts are created and different stocks are traded in each of the posts. Bonds and less active stocks are traded on separate posts. All trades are made on the floor of the exchange by members of the exchange.

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Around the perimeter are telephones and electronic equipment used to transmit, buy and sell orders from brokers' offices to the exchange floor and back again once an order has been executed.

All transactions on the floor of the exchange are made through an auction process. The goal is to fill all buy orders at lowest price and to fill all sell orders at the highest price. The price is determined by the flow of buying and selling orders. The actual auction takes place at the post where the particular security is traded.

3.3.1 Listing Policies

To have its shares listed on an organized stock exchange, a firm must file an application and meet certain listing requirements. Some firms are listed on more than one exchange. Such firms are said to have dual listing.

Some Stock Exchanges have stringent listing requirements. In order to be eligible for listing, a firm must have at least 1,500 stockholders owning 100 or more shares. It must have a minimum of N1 million shares of publicly held stock earning, earnings should be, at least, N5 million over the previous two years and a minimum of N100 million in stockholders' equity. A firm wanting to list in a stock exchange must pay a listing fee. Once a firm's securities have been accepted for listing, it must meet the requirements of the Securities and Exchange Commission (SEC), which regulates certain aspects of listed securities. If a firm listed fails to continue to meet specified requirements, it could be de-listed.

3.3.2 Options Exchange

Options allow their holders to sell or to buy another security or property at a specified price over a given period of time. Usually, an option to sell or buy a given security is listed on only one of the options exchanges, although dual listing sometimes occur. Options exchanges deal only in security options

Futures exchange, on the other hand, are contracts that guarantee the delivery of a specified commodity or a financial instrument at a specified future date at a price agreed upon. Futures are like "Gentleman's Agreement" which must be honoured

4.0 CONCLUSION

Under this unit, we discussed security markets outlining that they represent transaction arena where meet to strike financial deals. We noted that security market can be divided into

primary and secondary markets. Primary market deals with new issues while the secondary market handles already existing shares being re-traded between stockholders. Before a firm can have its shares listed on an organized stock exchange market, that firm must, first of all, file an application and then meet certain listing requirements.

5.0 SUMMARY

This unit discussed stock exchange markets and securities traded on them. We looked at how transactions are carried out and the various participants in the stock market. Special attention was paid to the different securities traded on the stock exchange market. Over-the-counter (OTC) market was also studied. We have seen that OTC market represents a widely scattered telecommunications network through which transactions are made in both initial offerings and securities already being held by investors.

6.0 TUTOR-MARKED ASSIGNMENT

- * Discuss the difference between primary market and secondary market
- * What are the features of over-the-counter market?

7.0 REFERENCE/FURTHER READING

Bodie, Z. et al. (2001) Essentials of Investment (Fourth Edition)
Published by McGraw-Hill Company Inc., 1221 Avenue, New York, U.S.A.

Cohen, J. (1977) Investment Analysis & Portfolio Management (Third Edition)
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Gitman, L.J and Joehnk, M.D. (1998). Fundamentals of Investment (Seventh Edition)
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Rufus, I.A. (2004) Investment Decisions, Concepts, Analysis and Management
Glorious Hope Printers, Glorious Hope House, 53 Jagunmolu Street, Bariga, Lagos.

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1.0 INTRODUCTION

In this unit, we will discuss investment planning and information. The process of investment should be guided by well-developed plans and can be carried out by following a logical progression of steps. Your plan should, of necessity, take into account the impact of taxes on investment and the ever changing economic environment.

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2.0 OBJECTIVES

After studying this unit, you should be familiar with:

- * The steps involved in investment planning
- * Taxes on investment returns

3.0 MAIN CONTENT

3.1 Steps in Investing

Investing can be conducted in various ways. One approach is a haphazard method in which actions are taken on intuitive basis. Another approach which exactly opposite the first is to rely on plans carefully developed to achieve specific goals. Evidence suggests that reliance on carefully developed plans usually results in better returns. The serious investor should therefore first establish a set of overall financial goals and then develop an investment programme consistent with those goals. We shall now discuss logical steps which should be followed for successful investing.

3.1.1 Meeting Investment Prerequisites

This is obviously the first step in investing. Before investing, you must make certain that the necessities of life are adequately provided for. Basic necessities of life include funds for accommodation, housekeeping money (food), transportation, money for taking care of wife and children, funds for clothing.

Another prerequisite is adequate protection that could result from death, illness or disability, damage to property, or a negligent act. Protection against such risks can be acquired through life, health and property insurance.

Planning for adequate retirement income can also be viewed as an investment prerequisite. Achieving this goal may partially depend on the success of one's investment programme.

3.1.2 Establishing Investment Goals

Once you have satisfied the prerequisites and set clearly defined financial goals, you must establish investment goals. Investment goals are the financial objectives you wish to achieve by

investing in any of a wide range of potential investment instruments. Clearly, your investment goals will determine the types of investments you will make. Common investment goals include:

- (a) **Accumulating Retirement Funds.** Accumulating funds for retirement is the single most important reason for investing. When one retires from regular employment, one needs some money to fall back upon for the rest of one's life. That is why we invest in order to have some savings to support whatever retirement benefit we will receive upon retirement.
- (b) **Enhancing Current Income.** Investments enhance current income by earning dividends or interest. Retirees frequently choose investments offering high current income at low risk.
- (c) **Saving for Major Expenditures.** Families often put aside money over the years to accumulate the funds needed to make major expenditures. The most common of these are the down payment on a home, education, and capital to start a business. The appropriate types of investment instruments depend on the purpose and the amount of money needed.

3.1.3 Adopting an Investment Plan

Once your general goals have been established, you should adopt an investment plan. An investment plan is a written document describing how funds will be invested. The plan also specifies the target date for achieving the investment goals and the amount of tolerable risk. Generally, the more clear and specific you are in your statement of investment goals, the easier it will be to establish an investment plan consistent with your goals.

3.2 Evaluating Investment Instruments

This is a very important consideration. You do not just wake up and jump into investment instruments and begin to invest without measuring the extent of risk and returns involved in each instrument.

Once you have your investment goals and plan laid out, your next line of action is to evaluate the investment instruments in terms of your investment goals by assessing each instrument's potential returns and risks. This process typically involves valuation, that is, the use of

measures of return and risk in order to estimate the perceived worth of an investment instrument.

3.2.1 Selecting Suitable Investments

It is time to gather additional relevant information to use in selecting specific investment instruments consistent with your goals. The best instruments may not be those that simply maximize returns. Other factors such as risks involved and taxes payable on the investment returns should also be considered. For example, if your goal is to receive maximum annual dividends from your investment, you might purchase the common stock of a firm expected to pay high dividends. However, if the unexpected happens, that is, the firm whose stock you purchased suffers bankruptcy, your entire investment in the company will be lost.

The stock of a firm that pays lower dividends but with less risk of bankruptcy might have been a better choice. Therefore, careful selection of investment instruments that are consistent with established goals and offer acceptable levels of return, risk and value is essential to successful investing.

3.2.2 Constructing a Diversified Portfolio

Selecting suitable investments includes choosing instruments in such a way that investment goals can be achieved and return, risk, and investment values are optimized. To do this, you will assemble an investment portfolio that meets one or more investment goals. For example, an investment portfolio might contain common stock, government bonds, and short-term investments. Diversification which is the inclusion of a number of different investment instruments is fundamental to constructing an effective portfolio. By diversifying in this way, investors are able to earn higher returns or be exposed to less risk than if they limit their investments to just one or two types of instruments. Diversification is the financial term for the common adage which says “Do not put all your eggs into one basket.”

3.2.3 Managing the Portfolio

Once a portfolio has been constructed, you should measure and evaluate its actual behaviour in relation to expected performance. If the investment results are not consistent with your objective, you may need to take corrective action. Such action usually involves selling certain investments and using the proceeds to acquire other instruments for the portfolio. Portfolio management therefore involves monitoring the portfolio and restructuring it as dictated by the actual behaviour of the investments.

3.3 Considering Personal Taxes

Besides carefully developing plans for achieving your specific investment goals, it is also important to consider the tax consequences associated with various investment instruments and strategies. Knowledge of the tax laws can help you reduce taxes and thereby increase the amount of after-tax Naira available for achieving your investment goals. Because tax laws are complicated and subject to frequent revision, we present only the key concepts and their applications to popular investment transactions.

3.3.1 Basic Sources of Taxation

The major types of taxes are those levied by the Federal Government and those imposed by the States and the Local Governments. The federal income tax is the major form of personal taxation. State and local government taxes vary from area to area. In addition to income taxes, states and local governments rely heavily on sales and property taxes as sources of revenue. Property tax generates high revenue for the states and local governments. The taxes are levied on real estate and personal property, such as automobiles, boats, motorcycles, market stalls, etc.

3.3.2 Types of Income

The income of individuals used to be classified as either ordinary income or capital gain income, but that classification has been modified today to give a clearer distinction as follows:

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(a) **Active Income.** Active income consists of everything from wages and salaries to bonuses, and pension income. Active income is made up of income earned on the job as well as most other forms of non-investment income.

(b) Portfolio Income. This comprises earnings generated from various types of investment holdings. Portfolio income covers most (but not all) types of investments, from savings accounts, stocks, bonds, and mutual funds to options and futures. For the most part, portfolio income consists of interests, dividends, and capital gains.

(c) Passive Income. Passive income is a special category of income composed chiefly of income derived from real estate, limited partnerships and other forms of tax-advantaged investments.

4.0 CONCLUSION

In this unit, we talked about investment planning and steps involved in investment planning to arrive at successful investment. We noted that some investors adopt haphazard approach to investment, which means just waking up to invest on instruments without planning. Such investors do not earn adequate returns. It is important for a prospective investor to evaluate the instruments available to him and know the risk and returns inherent in them before starting to invest. There is also the need for one to diversify one's portfolio of investment.

5.0 SUMMARY

We have seen that the process of investing should be guided by well-developed plans and can be carried out by following a logical progression of steps. The process of investing has a number of steps. The first step is meeting the investment prerequisites. Investment prerequisites call for the provision of basic necessities of life before going out to invest on instruments. We discussed the importance of selecting suitable investment instruments that yield high returns and the need to manage investment portfolio wisely.

6.0 TUTOR-MARKED ASSIGNMENT

- * Discuss the first step in investing which is "meeting investment prerequisites."
- * What is the importance of evaluating investment instruments?

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7.0 REFERENCE/FURTHER READING

Bodie, Z. et al. (2001) Essentials of Investment (Fourth Edition)
Published by McGraw-Hill Company Inc., 1221 Avenue, New York, U.S.A.

Cohen, J. (1977) Investment Analysis & Portfolio Management (Third Edition)
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Unit 1	Investment Return
Unit 2	Risk : The other Side of the Investment Coin
Unit 3	Investing in Common Stocks
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UNIT 1 INVESTMENT RETURN

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1.0 INTRODUCTION

When you go shopping for clothing materials, you will naturally go to the store and inspect and possibly try out the materials. But when you invest in a company, there is nothing to sample or

try out physically. It is difficult to find out exactly the risks associated with the stock you have just bought from a company. In this unit we are going to study returns on the investment you make and the risks associated with investments.

2.0 OBJECTIVES

After studying this unit, you should be able to:

- * Understand the concept of Return and Risks on Investments
- * How to calculate Capital Gains and Capital Losses on your Investments

3.0 MAIN CONTENT

3.1 The Concept of Return

When we mention the word “Return”, we mean the level of profit from an investment, that is, the reward for investing. Investors are motivated to invest in a given instrument by its expected return. Suppose you have N1,000 in a savings account paying 5 per cent annual interest, and a business associate asks you to lend him that amount of money. If you lend him that money for one year, at the end of which she pays you back, your return will depend on the amount of interest you charged him. If you gave him the money as an interest-free loan, your return will be zero. If you charged him 5 per cent interest, your return will be N50, that is, $(0.05 \times N1,000)$

Note that some investment instruments guarantee a return without failure, others do not. For example, if you deposit N1,000 in the savings account of a large and strong commercial bank, your return can be viewed as certain since such strong bank is unlikely to go bankrupt over a short period. But if you lend the same amount of money to your business associate, your return might be less certain. Because your business associate might run into financial difficulty and be unable to pay you the interest charge and sometimes even the principal sum.

3.1.1 Components of Return

The return on an investment may come from more than one source. The most common source is periodic payments such as dividends or interest. The other source of return is appreciation in

the value of your investment instrument, that, is the gain from selling an investment instrument for more than its original purchase price. We will call these two sources of return “current Income” and “capital Gain” respectively.

3.1.2 Current Income

Current income may take the form of dividends from stocks, interest received on bonds, rent received from real estate, and so on. To be considered to be an income, it must be received in the form of cash or be readily convertible into cash. For our purpose, current income is usually cash or near-cash that is periodically received as a result of owning an investment.

3.1.3 Capital Gains (or Losses)

The second type of return is concerned with the change in the market value of an investment. Investors pay a certain amount for an investment, from which they expect to receive, not only current income but also the return of the invested funds sometime in the future. The amount by which the proceeds from the sale of an investment exceed its original purchase price is called a “capital gain.” In the contrary, if an investment is sold for less than its original purchase price, we have what is called “capital loss.”

3.2 Why Return is Important

Return is a key variable in the investment decision: It allows us to prepare the actual or expected gains provided by various investments with the levels of return we need to be fairly compensated for the risks involved. For example, you would be satisfied with an investment that earns 12 per cent if your original expectation is that it should earn at least 10 per cent. Conversely, you will not be satisfied with an investment that 15 per cent return if your original anticipation is that it should earn at least 20 per cent return. Return can be measured in a historical sense or it can be used to formulate future expectations.

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3.2.1 Historical Performance

Although most people recognize that future performance is not guaranteed by past performance, they would agree that past data often provide meaningful basis for formulating

future expectations. A common practice in the investment world is to look closely at the historical performance of a given instrument when formulating expectations about its future. Because interest rates and other measures of financial return are most often cited on an annual basis, evaluation of past investment returns is typically done on the same basis.

3.2.2 Expected Return

In the final analysis, it is the future that matters when we make investment decisions. Expected return is a vital measure of performance. It is what you think the investment will earn in the future (in terms of current income and capital gains) that determines what you should be willing to pay for it.

To project future returns, we need insights into the investment prospects. If the trend in returns as recorded historically over a given range of years (say from 2005 to 2008) continued to rise, an expected future return in the range of 12 per cent to 15 per cent for 2012 to 2016 would be reasonable. On the other hand, if future prospects seem poor, or if the investment is subject to cycles, an expected return of 8 per cent to 10 per cent may be a more reasonable estimate.

3.2.3 Level of Return

The level of return achieved or expected from an investment will depend on a variety of factors. The key factors are internal characteristics and external forces.

Internal Characteristics: Certain characteristics of an investment affect its level of return. Examples include the type of investment instrument, the quality of management, the way the investment is financed and the customer base of the issuer. For example, the common stock of a large and well-managed company would be expected to provide a level of return higher from that of a small and poorly managed firm. Assessing internal factors and their impact on return is one important step in analyzing potential investments.

External Forces: External forces such as Federal Reserve actions, shortages war, price controls, and political events may also affect the level of return. None of these is under the control of the issuer of the investment instrument. Because investment instruments are affected differently by these factors, it is not unusual to find two instruments with similar

internal characteristics offering significantly different returns. As a result of the same external force, the expected return from one instrument may increase, whereas that of another decreases. Likewise, the economies of various countries respond to external forces in different ways.

Another external force is the general level of price changes, either upwards caused by “inflation” or downwards caused by “Deflation.” Inflation tends to have a positive impact on certain types of investment instruments, such as real estate, and a negative impact on others, such as stocks and fixed income securities. Rising interest rates, which normally accompany increasing rates of inflation, can significantly affect returns

3.3 The Time Value of Money

Imagine that Mr. Andrew who is 25 years of age begins making annual cash deposits of N1,000 into a savings account that pays 5 per cent annual interest. After 40 years, that is at the age of 65 years, Mr. Andrew would have made deposit totaling N40,000, that is, (40 years x N1,000 per year). Assuming Mr. Andrew made no withdrawals, what do you think Mr. Andrew’s account balance would be? Will it be N50,000, N75,000? Or N100,000? The answer is none of the above. Mr. Andrew’s N40,000 would have grown to nearly N12,000. Why? Because the time value of money allows the deposits to earn interest that is compounded over the 40 years. Time Value of Money refers to the fact that as long as an opportunity exists to earn interest, the value of money is affected by the point in time when the money is expected to be received. Because opportunities to earn interest on funds are readily available, the sooner you receive a return on a given investment, the better.

3.3.1 Interest: The Basic Return to Savers

A savings account at a bank is one of the most basic forms of investment. The saver receives interest in exchange for placing idle funds in an account. Interest can be viewed as a “rent” paid by a borrower for the use of the lender’s money. The saver will experience neither a

capital gain nor a capital loss, because, the value of the investment (the initial deposit) will increase only by the amount of interest earned.

Simple interest: The income paid on such instruments as Certificates of Deposit (CDs), bonds, and other forms of investment that pay interest is most often calculated using the simple interest method: Interest is paid only on the initial deposit for the amount of time it is held. For example, if you hold a N100 initial deposit in an account paying 6 per cent interest per annum, you will earn N6 interest at the end of the year, that is $(1 \text{ yr} \times 0.06 \text{ N}100)$.

Using the simple interest method, the stated rate of interest is the true rate of interest (or return), which is, the actual rate of interest earned. In our example, the true rate of interest is 6 per cent. Because the interest rate reflects the rate at which current income is earned regardless of the size of the deposit, it is a useful measure of current income.

3.3.2 Compound Interest

Compound interest is paid not only on the initial deposit but also on any interest accumulated from one period to the next period. This is the method usually used by savings institutions. When interest is compounded annually over a single year, compound interest and simple interest provide similar results. In this case the stated interest rate and the true interest rate are equal. Note that this is only in the first year. In subsequent years, the interest earned in the first year is compounded or added to the principal and both of them earn interest on the stated rate of interest.

4.0 CONCLUSION

In this unit we dealt with returns on investment instruments. We noted that return means the level of profit from an investment, that is, the reward for investing. What motivates an investor to invest in a given instrument is the expected return. We also talked about the current income and capital gains (or losses).

5.0 SUMMARY

This unit clearly demonstrates that it is only one factor that motivates investors to invest in instruments. That single factor is the expected return from the investment. Return on

investment comes from sources such as dividend and interest payment. Return can also be earned from capital gain, that is when we sell an investment instrument for more than its original purchase price.

6.0 TUTOR-MARKED ASSIGNMENT

- * Discuss what you understand by “current Income”
- * Why is return so important in investment practice?

7.0 REFERENCE/FURTHER READING

Bodie, Z. et al. (2001) Essentials of Investment (Fourth Edition)

Published by McGraw-Hill Company Inc., 1221 Avenue, New York, U.S.A.

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UNIT 2 RISK: THE OTHER SIDE OF THE INVESTMENT COIN

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1.0 INTRODUCTION

The investment coin has two sides like any other coin. One side represents the earning of returns and the other side embodies the risks and dangers of not realizing our investment expectations. In essence, we cannot consider return without also looking at risk, the chance that the actual return from an investment may differ from what is expected. In this unit, we shall consider the various types of risks in different investment instruments.

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2.0 OBJECTIVES

After studying this unit, the student will be familiar with:

- * The relationship between risk and return called the “Risk-Return Trade-off”
- * Various risks associated with different investment instruments

3.0 MAIN CONTENT

3.1 The Concept of Risk

As earlier mentioned, we cannot consider return without also looking at risk, the chance that the actual return from our investment may differ from our expectation. The risk associated with a given investment is directly related to its expected return. In general, the broader the range of possible returns associated with a given investment, the greater its risk, and vice versa. Expressed in another way, riskier investments tend to provide higher levels of return or the higher the risk the higher the reward. Otherwise, why would an investor risk his capital?

In general, investors attempt to minimize risk for a given level of return or to maximize return for a given level of risk. This relationship between risk and return is usually referred to as the “risk-return trade-off.”

3.1.1 Sources of Risk

The risk associated with certain investment instrument may result from a combination of a variety of possible sources. A Prudent investor considers how the major sources of risk might affect potential investment instruments. Of course, currency exchange rate should also be considered when investing internationally.

3.1.2 Business Risk

In general, business risk is concerned with the degree of uncertainty associated with the earnings of an investment and the ability of that investment to pay interest, principal, dividends, and any other returns owed investors. For example, a business firm may experience

poor earnings and, as a result fail to pay investors fully. In this case, business owners may

receive no return if earnings are not adequate to meet obligations. Debt holders, on the other hand, are likely to receive some, but not necessarily all, of the amount owed them, because of the preferential treatment legally accorded to debt instrument holders.

Much of the business risk associated with a given investment instrument is related to its kind of business. For example, the business risk of a public utility common stock differs from that of a high-fashion clothing manufacturer. Generally, investments in similar kinds of firms have similar risk although differences in management, costs, and location.

3.1.3 Financial Risk

The degree of uncertainty of payment attributable to the mix of debt and equity used to finance a firm or property is financial risk. The larger the proportion of debt used to finance a firm or property, the greater its financial risk. Debt financing obligates the firm to make interest payments as well as to repay the debts, thus increasing the firm's risk. These fixed-payment obligations must be met before the distribution of any earnings to the owners of such firms or properties. Inability to meet obligations associated with the use of debt could result in business failure and in loss for bond-holders as well as for stock-holders.

3.2 Purchasing Power Risk

The chance that changing price levels within the economy (inflation or deflation) will adversely affect investment returns is purchasing power risk. Specifically, this risk is the chance that generally rising prices (inflation) will reduce purchasing power, that is, the amount of a given commodity that can be purchased with Naira. For example, if last year one Naira could buy ten oranges. This year, if orange sellers start selling ten oranges for N2, it means that N1 can buy only five oranges this year. In period of rising price levels, the purchasing power of the Naira decreases and vice versa.

In general, investments whose values move with general price levels have low purchasing power risk and are most profitable during periods of rising prices. Those that provide fixed returns have high purchasing power risk and are most profitable during periods of declining price levels or low inflation. The returns on real and tangible personal property investments, for example, tend to move with the general price level, whereas returns from deposit accounts and bonds do not.

3.2.1 Interest Rate Risk

Securities are especially affected by interest rate risk. This is particularly true for those securities that offer purchasers a fixed periodic return. Interest rate risk is the chance that changes in interest rates will adversely affect the value of a security. The interest rate changes themselves result from changes in the general relationship between the supply of and the demand for money. As interest rates change, the prices of many securities fluctuate. They decrease with increasing interest rates, and increase with decreasing interest rates. . The price of fixed income securities, such as, bonds and preferred stock drop when interest rates rise. They thus provide purchasers with the same rate of return that would be available at prevailing rates. The reverse is the case when interest rates fall.

The other aspect of interest rate risk is related to investing in short-term securities such as Treasury bills, certificates of deposit, commercial paper, and bankers' acceptances. Some investors include these securities in their portfolios rather than investing in long-term securities. Investors face the risk that when short-term securities mature, their proceeds may have to be invested in lower yielding, new short-term securities. By initially making a long-term investment, you can lock-in a return for a period of years rather than face the risk of declining the returns from a short-term security investment strategy are adversely affected. Most investment instruments are subject to interest rate risk. However, fixed-income securities are most directly affected by interest rate movements followed by other long-term securities such as common stock and property.

3.2.2 Liquidity Risk

Liquidity risk is the risk of not being able to liquidate an investment conveniently and at a reasonable price. The liquidity of a given investment instrument is an important consideration for an investor. In general, investment instruments traded in a thin market, where demand and supply are small, tend to be less liquid than those traded in broad markets.

One can generally sell an investment instrument merely by significantly reducing its price. However, to be liquid, an investment instrument must be easily sold at a reasonable price.

3.2.3 Tax Risk

The chance that the Federal Government will make unfavourable changes in tax laws , driving down the after-tax returns and market values of certain investments. The greater the chance that such changes will drive down the after –tax returns and market values of certain investments, the greater the tax risk. Undesirable changes in tax laws include elimination of tax exemptions, limitation of deductions, and increase in tax rates. Virtually all investments are vulnerable to increases in tax rates, certain investments, such as municipal and other bonds, real estate, and natural resources generally have greater tax risk.

3.3 Market Risk

Market risk is the risk of a decline in investment returns because of market factors independent of the given security or property investment. Examples of market risk include political, economic, and social events as well as changes in investor tastes and preferences. Market risk actually embodies a number of different risks; purchasing power risk, interest rate risk, and tax risk.

The impact of market factors on investment returns is not uniform. Both the degree and the direction of change in turn differ among investment instruments. For example, legislation placing restrictive import quotas on foreign automobiles and electronic goods may result in a significant increase in the value of domestic automobiles and electronics. Essentially, market risk is expressed in the price volatility of a of a security. The more volatile the price of a security, the greater its perceived market risk.

3.3.1 Event Risk

Event risk implies the risk that comes from a largely (or totally) unexpected event that has a significant and usually immediate effect on the underlying value of an investment. This risk occurs when something happens to a company or property that has a sudden and substantial impact on its financial condition. Event risk goes beyond business and financial risk. It does not necessarily mean the company or market is doing poorly. Instead, it involves a largely unexpected event that has a significant and usually immediate effect on the underlying value of an investment. Event risk can take many forms and can affect all types of investment instruments.

3.3.2 Components of Risk

The risk of an investment consists of two components. Diversifiable and Non-diversifiable risks. Diversifiable risk, sometimes called unsystematic risk, results from uncontrollable or random events, such as labour strikes, lawsuits, and regulatory actions. Such risk affects various investment vehicles instruments differently. It represents the portion of an investment's risk that can be eliminated through diversification.

Non-diversifiable risk, also called systematic risk, is attributed to forces such as war, inflation, and political events that affect all investments and therefore are not unique to a given instrument. The sum of non-diversifiable risk and diversifiable risk is called total risk.

4.0 CONCLUSION

Under this unit, we discussed risk, that is the chance that the actual return from an investment may differ from what is expected. We made the point that, the risk associated with a given Investment is directly related to its expected return. We have many types of risk and they include; business risk, financial risk, purchasing risk, interest rate risk, etc.

5.0 SUMMARY

The issue of risk is important to every investor because risk affects the returns on investment. It is sometimes the assumption in investment studies that, the higher the risk in a particular investment instrument, the higher the returns, but that is not always the case. A wise investor thoroughly weighs the risk and returns in each investment move he makes.

6.0 TUTOR-MARKED ASSIGNMENT

- * What do you understand by risk and how does it affect return?
- * Explain what you understand by "Event Risk"?

7.0 REFERENCE/FURTHER READING

Bodie, Z. et al. (2001) Essentials of Investment (Fourth Edition)

Published by McGraw-Hill Company Inc., 1221 Avenue, New York, U.S.A.

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UNIT 3 INVESTING IN COMMON STOCKS

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 - 3.2.2 Disadvantages of Common Stock
 - 3.3 Basic Characteristics of Common Stocks
 - 3.3.1 Common Stock as a Corporate Security
 - 3.3.2 Classified Common Stock
- 4.0 Conclusions
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1.0 INTRODUCTION

Investing in common stock is about taking educated risk. It is also about receiving returns, sometimes spectacular ones too. It looks so easy to invest in common stock but it goes with big risk because common stock ownership makes you part owner of the firm and for this reason, you are carrying the most risk. Investors who risk their money in common stock must learn as much as possible about the company in which they are investing and the industry to which it belongs.

2.0 OBJECTIVES

After studying this unit, you will be familiar with

- * Common stocks and dividends payable to common stock holders.
- * Learn something about the characteristics of common stocks

3.0 MAIN CONTENT

3.1 The basic investment attribute of common stocks is that they enable investors to participate in the profits of the firm. Every shareholder is a part owner of the firm and, as such, is entitled to a piece of the firm's profit. This claim on income is not without limitations, however, because common stockholders are really the residual owners of the company. That is, they are entitled to dividend income and a share of the company's earnings only after all other corporate obligations have been met. Equally important as residual owners, holders of common stock have no guarantee that they will ever receive any return on their investment. The challenge, of course, is to find stocks that will provide the kind of return you are looking for. As anyone who has ever purchased stock can attest, it is not really easy to settle at common stock for there are literally thousands of actively traded stocks to choose from.

3.1.1 Why do Common Stock Appeal to Investors?

Common stocks are a popular form of investing, used by millions of individual investors. Their popularity stems from the fact that they offer investors an opportunity to tailor their investment programmes to meet individual needs and preferences. Given the size and diversity of the stock market, it is safe to say that no matter what the investment objective, there are common stocks to fit the bill. For retired people and others living on their investment holdings, stocks provide a way of earning a steady stream of current income, common stocks can serve as the basis for long-run accumulation of wealth. With this strategy, stocks are used very much like a savings account. Investors buy stock for the long haul as a way to earn not only dividends but also a steady flow of capital gains. These investors recognize that stocks have a tendency to go up in price over time, and they simply position themselves to take advantage of that fact. Indeed, it is this potential for capital gains that is the real incentive for investment in common stocks. Whereas dividends can provide a steady stream of income, the big returns come from capital gains. And few securities can match common stocks when it comes to capital gains.

3.1.2 Putting Stock Price Behaviour in Perspective

By the special nature of common stock, when the market is strong, investors can generally expect to benefit from steady price appreciation. On the other hand, when the market falters, that is, when the market is weak, stock price will begin to dwindle. The rise and fall characteristic of the stock market dictated by stock market condition gave rise to the concept of “Bull” and “Bear” situation in the stock market.

Bull Market: The stock market is said to be in bull shape when there is general rise in the price of stocks traded on it. There is active buying and selling, and investors are making money.

Bear Market: The stock market is said to be in bear shape when the general stock price is on the decline. There are not lively transactions and investors are losing money.

3.1.3 From Stock Prices to Stock Returns

So far, we have centred our discussion on stock prices, but what is even more important to investors is stock returns, which take into account, not only price behaviour, but also dividend income and capital gains.

Generally, when a firm is performing well and earning good profits, the chances are that it will declare high figure of dividend to be paid to common stock-holders. The market price of shares of a high-performing firm will always be on the increase. This means too that stockholders can make capital gains when they sell their stock in the stock exchange market.

3.2 The Pros and Cons of Stock Ownership

One reason why common stocks are so attractive to investors is the substantial return opportunities they offer. Stocks generally provide attractive highly competitive returns over the run. Indeed, common stock returns compare favourably to alternative investment outlets such as long-term corporate bonds and treasury bills.

The special advantage of equity securities (common stocks) is that stock holders are entitled to participate fully in the residual profit of the firm. In good times they earn higher dividends greater than the interest payable to bondholders.

3.2.1 Other Advantages of Common Stock

Common stocks offer some other special benefits. They are easy to buy and sell, and the transaction costs are modest. Moreover, price and market information is widely disseminated in the news and financial media. A final advantage of stock ownership is that the unit cost of share of common is usually within the reach of most individual investors. A final advantage of stock ownership is that the unit cost of share of common stock is usually within the reach of most individual investors. Unlike bonds, which carry minimum denomination of at least N100, N150 or N200 a share and any number of shares, no matter how few, can be bought or sold.

3.2.2 Disadvantages of Holding Common Stock

Looking at the other side of the coin, there are some disadvantages, too, associated with holding common stock. The major disadvantage has to do with risk. Common stocks are subject to a number of different types of risk. These risk include business and financial risk, purchasing power risk, market risk, and possibly event risk. All of these can adversely affect a stock's earnings and dividends, its price appreciation, and, of course, the rate of return earned by an investor.

Even the best of stocks possess elements of risk that are difficult to overcome, because company earning are subject to many factors, including government control and regulation, foreign competition and state of the economy. Because such factors affect sales and profits, they also affect the price behaviour of the stock and even dividends. All of these lead to another disadvantage: The earnings and performance of a stock are subject to wide swings so it is difficult to value common stock adequately.

3.3 Basic Characteristics of Common Stocks

Each share of common stock represents equity (ownership) in a company. Indeed, it is this equity position that explains why common stocks are often referred to equity securities or equity capital. Every share entitled the holder to an equal ownership position and participation in the corporation's earnings and dividends, and equal vote, and equal voice in management. Together, the common stockholders own the company, and the more shares an investor owns, the bigger his or her ownership position. Common stock has no maturity date; I remain s in position and in power indefinitely unless the holder decides to sell it to another investor.

3.3.1 Common Stock as a Corporate Security

All business firms (private and public) issue common stock. However, only the common stocks of publicly quoted corporate bodies are traded in the stock market. These are the shares that are readily available to the general public and which are bought and sold in the open market.

Shares of common stock can be issued in several different ways. The most widely used procedure today is the “public offering” of new shares, whereby the corporation, working with an underwriter, offers the investing public a certain number of shares at a certain price. New shares can also be issued using what is known as a “rights offering.” In a rights offering, existing shareholders are given the first opportunity to buy the new issues and can purchase new shares in proportion to their current ownership position. For instance, if a stockholder currently owns one per cent of a firm’s stock and the firm issues 10,000 additional shares, the rights offering will give that stockholder the opportunity to purchase one percent of 10,000 shares which boils down to 100 shares.

3.3.2 Classified Common Stock

For the most part, all the stockholders in a corporation enjoy the same benefits of ownership. Occasionally, (though not a common feature in the developing countries), a company can issue different classes of common stock, each of which entitles the holder to different privileges and benefits. These issues are known as Classified Common Stock.” Hundreds of publicly traded companies, especially in the developed economies, have created such stock classes. Even though issued by the same company, each class of common stock is different in a way.

Classified common stock is customarily used to denote either different voting rights or different dividend obligations. For instance, class A stock could be used to designate non-voting shares, and class B could carry normal voting rights. Ford Motor Company in U.S.A. is known for issuing two classes of common stock (ordinary shares). Class A stock is owned by the investing public, and class B stock is owned by the Ford family . The two classes of stock share equally in the dividends, but class A stock has one vote per share and the voting rights of the class B stock are structured to give the Ford Family a 40 per cent absolute control of the company.

4.0 CONCLUSION

In this unit, we have discussed common stock and what it has to offer investors. We noted that common stock, also referred to as ordinary share or equity share gives the holder ownership right in the firm according to the number of shares each investor holds. An investor in the stock of a firm is interested in the earnings. This earning comes in form of dividend payable to him at the end of every year when the company makes profit. The investor can also benefit from capital through the sale of his shares.

5.0 SUMMARY

Investment in common stock can be said to be the best investment so long as the company is performing profitably. The common stock holder in a well-performing company receives dividend at the end of the year. He can sell his shares to make capital gains, and he has voting right and by voting right, he is indirectly participating in the running of the organization. In good times, the investor makes capital gains out of his shares, and in bad periods he will incur capital losses.

6.0 TUTOR-MARKED ASSIGNMENT

- * Why is the common stock holder referred to as Residual Owner of the company?
- * When can a common stock holder incur capital loss?

7.0 REFERENCE/FURTHER READING

Bodie, Z. et al. (2001) Essentials of Investment (Fourth Edition)

Published by McGraw-Hill Company Inc., 1221 Avenue, New York, U.S.A.

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Glorious Hope Printers, Glorious Hope House, 53 Jagunmolu Street, Bariga, Lagos.

UNIT 4 BUYING AND SELLING OF COMMON STOCKS

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1.0 INTRODUCTION

In the stock market investors engage in the buying and selling of stocks. The buying and selling of stocks demand that the investor should be familiar with the way stocks are quoted and the costs of executing common stock transactions. This unit will introduce the student to the requirements for successful buying and selling of common stocks.

2.0 OBJECTIVES

After studying this unit, the student should be familiar with :

- * Knowledge and wisdom required for successful buying and selling of common stocks
- * How to determine the “par value” and “book value” of common stocks

3.0 MAIN CONTENT

3.1 Buying and Selling of Common Stocks

Whether buying or selling stocks, investors should be familiar with the way stocks are quoted and with the costs of executing common stock transactions. Certainly, keeping track of current prices is an essential element in the buying and selling decisions of investors. They are the link in the decision process that lets the investor decide when to buy or sell a stock. They also help investors monitor the market performance of their security holdings. Similarly, transaction costs are important because of the impact they can have on investment returns. Indeed, the costs of executing stock transactions can sometimes consume most (or all) of the profits from an investment. These costs should not be taken lightly.

3.1.1 Investors in the stock market have come to rely on a highly efficient information system that quickly disseminates market prices to the public. The stock quotes that appear daily in the financial press are a vital part of that information system. To see how price quotations work and what they mean, consider the quotes that appear daily in the Financial Times and other Newspapers. These quotes give, not only the most recent price of each stock, but also a great deal of additional information.

3.1.2 Transaction Costs

Common stock can be bought and sold in round or odd lots. A round lot is 100 shares of stock. An odd lot is a transaction involving less than 100 shares. The sale of 400 shares of stock would be a round lot transaction; the sale of 75 shares would be an odd lot transaction. Trading 250 shares of stock would involve a combination of two round lots and an odd lot.

An investor incurs certain transaction costs when buying or selling stock. In addition to some modest transfer fees and taxes paid by the seller, the major cost is the brokerage fee paid by both the buyer and the seller at the time of the transaction. As a rule, brokerage fees amount to one per cent to five per cent of most transactions, though they can go much higher particularly for very small trades. This is so because the purchase or sale of odd lots requires the assistance of a specialist known as an odd-lot dealer. This usually results in an odd-lot differential of 12.5 to 25 kobo per share.

3.2 Common Stock Value

The worth of a share of common stock can be described in a number of ways. Terms such as par value, book value, market value, and investment value are all found in the financial media. Each designates some accounting, investment, or monetary attribute of the stock in question.

3.2.1 Par Value

The term “par value” refers to the stated, or face value of a stock. It is not really a measure of anything, and except for accounting purposes, it is relatively useless. In many ways, par value is a throwback to the early days of corporate law, when it was used as a basis for assessing the extent of a stockholder’s legal liability. Because the term has little or no significance for investors, many stocks today are issued as no-par or low-par stocks, that is, they may have par values of only a penny or two.

3.2.2 Book Value

“Book Value,” another accounting measure, represents the amount of stock-holder’s equity in the firm. It is commonly used in security analysis and stock valuation. Book value indicates the amount of stockholder funds used to finance the firm. It is calculated by subtracting the firm’s liabilities and preferred stock from its assets.

Let us assume that a corporation has N10 million assets, owes N5 million in various forms of short- and long-term debt, and has N1 million worth of preferred stock outstanding. The book value of this firm would be N4 million. This amount can be converted to a per-share basis (book value per share) through dividing it by the number of common shares outstanding. For example, if this firm has 100,000 shares of common stock outstanding, then its book value per share is N40. As a rule, most stocks have market prices that are above their book values.

3.2.3 Market Value

“Market value” of a stock is one of the easiest stock values to determine. It is simply the prevailing market price of an issue. In essence, market value indicates how the market participants as a whole have assessed the worth of a share of stock. By multiplying the market price of the stock by the number of shares outstanding, we can also find the market value of the firm itself, or what is known as the firm’s market capitalization. For example, if a firm has N1 million shares outstanding and its stock trades at N50 per share, the company has a market value (or market cap) of N50 million. Because investors are always interested in an issue’s market price, the market value of a share of stock is generally of considerable importance to stockholders as they formulate their investment policies and programmes.

3.2.4 Investment Value

Investment value is probably the most important measure for a stockholder. It indicates the worth investors place on the stock, that is to say, what they think the stock should be trading for. Determining a security’s investment worth is a complex process based on expectations of the return and risk behaviour of a stock. Every stock has two potential sources of return. The first one is annual dividend payments and the second is possible capital gains that could accrue if the stock is sold after the market price of that stock has appreciated.

In establishing investment value, investors try to determine how much money they will make from these two sources and then use that estimate as the basis for formulating the return potential of the stock. At the same time, they try to assess the amount of risk to which they will be exposed by holding the stock. Such return and risk knowledge helps them place an investment value on the stock. This value represents the maximum price an investor should be willing to pay for the issue.

3.3 The Dividend Decision

By paying out dividends on annual or half-yearly basis, companies share with their stockholders the profits they earn. Actually, the question of how much to pay in dividend is decided by a firm’s board of directors. The directors evaluate the firm’s operating results and financial condition to determine whether dividends should be paid and, if so, how much. If the directors decide to pay dividends, they also establish several important payment dates.

3.3.1 Corporate Versus Market Factors

When the board of directors assembles for a regular dividend meeting, it weighs a variety of factors in making the dividend decision. First, the board looks at the firm's earnings. Even though a company does not have to show a profit to pay dividends, profits still are considered a vital link in the dividend decision.

With common stocks, the annual earnings of a firm are usually measured and reported in terms of earnings per share (EPS). Basically, EPS translates total corporate profits into profits on a per-share basis and provides a convenient measure of the amount of earnings available to stockholders. Earning per share is found by using the following simple formula:

$$\text{EPS} = \frac{\text{Net profit after taxes} - \text{Preferred dividends}}{\text{Number of shares of common stock outstanding}}$$

3.3.2 Some Important Dates

Let us assume the directors decide to declare a dividend. They then must indicate the date of payment and other important dates associated with the dividend. Normally, the directors will issue a statement to the press indicating their dividend decision, along with the dividend payment dates. These statements are widely published in the Financial Times and other print media.

Three dates are particularly important to the stockholder: The date of record, ex-dividend date, and payment date. The "date of record" is the date on which the investor must be a registered shareholder of the firm to be entitled to a dividend. These stock holders are usually referred to as "holders of record." When the board specified the date of record, all the investors who are official stock holders of the firm as of the close of business on that date will receive the dividends that have just been declared.

The "Payment date" is also set by the board of directors. Generally, the payment date follows the date of record after one week. The payment date is the actual date on which the firm will mail dividend cheques to holders of record.

Because of the time needed to make book-keeping entries after a stock is traded, the stock will sell on an “ex-dividend” basis for three business days prior to the date of record. That is, the ex-dividend date will dictate whether you were an official shareholder and therefore eligible to receive the declared dividend. If you sell your stock before this date, the new shareholder will receive the recently declared dividend.

4.0 CONCLUSION

In this unit, we studied the process of buying and selling common stocks. We noted that it is advisable for an investor to get familiar with the way stocks are quoted and the costs of executing common stock transactions. We also looked at common stock values and discussed the par value, book value, market value and investment value of common stock.

5.0 SUMMARY

Keeping track of current prices is an essential element in the buying and selling of common stock. Similarly, transaction costs are important because of the impact they can have on investment returns since the ultimate aim of every investor is to earn the highest possible returns. Common stock holders receive dividend on their holdings. They are interested in receiving high figures of dividend hence the way a firm makes investment decision is of interest to them.

6.0 TUTOR-MARKED ASSIGNMENT

- * Explain the meaning of “par value” and “market value” of common stock
- * How does a publicly quoted firm make dividend decision?

7.0 REFERENCE/FURTHER READING

Bodie, Z. et al. (2001) Essentials of Investment (Fourth Edition)

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MODULE 3

Unit 1	Security Analysis
Unit 2	Investing in Fixed-Income Securities
Unit 3	Bond Valuation and Analysis.
Unit 4	Preferred Stock and Convertible Securities

UNIT 1 SECURITY ANALYSIS

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3.2.2	Economic Analysis and the Business Cycle
3.3	Key Economic Factors
3.3.1	Developing an Economic Outlook
3.3.2	Industry Analysis
4.0	Conclusions
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1.0 INTRODUCTION

Just about everywhere you look, there is a product or service created by a company that issues common stock. Think of Coca Cola Company, Seven Up firm or the Liver Brothers, all of them

have one product or another to sell. Your satisfaction with a product or your attraction to its design may lure you into investing in its stock. But, wait a minute! Do not invest yet. Carry out security analysis to determine the value of the stock, the risks inherent and the potential returns before you stick out your neck to invest.

2.0 OBJECTIVES

After studying this unit, the student should be familiar with the:

- * Principles followed in Security Analysis
- * Application of Security Analysis in an Efficient Market

3.0 MAIN CONTENT

3.1 Principles of Security Analysis

The obvious motivation for investing in stocks is to watch your money grow. Unfortunately some of the investments we make end up in losses rather than profits. Most of the disasters in our investment can be traced to bad timing, greed, poor planning, or failure to use common sense in making investment decisions. That is why every investor needs to carry out security analysis of stocks before deciding to invest.

Security analysis consists of gathering information, organizing it into a logical framework, and then using the information to determine the inherent or intrinsic value of a common stock. Given a rate of return that is compatible with the amount of risk involved in a proposed transaction, intrinsic value provides a measure of the underlying worth of a share of stock. It provides a standard for helping you judge whether a particular stock is undervalued, fairly priced, or overvalued.

In investment, the question of value centres on returns. In particular, a satisfactory investment candidate is one that offers a level of expected return commensurate with the amount of risk involved. As a result, not only must an investment instrument be profitable, it must be sufficiently profitable, that is, you expect it to generate a return high enough to offset the perceived exposure to risk.

3.1.1 What Security Analysis Particularly Address

If you could have your way, you would probably like to invest in something that offers you a complete preservation of your capital, along with sizeable current income and capital gains. The problem, of course, is in finding such a security. One approach is to buy whatever that strikes your fancy. A more rational approach is to use security analysis to look for promising investment candidates. Security analysis therefore specifically addresses the question of “what to buy” by determining the “worth of a stock.” Presumably, an investor will buy a stock only if its prevailing market price does not exceed its worth. The worth of a stock means the intrinsic value put on it as perceived by the investor. However, intrinsic value depends on several factors:

1. Estimates of the stock’s future cash flows , that is, the amount of dividends you expect to receive over the holding period and the estimated price of the stock at time of sale.
2. The discount rate used to translate these future cash flows into present value.
3. The amount of risk embedded in achieving the forecasted level of performance.

3.1.2 Focus of Traditional Security Analysis

Traditional security analysis usually takes a “top-down” approach: It begins with economic analysis and the moves to industry analysis and finally to fundamental analysis.

Economic analysis is concerned with assessing the general state of the economy and its potential effects on security returns.

Industry analysis deals with the industry within which a particular company operates, how the company is measuring up with the major competitors in the industry, and the general outlook for that industry.

Fundamental analysis looks in depth at the financial condition and operating results of a specific company and the underlying behaviour of its common stock. In essence, it looks at the “fundamentals of the company,” that is, the company’s investment decisions, the liquidity of its assets, its use of debt, its profit margins and earnings growth and ultimately, it looks at the future prospects of the company and its stock. Fundamental analysis is closely linked to the notion of intrinsic value because it provides the basis for projecting a stock’s future cash flows.

A key part of this analytical process is company analysis, which takes a close look at the actual financial performance of the company. Such analysis is not meant simply to provide interesting information about how the company has performed in the past, rather, it is done to help investors formulate expectations about the future performance of the company and its stock. Make no mistake about it, in the field of investment, it is the future that matters. But in order to understand the future prospects of the firm, an investor should have a good handle on the company's current conditions and its ability to produce earnings.

3.1.3 Who Needs Security Analysis in an Efficient Market?

The concept of security analysis is general and fundamental analysis in particular is based on the assumption that investors are capable of formulating reliable estimates of a stock's future behaviour. Fundamental analysis operates on the broad premise that some securities may be mispriced in the market place at any given point in time. Furthermore, fundamental analysis assumed that, by undertaking a careful analysis of the inherent characteristics of each of the firms in question, it is possible to distinguish those securities that are correctly priced from those that are not.

To many, those two assumptions of fundamental analysis seem reasonable. However, there are others who just do not accept the assumptions of fundamental analysis. These are the so called "Efficient Market" advocates. They believe that the market is so efficient in processing new information that securities trade so close to or exactly at their correct values at all times. Thus, they argue, it is virtually impossible to outperform the market on a consistent basis.

In its strongest form, the efficient market hypothesis asserts that:

- (1) Securities are rarely, if ever, substantially misplaced in the market place.
- (2) No security analysis, however detailed, is capable of identifying misplaced with a frequency greater than that which might be expected by random chance alone.

Is the efficient market hypothesis correct? Is there a place for fundamental analysis in modern investment theory? Interestingly, most financial theorists and practitioners would answer yes to both of these questions.

3.2 Solution to the Paradox

The solution to this apparent paradox is really quite simple. Basically, fundamental analysis is of value in the selection of alternative investment instruments for two important reasons. First, financial markets are as efficient as they are because a large number of people and powerful financial institutions invest a great deal of time and money in analyzing the fundamentals of most widely held investments. In other words, markets tend to be efficient, and securities tend to trade at or near their intrinsic values, simply because a great many people have done the research necessary to determine what their intrinsic values should be. Second, although the financial markets are generally efficient, they are by no means perfectly efficient. Pricing errors are inevitable, and those individuals who have conducted the most thorough studies of the underlying fundamentals of a given security are the most likely to profit when errors do occur.

3.2.1 Economic Analysis

If we live in a world where economic activity had absolutely no effect on the stock market or no security prices, we could avoid studying the economy altogether. The fact is, of course, that we do not and cannot live in such a world. Stock prices are heavily influenced by the state of the economy and by economic events. As a rule, stock prices tend to move upwards when the economy is strong, and downwards when the economy starts to dwindle.

The reason why the economy is so important to the market is simple: The overall performance of the economy has a significant bearing on the performance and profitability of the companies that issue common stock. As the fortunes of the issuing firms change with the economic conditions, so do the prices of their stocks. Of course, not all stocks are affected in the same way or to the same extent. Some sectors of the economy, like food retailing, may be only mildly affected by the economy, others, like the construction and auto industries, are often hard hit when times get rough.

A general study of the economy should not only give an investor a grasp of the underlying nature of the economic environment but also enable him to assess the current state of the economy and to formulate expectations about its future course. It can go so far as to include a detailed examination of each sector of the economy, or it may be done on a very informal basis. Regardless of how it is performed, however, the purpose (from security analysis perspective) is always the same: To establish a sound foundation for the valuation of common stock.

3.2.2 Economic Analysis and the Business Cycle

Economic analysis sets the tone for security analysis. If the economic future looks bleak, you can probably expect most stock returns to be equally dismal. If the economy is buoyant, stocks prices will be high. The behaviour of the economy is sometimes captured in the business cycle, which reflects changes in total economic activity over time. Two widely followed measures of the business cycle are:

- (a) Gross Domestic Product (GDP), which represents the market value of all goods and services produced in a country over the period of a year.
- (b) Index of Industrial Production which measures the activity/output in the industrial or productive segment of the economy.

Normally, gross domestic product and the index of industrial production move up and down following the dictates of the business cycle.

3.3 Key Economic Factors

Several parts of the economy are especially important because of the impact they have on total economic activity. These would naturally include:

Government fiscal policy:

Taxes

Government spending

Monetary policy:

Money supply

Interest rates

Other factors:

Consumer spending

Business Investments

Foreign trade and foreign exchange rates

Government physical policy tends to be expansive when it encourages spending, that is, when the government reduces taxes and increases the size of the budget. Similarly, monetary policy is said to be expansive when money is readily available and interest rates are relatively low. An expansive economy also depends on a generous level of spending by consumers and

business concerns. These same variables moving in a reverse direction can have a recessionary impact on the economy, as for example, when taxes and interest rates increase or when spending by consumers and businesses falls off.

The impact of these major forces filters through the system and affects several key dimensions of the economy. The most important of these are industrial production, corporate profits, retail sales, personal income, the unemployment rate, and inflation. For example, a strong economy exists when industrial production, corporate profits, retail sales, and personal income are moving up and unemployment is moving down. Thus, when conducting an economic analysis, an investor should keep an eye on fiscal and monetary policies, consumer and business spending, and foreign trade for the potential impact they have on the economy. At the same time, he must stay abreast of the level of industrial production, corporate profits, Retail sales, personal income, unemployment, and inflation in order to assess the state of the business cycle.

3.3.1 Developing an Economic Outlook

Conducting an economic analysis involves studying fiscal and monetary policies, inflationary expectations, consumer and business spending, and the state of the business cycle. Often investors do this on a fairly informal basis. As they form their economic judgments, many rely on one or more of the popular published sources as well as on periodic reports from major brokerage houses. These sources provide a convenient summary of economic activity and give investors a general feel for the condition of the economy.

Once you have developed a general economic outlook, you can use the information in one of two ways. One approach is to construct an economic outlook and then consider where it leads in terms of possible areas for further analysis. For example, suppose you uncover information that strongly suggests the outlook for business spending is very positive. On the basis of such an analysis, you might want to look more closely at capital goods producers, such as machine tool manufacturers, as investment candidates.

A second way to use information about the economy is to consider specific industries or companies and ask, "How will they be affected by expected developments in the economy?" Take an investor with an interest in gold trinkets stocks. Because of the nature of the business (durable fashion goods), these stocks are susceptible to changing economic conditions.

Especially important here is the level of discretionary consumer spending: Normally spending on such goods tends to accelerate when the economy picks up and slackens when the economy slows down. In this instance, our imaginary investor would first want to assess the current state of the business cycle. Using insight, he would then formulate some expectations about the future of the economy and the potential impact it holds for the stock market in general and a gold trinket stocks in particular.

3.3.2 Industry Analysis

Looking at securities in terms of industry groupings is a popular way of viewing stocks and is widely used by both individual and institutional investors. This is a sensible approach because stock prices are influenced by industry conditions. The level of demand in an industry and other industry forces set the tone for individual companies. Clearly, if the outlook is good for an industry, then the prospects are likely to be strong for the companies that make up that industry.

The first step in industry analysis is to establish the competitive position of a particular industry in relation to others. It is clear that not all industries perform alike.

The next step is to identify companies within the industry that hold particular promise. This sets the stage for a more thorough analysis of individual companies and securities. Analyzing an industry means looking at such things as its makeup and basic characteristics, the key economic and operating variables that drive industry performance, and the outlook for the industry. The investor will also want to keep an eye out for specific companies that appear well suited to take advantage of industry conditions. Companies with strong market conditions should be favoured over those with less secure positions. Such dominance confers the ability to maintain pricing leadership and suggests that the firm will be in a position to enjoy economies of scale and low-cost production. Market dominance also enables a company to support a strong research and development effort, thereby helping it secure its leadership position for the future.

Normally, an investor can gain valuable insight about an industry by seeking answers to the following questions:

- (1) What is the nature of the industry? Is it monopolistic, or are there many competitors? Do few set the trend for the rest?

- (2) To what extent is the industry regulated? Is it a public utility?
If the industry is regulated, then find out how friendly the regulatory authority is.
- (3) What role, if any, does labour play in the industry? How important are labour unions?
Are there good labour relations within the industry? When is the next round of contract talks.
- (4) How important are technological developments? Are any new developments taking place, and what impact are potential breakthroughs likely to have?
- (5) Which economic forces are especially important to the industry?
Is the demand for the industry's goods and services related to key economic variables?
If so, what is the outlook for those variables?
How important is foreign competition to the health of the industry?
- (6) What are the important financial and operating considerations? Is there an adequate supply of labour, material, and capital?
What are the capital spending plans and needs of the industry?

4.0 CONCLUSION

In this unit, we studied security analysis which we pointed out is the process of gathering and organizing information and then using it to determine the value of a share of common stock. In essence, security analysis addresses the question of "what to buy" by determining what a stock ought to be, in terms of its value. Determining the intrinsic value of a stock depends on several factors among them is the risk inherent in achieving the forecasted performance.

5.0 SUMMARY

We carry out security analysis in order to determine the value of a common stock. Security analysis provides a standard for helping us determine whether a particular stock is undervalued, fairly priced or overvalued. In investment practice, the question of value centres on return. In particular, a satisfactory investment instrument is one that offers a level of expected return commensurate with the amount of risk involved.

6.0 TUTOR-MARKED ASSIGNMENT

- * What is the main objective of security analysis?
- * What are the two assumptions of fundamental analysis of securities?

7.0 REFERENCES/FURTHER READING

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MODULE 3

UNIT 2 INVESTING IN FIXED-INCOME SECURITIES

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1.0 INTRODUCTION

Under this unit, we shall be studying investment in fixed-income securities. Some securities such as bonds carry fixed-income payable at maturity. Other investments instruments, such as, common stock has no fixed-income. An investor in common stocks receives dividend and dividend payment is dependent on the earnings power of the issuing firm.

2.0 OBJECTIVES

After studying this unit, the student will be familiar with:

- * The process of investing in fixed-income securities
- * The advantages and disadvantages in fixed-income investment

3.0 MAIN CONTENT

3.1 Investment in Fixed-Income Securities

The oil industry is one of the world's most capital intensive businesses today. It requires billions of Naira worth of equipment for exploration and production of natural resources. One of the largest oil companies operating in Nigeria is Mobil, which searches for oil and natural gas throughout the world. Much of Mobil's equipment is financed through the issuance of long-term bonds. Because Mobil is such a strong company, investors in its bonds are confident that the debt will be paid. Mobil, of course, must pay investors interest on these bonds, but because it has a strong credit rating, it does not have to pay as high an interest rate as some other less well-established companies.

3.1.1 Why Invest in Bonds?

In the past, investment in bonds was viewed as rather dull investment that produced current income and little else. It is no longer true today, instead bonds are regarded as highly competitive investment instruments that offer the potential for attractive returns.

Bonds are publicly traded long-term debt securities whereby the issuer agrees to pay a fixed amount of interest over a specified period of time and to repay a fixed amount of principal at maturity. Bonds are issued in convenient denominations and by a variety borrowing companies, government corporations, states and local governments. Bonds are referred to as fixed –income securities because the debt-service obligations of the issuer are fixed. That is, the issuing organization agrees to pay a fixed amount of interest periodically and to repay a fixed amount of principal at maturity.

Like any other type of investment instrument, bonds provide investors with two kinds of income:

- (1) They provide a generous amount of current income.
- (2) They can often be used to generate substantial amounts of capital gains.

The current income is, of course, derived from the interest payments received over the life of the issue. Capital gains, in contrast, are earned whenever market interest rates fall. A basic trading rule in the bond market is that interest rates and bond prices move in opposite directions. When interest rates rise, bond prices fall, and when interest rates drop, bond prices move up. Thus, it is possible to buy bonds at one price and to sell them later at a higher price. Of course, it is also possible to incur a capital loss, should market rates move against you. Taken together, the current income and capital gains earned from bonds can lead to attractive investor returns.

3.1.2 Bonds as Versatile Investment Outlet

Bonds are also a versatile investment outlet. They can be used conservatively by those who primarily (or exclusively) seek high current income, or they can be used aggressively by those who go after capital gains. Although, bonds have long been considered attractive investments for those seeking current income, it is only since the advent of volatile interest rates that they have also been recognized as outstanding trading instruments. Investors found that, given the relation of bond prices to interest rates, the number of profitable trading opportunities increased substantially as wider and more frequent swings in interest rates began to occur.

In addition, certain types of bonds can be used for tax shelter. Municipal obligations are perhaps the best known in this regard, but certain federal agency issues also offer some tax advantages. Finally, because of the general high quality of many bond issues, they can also be used for preservation and long-term accumulation of capital. With quality issues, not only do investors have a high degree of assurance that they will get their money back at maturity, but the stream of interest income is also highly dependable.

3.1.3 Putting Bond Market Performance in Perspective

The bond market is driven by interest rates. In fact, the behaviour of interest rates is the single most important force in the bond market. These rates determine not only the amount of current income investors will make but also the amount of capital gains (or losses) bondholders

will incur. It is not surprising, therefore, that bond market participants follow interest rates closely and that bond market performance is generally portrayed in terms of market interest rates.

3.2 Total Returns in the Bond Market

As with stocks, total returns in the bond market are made up of current income and capital gains (or losses). Not surprisingly because rising rates mean falling prices, the drawn-out bear market in bonds mean depressing returns for bondholders. For investors just entering the market, the higher market yields were welcomed, because they meant higher levels interest income. But for those already holding bonds, the implications were much different, as returns fell way below expectations and, in many cases resulted into outright losses.

Some market experts go so far as to question whether bonds should have any place at all in an investment portfolio. They reason that if interest rates have bottomed out, then bonds will not have a lot to offer investors (other than relatively low returns).

3.2.1 Exposure to Risk

Like any other type of investment instrument, fixed-income securities should be viewed in terms of their risk and return. Generally speaking, bonds are exposed to five major types of risks; interest rate risk, purchasing power risk, business/financial risk, liquidity risk, and call risk.

Interest Rate Risk: Interest rate risk is the number one source of risk to fixed-income investors, because it is the major cause of price volatility in the bond market. In the case of bonds, interest rate risk translates into market risk: The behaviour of interest rates, in general affects all bonds and cuts across all sectors of the market including the government treasury bills market.. When market interest rates rise, bond prices fall, and vice versa. And as interest rates become more volatile, so do bond prices.

Purchasing Power Risk: Purchasing power risk accompanies inflation. During periods of mild inflation, bonds do pretty well, because their returns tend to outstrip inflation rates. Purchasing power risk really hits up when inflation takes off. When that happens, bond yields start to lag behind inflation rates. The reason: You have a fixed coupon rate on your bond, so even though market yields are rising with inflation, your return is locked-in during the inflation period.

3.2.2 Other Risks Associated with investment in Bonds

Business/Financial Risk: This is basically the risk that the issuer will default on interest and/or principal payments. Business/financial risk has to do with the quality and financial integrity of the issuer; the stronger the issuer, the less business/financial risk there is to worry about. This risk does not even exist in some securities. For example, the government treasury bills do not have business/financial risk.

Liquidity Risk: Liquidity risk is the risk that a bond will be difficult to unload if you want or have to sell it. In certain sectors of the market, this is a far bigger problem than a lot of investors realize. Even though the bond market may be enormous, the market is chiefly over-the-counter in nature, and much of the activity occurs in the primary/new issue market. Therefore, with the exception of the Treasury market and good deal of the agency market, relatively little trading is done in the secondary markets.

Call Risk: Call risk is sometimes referred to as prepayment risk, and this is the risk that a bond will be “recalled,” that is, retired long before its scheduled maturity date. Issuers are often given the opportunity to prepay their bonds, and they do so by calling them in for prepayment. When issuers call their bonds, the bondholders end up getting cashed out of their deal and have to find another place for their investment funds, and there lies the problem. Because bonds are nearly always called for prepayment after interest rates have taken big fall, comparable investment instruments will just not be available. Thus the investor will be forced to replace a high-yielding bond with a much lower-yielding issue.

3.3 Essential Features of a Bond

A bond is a negotiable, long-term debt instrument that carries certain obligations (including the payment of interest and the repayment of principal) on the part of the issuer. Because bondholders, unlike holders of common stock, are only lending money to the issuer, they are not entitled to an ownership position or to any of the rights and privileges open to the common stock holders. But bond holders and well as bond issuers do have a number of well defined rights and privileges that together help to define the essential features of a bond.

Bonds Interest and Principal: In the absence of any trading, a bond investor’s return is limited to fixed interest and principal payments. That is because bonds involve fixed claim on the

issuer's income and a fixed claim on the assets of the issuer. As a general rule, bonds pay interest every six months. There are sometimes exceptions. Some issues carry interest payment intervals as short as two months and others as long as one year. The amount of interest due is a function of a "coupon." A coupon is the feature on a bond which defines the amount of annual interest income due to an investor. For example, a N1,000 bond with an 8 per cent coupon pays N80 interest to the investor. Also, the principal amount of a bond, known as an issue's par value, specifies the amount of capital that must be repaid to the investor at maturity.

3.3.1 Maturity Date

Unlike common stock, all debt securities have limited lives and will expire on a given date in the future which is called the issue's "maturity date." Although, a bond carries a series of specific interest payment dates, the principal is repaid only once; on or before maturity. Because the maturity date is fixed (and never changes), it not only defines the life of a new issue but also denotes the amount of time remaining for older, outstanding bonds.

Two types of bonds can be distinguished on the basis of maturity; term and serial issues. A "term bond" has a single, fairly lengthy maturity date and is the most common type of issue. A "serial bond" has a series of different maturity dates, perhaps as many as 15 to 20 within a single issue. For example, a 20-year term bond issued in 1995 has a single maturity date of 2015, but that same issue as a serial bond might have 20 annual maturity dates that extend from 1996 through 2015. At each of these annual maturity dates, a certain portion of the issue would come due and be paid off.

Maturity is also used to distinguish a note from a bond. That is, a debt security that is originally issued with maturity of 2 to 10 years is known as a note, whereas a bond technically has an initial term of maturity of more than 10 years. In practice, notes are often issued with maturities of 5 to 7 years, whereas bonds normally carry maturities of 20 to 30 years or more.

3.3.2 Call Features – Let the Buyer Beware

Consider the following situation: You have just made an investment in a high-yielding, 25-year bond. Now all you have to do is sit back and let the cash flow-in. Well, perhaps that may happen for a few years. However, if market interest rates drop, it is also likely that you will

receive a notice from the issuer that the bond is being called. This means that the issue is being retired before its maturity date. There is really nothing you can do but to turn in the bond and to invest your money elsewhere. The practice is all perfectly legal because every bond is issued with a call feature which stipulates whether and under what conditions a bond can be called-in for retirement prior to maturity. Basically, there are three types of call features:

- (1) A bond can be “freely callable” which means that the issuer can prematurely retire the bond at any time.
- (2) A bond can be “non-callable” which means that the issuer is prohibited from retiring the bond prior to maturity.
- (3) The issue could carry a “deferred call” which means that the issue cannot be called until after a certain length of time has passed from the date of issue. In essence, the issue is non-callable during the deferment period and then becomes freely callable thereafter.

Call features are placed on bonds for the benefit of the issuers. They are used most often to replace one issue with another that carries a lower coupon payment, and the issuer benefits by realizing a reduction in annual interest cost. Thus, when market interest rates undergo a sharp decline, bond issuers retire their high-yielding bonds and replace them with lower-yielding obligations.

The net result is that the investor is left with a much lower rate of return than anticipated.

In an attempt to compensate investors who have lost some earnings as a result of bond call, a “call premium” is tacked onto a bond and paid to investors along with the issue’s par value at the time the bond is called. Thus, the sum of the par value plus call premium represents the issue’s “call price” which becomes the amount the issuer must pay to retire the bond prematurely.

4.0 CONCLUSION

Under this unit, we noted that most big firms finance their operations through the issuance of long-term debt instrument. The issuance of corporate bonds is one of the most popular debt instruments. Investors in bonds are confident that they will get their money back when investing in well-established company like Mobil oil and others. Investors in bonds are paid fixed interest usually annually and the return of their capital at maturity.

5.0 SUMMARY

No business organization can have enough capital for all its operational needs. What companies do is to borrow money from lenders. What well-established companies do is to issue long-term bond to investors and make money available for their operations. Bonds are publicly traded long-term debt securities. They are issued in convenient denominations to investors. Bonds are exposed to many kinds of risks including interest rate risk, purchasing power risk, business risk, liquidity risk and call risk.

6.0 TUTOR-MARKED ASSIGNMENT

- * What benefit does an investor in long-term corporation bond derive?
- * Discuss two types of risk to which a bond instrument is exposed

7.0 REFERENCES/FURTHER READING

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MODULE 3

UNIT 3 BOND VALUATION AND ANALYSIS

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1.0 INTRODUCTION

It is a common practice for companies to finance their operations by the issuance of bonds to investors. A number of factors determine a bond's price including credit quality and the general level of interest rates. Investors must evaluate these factors when deciding whether the market value of a bond will provide the kind of return they need. We shall examine, in detail, the factors that determine a bond's price under this unit.

2.0 OBJECTIVES

After studying this unit, the student will be familiar with:

- * Basic principles guiding the valuation of bonds
- * The forces that push up the price of bonds

3.0 MAIN CONTENT

3.1 Every rational investor tries to earn a return that fully compensates them for risk. In the case of bondholders, that required return has three components; the real rate of return, an expected inflation premium, and a risk premium.

The real rate of return and the inflation premium are external economic factors, and together, they equal the risk-free rate. Now, to find the required return, we need to consider the unique features and properties of the bond issue itself. We can do this by adding the bond's risk premium to the risk-free rate. A bond's risk premium will take into account key issue and issuer characteristics, including such variables as the type of bond, maturity, call features, and bond rating. The three components, that is, the real rate of return, the expected inflation premium and the risk premium, work together to determine interest rate levels at a given point in time.

Because interest rates have such a significant bearing on bond prices and yields, they are closely monitored by both conservative and aggressive investors. Interest rates are important to conservative investors because one of their major objectives is to lock in high yields. Aggressive traders also have a stake in interest rates because their investment programmes are often built on the capital gains opportunities that accompany major swings in rates.

3.1.1 Keeping Tabs on Market Interest Rates

Just as there is no single bond market but a series of different market sectors, so too there is no single interest rate that applies to all segments of the market. Rather, each segment has its own, unique level of interest rates. Granted, the various rates tend to drift in the same direction over time and to follow the same general pattern of behaviour, but it is also common for yield spreads (that is interest rate differentials) to exist in the various market sectors. We can summarize the more important market yields and yield spreads as follows:

- (1) Local government bonds usually carry the lowest market rates because of the tax-exempt feature of these obligations. As a rule, their market yields are about two-thirds those of corporate organizations. In the taxable sector, treasuries have the lowest yields because they have the least risk, followed by agencies and then corporate bodies, which provide the highest returns.
- (2) Issues that normally carry official ratings generally display similar behaviour. That is to say, the lower the rating, the higher the yield.
- (3) Bonds that are freely callable generally provide the highest returns, at least at date of issue. These are followed by deferred call obligations and then by non-callable bonds, which yield the least.
- (4) As a rule, bonds with long maturities tend to yield more than short issues. However, this rule does not hold all the time; sometimes short-term yields exceed the yield on long-term bonds.

3.1.2 Higher Yielding Segments of the Bond Market

As an investor, you should pay close attention to interest rates and yield spreads, and try to stay abreast, not only of the current state of the market, but also of the future direction in market rates. For example, if you are a conservative (income-oriented) investor and think that rates have just about peaked, that should be a clue to you to try to lock in the prevailing high yields with some form of call protection. In contrast, if you are an aggressive bond trader who thinks rates have peaked (and are about to drop), that should be a signal to buy bonds that offer maximum price appreciation potential (example, low-coupon bonds that still have a long time before they mature). Clearly, in either case, the future direction of interest rates is important.

But how does a bond investor formulate such expectations? Unless you have considerable training in economics, you will probably have to rely on various published sources. Fortunately, a wealth of such information is available. Your broker is an excellent source for such reports, as are investor services. Finally there are widely circulated business and financial publications that regularly address the current state and future direction of market interest rates. Make no mistakes about it. Prediction of future direction of interest rates is not an easy task. The best you can offer is experienced educated guesswork, and guesswork, like you know it, lacks exactitude.

3.2 What Causes Rates to Move

Although, the subject of interest rates is a complex economic issue, we do know that certain forces are especially important in influencing the general behaviour of market rates. Serious bond investors should make it a point to become familiar with the major determinants of interest rates and try to monitor those variables, at least informally.

And in that regard, perhaps no variable is more important than inflation. Changes in the inflation rate (or even expectations about the future course of inflation) have direct and pronounced effect on market interest rates and have been a leading cause of wide swings in interest rates. Clearly, if expectations are for inflation to slow down, then market interest rates should fall as well.

In addition to inflation, there are at least five other important economic variables that can significantly affect the level of interest rates. These are:

1. **Changes in the Money Supply.** An increase in the money supply pushes rates down (as it makes more funds available for loans), and vice versa. This is true only up to a point, however. If the growth in the money supply becomes excessive, it can lead to inflation, which, of course, means higher interest rates.
2. **The Size of the Federal Budget Deficit.** When the Federal Government must borrow large amounts to cover the budget deficit, the increased demand for funds exerts an upward pressure on interest rates. That is why bond market participants view the prospect of a balanced federal deficit so favourably. That is, as the federal budget deficit declines/disappears, so will a lot of the pressure on bond interest rates (which usually brings with it the potential for falling market rates).
3. **The Level of Economic Activity.** Businesses need more capital when the economy expands. This need increases the demand for funds, and rates tend to rise. During a recession, economic activity contracts, and rates typically fall.
4. **Policies of the Federal Reserve.** Actions of the Federal Reserve to control inflation also have a major effect on market interest rates. For example, when the Federal Government wants to slow real or perceived inflation down, it usually does so by driving up interest rates.

Unfortunately, such action can also have the nasty side effect of slowing down business activities as well.

5. The Level of Interest Rates in Major Foreign Markets. Today, investors look beyond national borders for investment opportunities. If rates in major foreign markets rise, that puts pressure on rates in the country to rise as well. If they fail to rise, local investors may be tempted to withdraw their Naira to buy high-yielding foreign securities in order to make more profits.

3.2.1 The Term Structure of Interest Rates and Yield Curves

Although, many factors affect the behaviour of market interest rates, one of the most popular and widely studied is bond maturity. The relationship between interest rates (yield) and time to maturity for any time of similar-risk securities is called the “term structure of interest rates.” This relationship can be depicted graphically by a yield curve which relates a bond’s term maturity to its yield to maturity at a given point in time. A particular yield curve exists for only a short period of time; as market conditions change, so do the yield curve’s shape and location.

3.2.2 Plotting Your Own curves

Yield curves are constructed by plotting the yields for a group of bonds that are similar in all respects except maturity. Treasury securities (bills, notes, and bonds) are typically used to construct yield curves.

There are several reasons for this: Their yields are easily found in financial publications, they have no risk of default, and they are homogeneous with regard to quality and other issue characteristics. Investors can also construct yield curves for other classes of debt securities, such as A-rated Local Government bonds, A-rated corporate bonds, or even certificates of deposit.

3.3 Explanations of the Term Structure of Interest Rates

As we noted earlier, the shape of the yield curve changes over time. Three commonly cited theories explain the reasons for the general shape of the yield curve. These three theories are: The expectations hypothesis, the liquidity preference theory, and the market segmentation theory.

3.3.1 Expectations Hypothesis: The expectation hypothesis suggests that the yield curve reflects investor expectations about the future behaviour of (short-term) interest rates. The relationship between rates today and rates expected in the future is due primarily to investor expectations regarding inflation. If investors anticipate higher rates of inflation in the future, they will require higher long-term interest rates today, and vice versa.

Generally, under the expectations hypothesis, an increasing inflation expectation results in an upward-sloping yield curve, a decreasing inflation expectation results in a downward-sloping yield curve, and a stable inflation expectation results in a relatively flat yield curve.

3.3.2 Liquidity Preference Theory: More often than not, yield curves have at least a mild upward slope. One explanation for the frequency of upward sloping yield curves is the liquidity preference theory. This theory states that, intuitively, long-term bond rates should be higher than short-term rates because of the added risks involved with the longer maturities. In other words, because of the risk differential (real or perceived) between long-term and short-term debt securities, rational investors prefer the less risky, short-term obligations unless they can be motivated, via higher interest rates, to invest in the longer bonds.

Actually, there are a number of reasons why rational investors should prefer short-term securities. To begin with, they are more liquid (more easily convertible to cash) and less sensitive to changing market rates, which means there is less risk of loss of principal. For a given change in market rates, the prices of long-term bonds will show considerably more movement than the prices of short-term bonds. Simply put, uncertainty increases over time, and investors therefore require a premium to invest in long maturities. In addition, just as investors tend to require a premium for tying up funds for longer periods, borrowers will also pay a premium in order to obtain long-term funds. Borrowers thus assure themselves that funds will be available and they can avoid having to roll over short-term debt at unknown and possibly unfavourable rates. All of these preferences and market forces explain why higher rates of interest should be associated with longer maturities and why it is perfectly rational to expect upward-sloping yield curves.

3.3.3 Market Segmentation Theory

Another often-cited theory is the “market segmentation theory.” This theory suggests that the market for debt is segmented on the basis of maturity preferences of different types of

financial institutions and investors. According to this theory, the yield curve changes as the supply and demand for funds within each maturity segment determines its prevailing interest rate. The equilibrium between the financial institutions that supply the funds for short-term maturities, for example, the banks and the borrowers of those short-term funds, for example, businesses with seasonal loan requirement, established interest rates in the short-term markets. Similarly, the equilibrium between suppliers and demanders in such long-term markets as life insurance and real estate determines the prevailing long-term interest rates.

The shape of the yield curve can be either upward-sloping or downward-sloping, as determined by the general relationship between rates in each market segment. When supply outstrips demand for short-term loans, short-term rates are relatively low. If, at the same time, the demand for long-term loans is higher than the available supply of funds, then long-term rates are high, and the yield curve slopes upward. Simply stated, low rates in the short-term segment and high rates in the long-term segment cause an upward-sloping yield curve, and vice versa.

4.0 CONCLUSION

We know that rational investors try to earn a return on their investment that compensates for then risk. In the case of bondholders, that return has three components which are; the real rate of return, the expected inflation premium and the risk premium. However to obtain the best of returns, an investor should be familiar with the technicalities of bond valuation. It is the knowledge of bond valuation that will arm the bond investor with trends and expected rates which are essential factors that affect his ultimate returns.

5.0 SUMMARY

To the bond investor, it is essential to watch the behaviour of market interest rates because interest rates have such a significant bearing on bond prices and yields. Interest rates are closely monitored by both conservative investors and aggressive investors. Interest rates are important to conservative investors because their major objective is to lock-in high yields. Aggressive investors are also concerned with in interest rates behaviour because their investment programmes are often built around the desire to exploit capital gain opportunities.

6.0 TUTOR-MARKED ASSIGNMENT

- * Discuss the three components in the returns on bondholding.
- * Discuss the three commonly cited theories that explain the reasons for the general shape of the yield curve.

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MODULE 3

UNIT 4 PREFERRED STOCK AND CONVERTIBLE SECURITIES

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1.0 INTRODUCTION

In turbulent investment periods especially when it is difficult to get enough investors to invest in corporate common stocks, business organizations issue securities with special features to attract attention. Preferred stocks and convertible securities are popular investment instruments issued to investors.

2.0 OBJECTIVES

After studying this unit, the student will be familiar with:

- * The nature of preferred stocks and the advantages and disadvantages in them.
- * The rights of preferred stockholders

3.0 MAIN CONTENT

3.1 Preferred Stocks

What would you think of a stock that promised to pay you a fixed annual dividend for life, nothing more nothing less? If you are an income-oriented investor, this offer would certainly sound pretty. However, it is not possible to find such an investment in real life. Here we will study the features of two fixed income securities called then “preferred stocks” and “convertible debentures.”

Preferred stock is a stock that has a prior claim (ahead of common stockholders) on the income and assets of the issuing firm. Preferred stocks carry fixed dividends that are usually paid quarterly and are expressed either in Naira terms or as a percentage of the stock’s par (or stated) value. They are used by companies that need money but do not want to raise debt instruments to get it. In effect, preferred stocks are widely viewed by issuers as an alternative to debt instrument. Companies like to issue preferred stocks because they do not count as common stock and therefore do not affect Earnings Per Share (EPS). However, being a form of equity, they do not count as debt either and therefore do not add to the company’s debt load. There are today so many Over the Counter (OTC) and listed preferred stocks issued by public utilities, industrial and financial establishments.

3.1.1 Preferred Stocks as Investment Instruments

Preferred stocks are available in a wide range of quality ratings, from investment-grade issues to highly speculative stocks. Some high-yielding preferred stock can pay investors as high as N20 per share, annual dividend. Less high-yielding preferred stock pay not less than N14 per share annually.

As earlier stated, one interesting thing about preferred stock is that it carries fixed dividend payment. Of course, if a company does not earn any profit in a particular year, it may be unable to pay the dividend of the preferred stockholder. However, in future years, the arrears of all the preferred stockholders must be cleared before the common stockholder can receive any dividend.

3.1.2 Advantages and Disadvantages of Holding Preferred Stocks

Advantages:

Investors are attracted to preferred stocks because of the current income they provide. Moreover, such dividend income is highly predictable, even though it can, under certain circumstances, be temporarily discontinued. Note that there is the tendency for preferred stocks to generate yields that are slightly less than those of high-trade bonds. This is due to the fact that 70 per cent of the preferred dividends received by a corporation are exempt from federal income taxes. Since corporations are big investors in preferred stocks, the net effect of this favourable tax treatment is reduced preferred dividend yields.

Another reason for investing in preferred stocks is the level of safety they offer investors. That is, despite a few well-publicized incidents, high-grade preferred stocks have an excellent record of meeting dividend payments in a prompt and timely manner.

A final advantage of preferred stocks is the low unit cost (N25 to N50 per share) of many of the issues, which gives even small investors the opportunity to actively participate in preferred stocks.

Disadvantages:

A major disadvantage of preferred stocks is their susceptibility to inflation and high interest rates. Like many other fixed-income securities, preferred stocks simply have not proved to be satisfactory long-term hedges against inflation. Another disadvantage is that preferred dividends may be suspended, if the earnings of the corporate issuer drop off. Thus, unlike coupon payments on a bond, dividends on preferred stocks have no legal backing, and failure to pay them does not lead to default.

Still another drawback is that most preferred stocks lack substantial capital gains potential. Although, it is possible to enjoy fairly attractive capital gains from preferred stocks when interest rates decline dramatically, these amounts generally do not match the price performance of common stocks. But perhaps the biggest disadvantage of preferred stocks is the yield give-up they incur relative to bonds. In essence, there is virtually nothing a preferred stock has to offer that cannot be obtained from a comparably rated corporate bond.

3.2 Source of Value for Preferred Stocks

With the exception of convertible preferred stocks, the value of high-grade preferred stocks is a function of the dividend yields they provide. Most specifically, the value (or market price) of a preferred stock is closely related to prevailing market rates: Thus, as the general level of interest rates moves up, so do the yields on preferred stocks, and their prices decline accordingly. When interest rates drift downward, the yield on preferred stocks also declines, but their prices will rise. Just like bond prices, therefore, the price behaviour of a high-grade preferred stock is inversely related to market interest rates. Moreover, its price is directly linked to the issuer's level of income. That is, other things being equal, the higher the dividend payment, the higher the market price of an issue. Thus the price of a preferred stock can be defined as follows:

$$\text{Price of a Preferred Stock} = \frac{\text{Annual Dividend Income}}{\text{Prevailing Market Yield}}$$

3.2.1 Risk Exposure

Preferred stock investors are exposed to both business and interest rate risks. Business risk is important with preferred stocks because these securities are a form of equity ownership and, as such, lack many of the legal protections of bonds. Annual operating costs and corporate financial strength, therefore, are of concern to preferred stockholders. Preferred stock ratings can be used to assess the amount of business risk embedded in an issue; higher-quality/higher-rated issues are believed to possess less business risk. Because of the fixed-income nature of these securities and the way they are valued in the market, interest rate risk is also important to preferred stockholders. That is, when market interest rates move up, the value of these securities (like that of bonds) falls. Indeed, such risk exposure can be very damaging if interest rates move against you in a big way.

3.2.2 Market Transactions

Preferred stocks are subject to the same transaction costs, that is, brokerage fees and transfer taxes, as shares of common stock. In addition, preferred stock investors use the same types of orders (market, limit, and stop-loss) and operate under the same margin requirements.

Quotes for preferred stock are interpreted exactly like those for common stock, except that the price/earnings ratios are not listed. Preferred stocks are also listed right after listing the common stocks of a company.

3.3 Issue Characteristics

Preferred stocks possess features that not only distinguish them from other types of securities but also help differentiate one preferred stock from another. For example, preferred stocks may be issued as convertible or non-convertible, although the majority fall into the non-convertible category.

Convertible feature allows the holder to convert the preferred stock into a specified number of shares of the issuing company's common stock. In addition to convertibility, investors should be aware of several other important features of preferred stocks; they include the rights of preferred stockholders and the special provisions (such as those pertaining to passed dividends or call features) that are built into preferred stock issues.

3.3.1 Rights of Preferred Stockholders

The contractual agreement of a preferred stock specifies the rights and privileges of preferred stockholders. The contractual agreement of a preferred stock usually contain information on; level of annual dividends, the claim on income, voting rights, and the claim on assets. The issuing company agrees that it will pay preferred stockholders a (minimum) fixed level of quarterly dividends and that such payments will take priority over common stock dividends. The only condition is that the firm generates income sufficient to meet the preferred dividend requirements. However, the firm is not legally bound to pay dividends. Of course, it cannot pass dividends on preferred stock and then pay dividends on common stock, because that would violate the preferred stocks' prior claim on income.

Although, most preferred stocks are issued with dividend rates that remain fixed for the life of the issue, in the early 1980s, some preferred stocks began to appear with floating dividend rates. Known as “adjustable rate” (or floating rate) preferred stocks. These issues adjust dividends periodically in line with yields on specific Treasury issues, although minimum and maximum dividend rates are usually established as a safeguard for investors.

Even though the preferred stock investors hold an ownership position in the firm, they do not have voting rights. However, if conditions deteriorate to the point where the firm needs to defer or pass one or more consecutive quarterly dividends, preferred stockholders are usually given the right to elect a certain number of corporate directors so that their views can be represented. And if liquidation becomes necessary, the holders of preferred stocks are given a prior claim on assets. These preferred claims, limited to the par or stated value of the stock, must be satisfied before the claims of the common stockholders. Of course, this obligation does not always mean that then full par or stated value of the preferred stock will be recovered, because the claims of senior securities, like bonds, must be met first. That is, all bonds, including convertible bonds, have a higher claim on assets (and income) than preferred stock, whereas preferred stocks have a higher claim than common stock. Thus preferred stockholders have a claim that is somewhere between that of bondholders and common stockholders.

Finally, when a company has more than one issue of preferred stock outstanding, it sometimes issues preference (or prior preferred) stock. Essentially, this stock has seniority over other preferred stock in its right to receive dividends and in its claim on assets in the event of liquidation. Therefore, preference stocks should be viewed as senior preferred stocks.

3.3.2 Preferred Stock Provisions

There are three preferred stock provisions that investors should be well aware of before making an investment in a preferred security. Especially important is the obligation of the issuer in case any dividends are missed. In addition, the investor should determine whether the stock has a call feature and/or a sinking fund provision; Let us start by looking at how passed dividends are handled, which depends on whether the preferred stock is issued on a cumulative or a non-cumulative basis.

Fortunately for investors, most preferred stocks are issued on a cumulative basis. This means that any preferred dividends that have been passed must be made up in full before dividends can be paid to the common stockholders. As long as dividends on preferred stocks remain in arrears, a corporation cannot make any dividend payment to common stockholders.

If preferred stock carries a non-cumulative provision, the issuing company would not be under any obligation to make up any of the past (unpaid) dividends. Of course, the firm could not make dividend payments to common stockholders either, but all it would have to do is to meet the next quarterly dividend payment due to preferred stockholders before it can pay any dividends to the common stockholders.

Other things being equal, a cumulative preferred stock should be more highly valued than an issue without such cumulative provision, that is, the cumulative feature should increase the price (and, in so doing, lower the yield) of these issues.

Since the early 1970s, it has become increasingly popular to issue preferred stocks with call features. Today, a large number of preferred stocks carry this provision, which gives the firm the right to call the preferred stock for retirement. Callable preferred stocks are usually issued on a deferred-call basis, which means that they cannot be retired for a certain number of years after the date of issue. After the deferral period, which often extends for 5 to 7 years, the preferred stocks become freely callable. Of course, such issues are then susceptible to call if the market rate for preferred stocks declines dramatically, which explains why the yields on freely callable preferred stocks should be higher than those on non-callable issues. As with bonds, the call price of a preferred stock is made up of the par value of the issue and a call premium that may amount to as much as one year's dividends.

Another preferred stock feature that has become popular in the past 10 years is the sinking fund provision which denotes how all or a part of an issue will be paid off, amortized, over time. Such sinking fund preferred stocks actually have implied maturity dates. They are used by firms to reduce the cost of financing, because sinking fund issues generally have lower yields than non-sinking fund preferred stocks.

4.0 CONCLUSION

Under this unit, we dealt with preferred stocks. We noted that preferred stocks carry fixed dividends and that these dividends are paid quarterly. Preferred stocks are issued by corporate organizations that need money but do not want to raise debt to get the funds. Investors are attracted to preferred stocks because of the current income they provide. One major disadvantage of preferred stocks is their susceptibility to inflation and high interest rates.

5.0 SUMMARY

Preferred stocks carry fixed dividend and they are usually available in a wide range of quality ratings from investment-grade issues to highly speculative stocks. With the exception of convertible preferred stocks, the value of high-grade preferred stocks is a function of the dividend yields they provide. Preferred stock investors are exposed to both business and interest rate risks. Business risk is important with preferred stocks because these securities are a form of equity ownership and, as such, they lack many of the legal protections of bonds.

6.0 TUTOR-MARKED ASSIGNMENT

- * What is the difference between dividend payment on preferred stocks and dividend entitlement to common stockholders.

- * Explain what you understand by “cumulative provision” and “non-cumulative provision” in the payment of dividends to preferred stockholders.

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MODULE 4

Unit 1	Puts and Calls Options
Unit 2	Commodities and Financial Futures
Unit 3	Financial Futures
Unit 4	Mutual Funds

UNIT 1 PUTS AND CALLS OPTIONS

CONTENTS

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1.0 INTRODUCTION

The big institutional investors have always had fancy ways to buy and sell the overall stock market. This is called options trading. With options, you can trade on the overall direction of

the market, whether it rises or falls. This is done through two types of options: Calls and Puts. Options are playing an increasing role in the investment landscape. This unit will explain their essential characteristics and demonstrate how they can be used in investment programmes.

2.0 OBJECTIVES

After studying this unit, the student will be conversant with:

- * The essential characteristics of the two types of options: Calls and Puts
- * The advantages and disadvantages of investing in calls and puts options

3.0 MAIN CONTENT

3.1 Puts and Call Options

3

When investors buy shares of common or preferred stock, they become the registered owners of these securities and are entitled to all the rights and privileges of ownership. Investors who acquire bonds or convertibles issues are also entitled to the benefits of ownership. Stocks, bonds and convertibles are all examples of financial assets. They represent financial claims on the issuing corporation or organization.

In contrast, investors who buy options acquire nothing more than the right subsequently to buy or sell other, related securities. In other words, an option is a security that gives the holder the right to buy or sell a certain amount of an underlying financial asset at a specified price for a specified period of time. Options are contractual instruments, whereby two parties enter into an agreement (a contract) to give something of value to the other. The option buyer has the right to buy or sell an underlying asset for a given period of time, at a price that was fixed at the time of the contract. The option seller, on the other hand, stands ready to buy or sell the underlying asset according to the terms of the contract, for which the seller has been paid a certain amount of money.

3.1.1 Definitions and Characteristics

One of the market phenomena of the 1970s was the remarkable performance and investment popularity of stock options, particularly puts and calls on common stock. By the early 1980s, the interest in options spilled over to other kinds of financial assets, and today, investors can trade puts and calls on:

- * Common stock
- * Stock indexes
- * Debt instruments
- * Foreign currencies
- * Commodities and financial futures

Although the underlying financial assets may vary, the basic features and behavioural characteristics of these securities are pretty much the same. Regardless of the type of option, much of the popularity of options stem from the fact that investors can buy a lot of price action with a limited amount of capital, while nearly always enjoying limited exposure to risk.

3.1.2 A Negotiable Contract

“Puts” and “calls” are negotiable instruments, issued in bearer form, that allow the holder to buy or sell a specified amount of a specified security at a specified price. For example, a put or a call on a common stock covers 100 shares of stock in a specified company. A “put” enables the holder to sell the underlying security at the specified price (known as the exercise or strike price) over a set period of time. A “call” in contrast, gives the holder the right to buy the securities at the stated (strike) price within a certain time period there are no voting rights, no privileges of ownership, and no interest on dividend income. Instead puts and calls possess value to the extent that they allow the holder to participate in the price behaviour of the underlying financial asset.

Because puts and calls derive their value from the price behaviour of some other real or financial assets, they are known as “derivative securities.” Many different types of derivative securities are available in the market today, from puts and calls to structured call deposits (CDs) to exotic debt instruments such as collateralized mortgage obligations (CMOs).

One of the key features of puts and calls (and of many other types of derivative securities) is the very attractive leverage opportunities they offer investors. Such opportunities exist because of the low prices these options carry relative to the market prices of the underlying financial assets. But, take note that the lower cost does not in any way affect the payoff or capital appreciation potential of your investment.

3.1.3 Maker Versus Buyer

Put and calls are a unique type of security because they are not issued by the organizations that issue the underlying stock or financial asset. Instead, puts and calls are created by investors. It works like this: Suppose an individual wants to sell to another the right to buy 100 shares of common stock. This individual would “write a call” The individual (or institution) writing the option is known as the “option maker or writer.” Thus, it is the option writer who sells the option in the market and so he is entitled to receive the price paid for the put or call (less modest commissions and other transaction costs). The put or call option is now a full-fledged financial asset and trades in the open market much like any other security.

Puts and calls are both written (sold) and purchased through security brokers and dealers, and they are actively bought and sold in the secondary market. The writer stands behind the option, because it is the writer who must buy or deliver the stocks or other financial assets according to the terms of the option. Note, unlike the buyers of put or call options, the writers of these securities do have a legally binding obligation to stand behind the terms of the contracts they have written. The buyer can just walk away from the deal if it turns sour; the writer cannot). Puts and calls are written for a variety of reasons, which we will explore below. It suffices to say that, writing options can be a viable investment strategy and can be a profitable course of action because, more often than not, options expire worthless.

3.2 How Puts and Calls Work

Taking the buyer’s point of view, let us now briefly examine how puts and calls work and how they derive their value. To understand the mechanics of puts and calls, it is best to look at their profit-making potential. For example, using stock options as a basis of discussion, consider a stock currently priced at N50 per share. Assume you can buy a call on the stock for N500, which enables you to purchase 100 shares of the stock at a fixed price of N50 each. A rise in

the price of the underlying security (in this case common stock) is what you as an investor, hope for. What is the profit potential from this transaction if the price of the stock does, indeed move up to, say, N75, by the expiration date on the call?

The answer is that you will earn N25, (that is $N75 - N50$) on each of the 100 shares of stock in the call, for a total gross profit of some N2,500, and all from a N500 investment. This is because you can buy 100 shares of the stock from the option writer, at a price of N50 each and immediately turn around and sell them in the market for N75 per share. You could have made the same (N2,500) profit by investing directly in the common stock, but because you would have had to invest N5,000 (100 shares x N50 per share), your rate of return would have been much lower. Obviously, there is considerable difference between the return potential of common stocks and calls and it is this difference that attracts investors and speculators to calls whenever the price outlook for the underlying financial asset is positive. Such differential returns, of course, are the direct result of leverage, which rests in the principle of reducing the level of required capital in a given investment position without materially affecting the Naira amount of the pay-off or capital appreciation from that investment.

Note that, although our illustration is couched in terms of common stock, this same valuation principle applies to any of the other financial assets that may underlie call options, such as market indexes, foreign currencies, and future contracts.

3.2.1 Advantages and Disadvantages

The major advantage of investing in puts and calls is the leverage they offer. This feature also carries the advantage of limiting the investor's exposure to risk, because only a set amount of money (the purchase price of the option) can be lost. Also appealing is the fact that puts and calls can be used profitably when the price of the underlying security goes up or down.

A major disadvantage of puts and calls is that the holder enjoys neither interest or dividend income nor any other ownership benefit. Moreover, because the instruments have limited lives, the investor has a limited time frame in which to capture desired price behaviour. Another disadvantage is that puts and calls themselves are a bit unusual, and many of their trading strategies are complex. Thus investors must possess special knowledge and must fully understand the subtleties of this trading instrument.

3.2.2. Options markets

Although, the concept of options can be traced back to the writings of Aristotle, options trading in the United States did not begin until the late 1700. Even then, this market remained fairly small, largely unorganized, and the private domain of a handful of specialists and traders. In the developing countries including Africa active options trading started in the early years of the 20th century.

Conventional Options

Put and call options trading were originally conducted in the over-the-counter market through a handful of specialized dealers. Investors who wish to purchase puts and calls dealt with these options dealers via their own brokers, and the dealers would find individuals (or institutions) willing to write the options. The buyer wishes to exercise an option, he did so with the writer and no one else, a system that largely prohibited any secondary trading. On the other hand, there were virtually no limits to what could be written, so long as the buyer was willing to pay the price. Put and call options were written on New York and American stocks as well as on regional and over-the-counter securities for as short a time as 30 days and for as long as a year. Over-the-counter options are today referred to as conventional options.

3.3. Listed Options

Listed options are put and call options listed and traded on organized securities exchanges such as Chicago Board Options Exchange (CBOE) in America and the Nigerian Stock Exchange in Nigeria. Listed options are a term used to describe put and call options traded on organized exchanges rather than over-the-counter market. Today, trading in listed options is done in both puts and calls and takes place in different exchanges.

Listed options not only provided a convenient market for the trading of puts and calls but also standardized the expiration dates and exercise prices. The listed options exchanges created clearinghouse organization that eliminated direct ties between buyers and writers of options and reduced the cost of executing put and call transactions. They also developed an active secondary market, with wide distribution price information. As a result, it is now as easy to trade a listed option as a listed stock.

3.3.1 Stock Options

The advent of the Nigerian Stock Exchange and other listed option exchanges had a quick and dramatic impact on the trading volume of puts and calls. Indeed, the level of activity in listed stock options has grown rapidly in recent times.

The creation and continued expansion of listed options exchanges have unquestionably given the field of investments a whole new dimension. In order to avoid serious (and possibly expensive) mistakes with these securities, however, investors must fully understand their basic features.

Stock Option Provisions

Because of the low unit cost of stock options, (or equity options as they are also called), they are very popular with individual investors. Except for the underlying financial asset, they are like any other type of put or call, subject to the same kinds of contract provisions and market forces. As far as options contracts are concerned, there are two provisions that are especially important and to which investors should pay particular attention. These are:

- (1) The price, known as the "strike price" at which the stock (or other financial asset) can be bought or sold.
- (2) The amount of time remaining until expiration.

Both the strike price and the time remaining to expiration have a significant bearing on the valuation and pricing of options.

Strike Price: Strike Price, as specified on the option is the price contract between the buyer of an option and the writer; the stated price at which you can buy a security with a call or sell a security with a put. In other words, for a call, the strike price specifies the price at which each of the 100 shares of stock can be bought. For a put, it represents the price at which the stock can be sold to the writer. With conventional over-the-counter (OTC) options there are no constraints on the strike price, although it is usually specified at or near the prevailing market price of the stock at the time the option is written.

Expiration Date: The expiration date is also an important provision, because it specifies the life of the option just as the maturity date indicates the life of a bond. The expiration date, in

effect, specifies the length of the contract between the holder and the writer of the option. Thus, if you hold a 6-month call on Lever Brothers, that option gives you the right to buy 100 shares of common stock of Lever Brothers at a strike price of, say, N40 per share at any time over the next 6 months. Now, no matter what happens to the market price of the stock, you can use your call option to buy 100 shares of Lever Brothers at N40 per share over the next 6 months. If the price of the stock moves upwards, you stand to make money, if the price goes downwards, you will lose money. Expiration dates for options in the conventional market can fall on any working day of the month. In contrast, expiration dates are standardized in the listed options market.

3.3.2 The profit Potential of Puts and Calls

Although, the quoted market price of a put or call is affected by such factors as time to expiration, stock volatility, and market interest rates, by far the most important variable in the price behaviour of the underlying common stock. This is the variable that drives any significant moves in the price of the option and that in turn determines the option's profit (return) potential. Thus, when the underlying stock moves up in price, calls do well; when the price of the underlying stock drops, puts do well. Such performance also explains why it is important to get a good handle on the expected future price behaviour of a stock before buying or selling (writing) an option.

Fundamental Value:

The fundamental value of a put or call depends ultimately on the exercise price stated on the option, as well as on the prevailing market price of the underlying common stock. In other words, the fundamental or intrinsic value of a call is nothing more than the difference between market price and strike price. A put, on the other hand, cannot be valued in the same way because puts and calls allow the holder to do different things.

In the Money/Out of the Money

Written options do not necessarily have to carry strike prices at the prevailing market prices of the underlying common stocks. Also, as an option subsequently trades on the listed exchanges,

the price of the option will move in response to moves in the price of the underlying common stock. . When a call has a strike price that is less than the market price of the underlying common stock, it has a positive intrinsic value and is known as an “in-the-money” option. A major portion of the option price in this case is based on (or derived from) then fundamental or intrinsic value of the call. When the strike price exceeds the market price of the stock, the call has no “real” value and is known as an “out-of-the-money” option. Because the option has no intrinsic value, its price is made up solely of investment premium. As you might expect, the situation is reversed for put options. That is, a put is considered in-the-money when its strike price is greater than the market price of the stock, and it is considered out-of-the-money when the market price of the stock exceeds the strike price. These terms are much more than convenient, exotic names given to options.

Option prices and Premiums

Put and call values denote what the options should be valued and traded at. This rarely occurs, however. These securities almost always trade at prices that exceed their intrinsic or fundamental values, especially for options that still have a long time to run. That is puts and calls nearly always trade at premium prices. Therefore, the term “option premium” is used to describe the market price of listed put and call options. Technically, the option premium is the (quoted) price the buyer pays for right to buy or sell a certain amount of the underlying common stock (or other financial asset) at a specified price for a specified period of time. The option seller, on the other hand, receives the premium and gets to keep nit whether or not the option is exercised. To the option seller, the option premium represents compensation for agreeing to fulfill certain obligations of the contract.

The term premium is also used to denote the extent to which the market price of an option exceeds its fundamental or intrinsic value. Thus, to avoid confusion and keep matters as simple as possible, we will use the word price in the usual way to describe the amount it takes to buy an option in the market.

4.0 CONCLUSION

Under this unit, we have studied puts and calls options. Essentially, we noted that an option is a security that gives the holder the right to buy or sell a certain amount of an underlying

financial asset at a specified price for a specified period of time. The 1970s saw remarkable performance and investment popularity of stock options, particularly puts and calls on common stock. Today investors trade puts and calls on common stock, stock indexes, debt instruments, foreign currencies, and commodities and financial futures.

5.0 SUMMARY

When investors buy shares of common or preferred stock, they become the registered owners of these securities and are entitled to all the rights and privileges of ownership. Investors who acquire bonds or convertibles issues are also entitled to the benefits of ownership. Stocks, bonds, and convertibles are all examples of financial assets. They represent financial claims on the issuing corporation. In contrast, investors who buy options acquire nothing more than the right subsequently to buy or sell other, related securities. Options are contractual instruments and the two basic kinds of options we have are the puts and calls.

6.0 TUTOR-MARKED ASSIGNMENT

- * Explain the basic process of trading in puts and calls
- * Discuss the advantages and disadvantages of investing in puts and calls

7.0 REFERENCES/FURTHER READING

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MODULE 4

UNIT 2 COMMODITIES AND FINANCIAL FUTURES

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1.0 INTRODUCTION

The use of futures contracts for commodities and financial instruments is a very important tool to control risk. Futures contract is a commitment to deliver a certain amount of some specified item at some specified date in the future.

2.0 OBJECTIVES

After studying this unit, the student should be able to:

- * Describe the essential features of a futures contract and how the futures market Operates.
- * Understand the commodities segment of the futures market.

3.0 MAIN CONTENT

3.1 The Futures Market

The market for commodities and financial futures represent the more exotic side of investment and it often involves a considerable amount of speculation. In fact, the risks are enormous, but with a little luck, the payoffs can be phenomenal. Even more important than luck, is the need for patience and know-how. Indeed, these are specialized investment products that require specialized investor skills.

The amount of futures trading in the United States has mushroomed over the past 25 years as an increasing number of investors have turned to futures trading as a way to earn attractive and highly competitive rates of return. Futures contracts are also becoming increasingly popular in developing countries such as Nigeria, Ghana and the Cameroons.

The major reason behind the growth in the volume of futures trading has been the big jump in the number and variety of contracts available for trading. Today, in addition to the traditional primary commodities, such as grains and metals, markets also exist for live animals, processed commodities, crude oil and gasoline, foreign currencies, money market securities, bonds and common stocks.

3.1.1 Market Structure

When a bushel of wheat is sold, the transaction takes place in the cash market. In other words, the bushel changes hands in exchange for a cash price paid to the seller. The transaction occurs at that point in time and for all practical purposes is completed then and there. Most traditional securities are traded in this type of market. However, a bushel of wheat could also

be sold in the futures market, the organized market for the trading of futures contracts. In this market, the seller would not actually deliver the wheat until some mutually agreed-upon date in the future. As a result, the transaction would not be completed for some time: The seller would receive partial payment for the bushel of wheat at the time the agreement was entered into and the balance on delivery. The buyer, in turn, would own a highly liquid futures contract that could be held (and presented for delivery of the bushel of wheat) or traded in the futures market. No matter what the buyer does with the contract, as long as it is outstanding, the seller has a legally binding obligation to make delivery of the stated quantity of wheat on a specified date in the future, and the buyer/holder has similar obligation to take delivery of the underlying commodity.

3.1.2 Futures Contracts

A futures contract is a commitment to deliver a certain amount of a specified item at a specified date at a price agreed upon at the time the contract is sold. Each market establishes its own contract specifications, which include not only the quantity and quality of the item but also the delivery procedure and delivery month. The delivery month for a futures contract is much like the expiration date used on put and call options. It specifies when the commodity or item must be delivered and thus defines the life of the contract.

However, although the value of a single contract is normally quite large, the actual amount of investor capital required to deal in these instruments is relatively small, because all trading in this market is done on a margin basis.

3.1.3 Options Versus Futures Contracts

In many respects, futures contracts are closely related to call options. Both involve the future delivery of an item at an agreed-upon price. But there is a significant difference between a futures contract and an options contract. A futures contract obligates a person to buy or sell a specified amount of a given commodity on or before a stated date, unless the contract is canceled or liquidated before it expires. In contrast, an option gives the holder the right to buy or sell a specific amount of real or financial asset at a specific price over a specified period of time.

In addition, whereas price (that is strike price) is one of the specified variables on a call option, it is not stated anywhere on a futures contract. Instead, the price on a futures contract is established through trading on the floor or a commodities exchange, which means that the delivery price is set by supply and demand at whatever price the contract sells for. Equally important, the risk of loss with an option is limited to the price paid for it, whereas a futures contract has no such limit on exposure to loss.

3.2 Major Exchanges

Futures contracts in the United States got their start in the agricultural segment of the economy many years ago, when individuals who produced, owned and processed foodstuff sought a way to protect themselves against adverse price movements. Later, futures contracts came to be traded by individuals who were not necessarily connected with agriculture but who wanted to make money with commodities by speculating on their price swings. Futures markets in the developing countries came later after the United States lead.

Most exchanges deal in a number of different commodities or financial assets, and many commodities and financial futures are traded on more than one exchange. Although the exchanges are highly efficient (citing the US as an example), and annual volume has surpassed the trillion-dollar mark, futures trading is still conducted by open outcry auction.

3.2.1 Trading in the Future Market

Basically, the futures market contains two types of traders; hedgers and speculators. The market simply could not exist and operate efficiently without either one. The hedgers are commodities producers and processors (which today include financial institutions and corporate money managers) who use futures contracts as a way to protect their interest in the underlying commodity or financial instrument. For example, if a rancher thinks the price of cattle will drop in the near future, he will hedge his position by selling a futures contract on cattle in the hope of locking in as high a price as possible for his herd. In effect, the hedgers provide the underlying strength of the futures market and represent the very reason for its existence. Speculators, in contrast, give the market liquidity. They are the ones who trade futures contracts simply to earn a profit on expected swings in the price of a futures contract. They are the risk takers, the investors who have no inherent interest in any aspect of the commodity or financial future other than the price action and potential capital gains it can produce.

3.2.2 Trading Mechanics

Once future contracts are created, they can readily be traded in the market. Like common stocks and other traditional investment instruments, futures contracts are bought and sold through local brokerage offices. Most firms have at least one or two people in each office who specialize in futures contracts. In addition, a number of commodity firms that deal only in futures contracts stand ready to help individuals with their investment needs. Except for setting up a special commodities trading account, there is really no difference between trading futures and dealing in stocks or bonds. The same types of orders are used, and the use of margin is the standard way of trading futures. Any investor can buy or sell any contract, with any delivery month, at any time, so long as it is currently being traded on one of the exchanges.

Buying a contract is referred to as taking a long position, whereas selling a contract is termed taking a short position. It is exactly like going long or short with stocks and has the same connotation. The investor who is long wants the price to rise, and the short seller wants it to drop. Both long and short positions can be liquidated simply by executing an offsetting transaction. The short seller, for example, would cover his or her position by buying an equal amount of the contract. In general, less than one percent of all futures contracts are settled by delivery; the rest are offset prior to the delivery month. All trades are subject to normal transaction costs, which include round-trip commissions of about N120 to N150 for each contract traded. (A round-trip commission includes the commission costs on both ends of the transaction – to buy and to sell a contract). The exact size of the commission depends on the number and type of contracts being traded.

3.3 Margin Trading

To buy on margin, means putting up only a fraction of the total price in cash. Margin, in effect, is the amount of equity that goes into the deal. Margin trading plays a crucial role in futures transactions because all futures contracts are traded on a margin basis. The margin required usually ranges from about 2 per cent to 10 per cent of the value of the contract, which is very low when compared to the margin required for stocks and most other types of securities. Furthermore, there is no borrowing required on the part of the investor to finance the balance of the contract. The margin or margin deposit, as it is sometimes called, exists simply as a way to guarantee fulfillment of the contract. The margin deposit is not a partial payment for the

commodity or financial instrument, nor is it in any way related to the value of the product or item underlying the contract. Rather, it represents security to cover any loss in the market value of the contract that may result from adverse price movements.

The size of the required margin deposit is specified as a Naira amount. It varies according to the type of contract (that is, the amount of price volatility in the underlying commodity or financial asset) and, in some cases, the exchange on which the commodity is traded.

3.3.1 The Rise and Fall in the Market Value

After the investment is made, the market value of a contract will, of course, rise and fall as the quoted price of the underlying commodity or financial instrument goes up or down. Such market behaviour will cause the amount of margin on deposit to change. To be sure that an adequate margin is always on hand, investors are required to meet a second type of margin requirement, the maintenance deposit. This deposit is slightly less than the initial deposit and establishes the minimum amount of margin that must be kept in the account at all times. For instance, if the initial deposit on a commodity is N1,000 per contract, its maintenance margin might be N750. So long as the market value of the contract does not fall by more than N250 (the difference between the contract's initial and maintenance margins), the investor has no problem. But if the market moves against the investor and the value of the contract drops by more than the allowed amount, the investor will receive a margin call. He must then immediately deposit enough cash to bring the position back to the initial margin level.

An investor's margin position is checked daily via a procedure known as mark-to-the-market. That is, the gain or loss in a contract's value is determined at the end of each session, at which time the broker debits or credits the trader's account accordingly. In a falling market, an investor may receive a number of margin calls and be required to make additional margin payments in order to keep the position above the maintenance margin level. Failure to do so will mean that the broker has no choice but to close out the position, that is to sell the contract.

3.3.2 Basic Characteristics of Commodities

Physical commodities like grains, metals, wood, and meat make up a major portion of the futures market. They have been actively traded in both overseas and local market for well over a century and still account for a good deal of the trading activity.

Various types of physical commodities are found on nearly all U.S. and developing countries' futures exchanges. The market for commodity contracts is divided into four major segments; grains, and oilseeds, livestock and meat, food and fiber, and metals and petroleum. Such segmentation does not affect trading mechanics and procedures but provides a convenient way of categorizing commodities into groups based on similar underlying characteristics.

Price Behaviour of Commodities

Commodity prices react to a unique set of economic, political, and international pressures, (as well as to the weather). However, it is important to note that commodity price changes do not move up and down just like any other investment instrument, and this is exactly what speculators want. Because commodity market deals in such large trading units, such as, (10,000 bushels of this or 20,000 pounds of that), even a modest price change can have an enormous impact on the market value of a contract and therefore on investors' returns or losses. For example, if the price of corn goes up or down by just 20 cents per bushel, the value of a single contract will change so much. It is easy to see the effect this kind of price behaviour can have on investor return.

Return on Invested Capital

Futures contracts have only one source of return, and that is, the capital gains that can be earned when prices move in a favourable direction. There is no current income of any kind. The volatile price behaviour of futures contracts is one reason why high returns are possible; the other is leverage. Because all futures trading is done on margin, it takes only a small amount of money to control a large investment position and to participate in the price swings that accompany many futures contracts. Of course, the use of leverage also means that it is possible for an investment to be wiped out with just one or two bad day

Investment returns can be measured by calculating return on invested capital. This is simply a variation of the standard holding period return formula, where return is based on the amount of money actually invested in the contract, rather than on the value of the contract itself. It is used because of the generous amount of leverage (margin) used in commodities trading. The return on investment capital for a commodities position can be determined according to the following simple formula:

$$\text{Return on Invested Capital} = \frac{\text{Selling price of commodity contract} - \text{purchase price of commodity contract}}{\text{Amount of margin}}$$

4.0 CONCLUSION

We studied in this unit, commodities and financial futures. We noted that investment in futures represents a more exotic side of investment and that it often involves a considerable amount of speculation. The risks are enormous but if one is lucky to come out clean, the payoffs could be tremendous.

5.0 SUMMARY

Futures market is the organized market for the trading of futures contracts. The amount of futures trading in the United State as well as the third world countries has mushroomed over the past few decades. Increasing number of investors are turning to futures trading as a way of earning attractive and highly competitive rates of return. The major reason behind the growth in the volume of futures trading currently is the big jump in the number and variety of contracts available for trading.

6.0 TUTOR-MARKED ASSIGNMENT

- * Describe the commodities segment of the futures market and the basic characteristics of these investment instruments.
- * What are the essential features of a futures contract?

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MODULE 4

UNIT 3 FINANCIAL FUTURES

CONTENTS

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- 2.0 Objectives
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1.0 INTRODUCTION

Another dimension of the futures market is financial futures, a segment of the market in which futures contracts are traded on a variety of financial instruments. Actually, financial futures are little more than an extension of the commodities concept. They were created for much the same reason as commodity futures, they are traded in the same market, their prices behave a lot like commodities and they have similar investment merits. Yet, despite all these similarities financial futures are a unique type of investment instrument. This unit will look at these instruments and how investors can use them more closely.

2.0 OBJECTIVES

After studying this unit, the student will understand:

- * The difference between a physical commodity and a financial future.
- * The reason for the growing role of financial futures in the market today.

3.0 MAIN CONTENT

3.1 The Financial Futures Market

Even though the financial futures market has been around for about 20 years, it is today a dominant force in the whole futures market. Indeed, the level of trading today in the financial futures market far surpasses that of the traditional commodities market. Much of the interest in financial futures is due to hedgers and big institutional investors who use these contracts as portfolio and debt management tools. But individual investors can also find plenty of opportunities here. For example, financial futures offer yet another way of speculating on the behaviour of interest rates. They can also be used to speculate in the stock market. They even offer a convenient way to speculate in the highly specialized, and often highly profitable, foreign currency markets.

3.1.1 Foreign Currencies, Interest Rates, and Stock Indexes

The financial futures market started rather inconspicuously in Nigeria in the 1980s with the listing of a handful of local and foreign currency contracts known as currency futures. They have become a major hedging instrument as international trade to and from this country has mushroomed. Most of the currency trading today is conducted in the following currencies:

- British pound sterling
- Euro
- Swiss Franc
- Japanese yen
- U.S Dollar
- Nigerian Naira

All of these currencies involve countries with which the United States has strong international trade and exchange ties. Trading in futures contract on debt securities, or interest rate futures as they are more commonly known are popularly traded today.

3.1.2 The success of Interest Rate Futures

Interest rate futures have also been successful and their popularity continues to grow today. In about 1980a new trading instrument was introduced called the stock-index futures contract. Stock index futures are futures contracts written on broad-based measures of stock market performance, allowing investors to participate in the general movements of the stock market.

At present, investors can trade stock-index futures contracts in the Nigerian Stock Exchange as well as in London and Paris stock exchanges. Stock index futures which are similar to the stock index options allow investors to participate in the general movements of the entire stock market. These index futures (and other futures contracts) represent a type of derivative security because they, like options, derive their value from the price behaviour of the assets that underlie them. In the case of stock index future, they are supposed to reflect the general performance of the stock market as a whole, as measured by a particular index. Thus when the market value of a particular firm's stock index goes up, the value of the futures contract of the firm goes up as well.

3.1.3 Contract Specifications

In principle, financial futures contracts are like commodities contracts. They control large sums of the underlying financial instrument and are issued with a variety of delivery months. In a hypothetical list of quotes for several foreign currency futures, interest rate, and stock-index futures contracts, the currency futures contract can entitle the holders to a certain position in the specified foreign currency. In effect, the owner of a currency future holds a claim on a certain amount of foreign money. Similarly, holders of interest rate futures have a claim on a certain amount of the underlying debt security. These claims can be quite large in sum total.

3.2 Prices and Profits

There are three basic types of financial futures, and no surprisingly, the price of each type of contract is quoted somewhat differently.

- * **Foreign Currency Futures:** All currency futures are quoted in Naira per unit of the underlying foreign currency. For example, certain figure of Naira against a British pound sterling or a given figure of Naira against an American dollar.
- * **Interest Rate Futures:** Except for the quotes on Treasury bills and other short-term securities, interest rate futures contracts are priced as a percentage of the par value of the underlying debt instrument, (for example, Treasury notes or treasury bonds).
- * **Stock-index futures:** Stock-index futures are quoted in terms of the actual underlying index, but, as noted above, they carry a face value of anywhere from N100 to N1000 times the index.

3.2.1 Response of Interest Rate futures

The value of an interest rate futures contract responds to interest rates exactly as the debt instrument that underlies the contract does. That is, when interest rates go up, the value of an interest rate futures contract goes up. But, the value of an interest rate futures contract goes down and vice versa. However, the quote system for interest rate as well as currency and stock-index futures is set up to reflect the market value of the contract itself. Thus, when the price of quoted for financial futures contract increases, the investor who is long makes money. In contrast, when the price decreases, the short seller makes money.

Price behaviour is the only source of return to speculators, for even though stocks and debt securities are involved in some financial futures, such contracts have no claim on the dividend and interest income of the underlying issues. Even so, huge profits (or losses) are possible with financial futures because of the equally large size of the contracts.

3.2.2 Pricing Futures on Treasury Bills and other Short-Term Securities

Because Treasury bills and other short-term securities are normally traded in the money market on what is known as a discount basis, it was necessary to devise a special pricing system that would reflect the actual price movements of these futures contracts. To accomplish this, an index price system was developed whereby the yield is subtracted from an index of 100. Thus, when the yield on an underlying security, such as a Treasury bill or Eurodollar deposit, is 5.25%, the contract would be quoted at an index of 94.75% (i.e. $100.00 - 5.25$). Under such a system, when someone buys, say, a Treasury bill future and the index goes up, that individual has made money; when the index goes down, a short seller has made money.

Note also that 30-day interest rate futures, as well as 90-day Treasury bill and Euro-dollar/Euro-market contracts, are all quoted on basis point, where 1 basis point equals $1/100$.

3.3 Trading Techniques

Like commodities, financial futures can be used for hedging, spreading, and speculating. Multinational companies and firms that are active in international trade might consider hedging with currency of Naira and Euro-market futures, whereas various financial institutions and corporate money managers often use interest rate futures for hedging purposes. In either case, the objective is the same; to lock in the best monetary exchange or interest rate possible. In addition, individual investors and portfolio managers use stock-index futures for hedging purposes to protect their security holdings against temporary market declines.

Financial futures can also be used for spreading. This tactic is popular with investors who adopt strategies of simultaneously buying and selling combinations of two or more contracts to form a desired investment position. One type of futures spread is described in the Investing for Action box. Note in this case that the spread is set up to capture profits in the stock market. Finally, financial futures are widely used for speculation.

3.3.1 Speculating in Financial Futures

Speculators are especially interested in financial futures because of the size of the contracts. For instance, to quote a financial example, in early 1998, Canadian dollar contracts were worth over \$70,000, Treasury notes were going for over \$100,000, and Treasury bill contracts were

being quoted at close to \$1 million. With contracts of this size, it obviously does not take much movement in the underlying asset to produce big price swings, and therefore big profits. Currency or interest rate futures are popular with investors, and can be used for just about any speculative purpose. For example, if you expect the dollar to be devalued relative to the Euro, you would buy Euro currency futures, because the contracts should go up in value. In a similar fashion, if you anticipate a rise in interest rates, you might consider going short (selling) interest rate futures, because they should go down in value.

3.3.2 Going Short an Interest Rate Contract

Let us assume that you are anticipating a sharp rise in long-term rates. Because a rise in rates means that interest rate futures will drop in value, you decide to short sell two June Treasury bond contracts at 115.00 which means that the contracts are trading at 115% of par. Thus, the two contracts are worth N230,000 ($100,000 \times 1.15 \times 2$), but the amount of money required to make the investment is only N5,400, (the initial margin deposit is N2,700 per contract). Assume that interest rates do, in fact, move up and that as a result, the price on Treasury bond contracts, that is, drops to 106-16. Under such circumstances, you would buy back the two June Treasury bond contracts (in order to cover the short position) and in the process make a profit of N17,000. (Remember, you originally sold the two contracts at N230,000 and bought them back sometime later at N213,000, as with any investment, such a difference between what you pay for a security and what you sell it for in profit). In this case, the return on invested capital amounts to 315%. Again, however, this kind of return is due in no small part to the enormous risk of loss the investor assumes.

Trading Stock Index Futures

Most investors use stock-index futures for speculation or hedging. Stock-index futures are similar to the index options, therefore much of the discussions that follow also apply to index options. Whether speculating or hedging, the key to success is to intelligently predict the future course of the stock market. Because you are “buying the market” with stock index figures, it is important to get a handle on the future direction of the market via technical analysis or some other techniques. Once you have a feel of the market’s direction, you can formulate a stock-index futures trading or hedging strategy. For example, if you feel strongly that the market is heading upwards, you would want to go long (buy stock-index futures); in contrast, if your analysis of the market suggests a sharp drop in equity values, you could make money by going short (selling stock-index futures).

Assume, for instance, that you believe the market is undervalued and a move up is imminent. You can try to identify one or a handful of stocks that could go up with the market (and assume the stock selection risk that goes with this approach), or you can buy Nigerian Breweries 500 stock-index futures currently trading at, say, 974.45. To execute this speculative transaction, you would need to deposit an initial margin of only N10,500. Now, if your expectations are correct and the market does rise so that the Nigerian Breweries 500 index moves to 990.95 by the expiration of the futures contract, you will earn a profit of N4,125 (that is, $990.95 - 974.45$) \times N250 = N4,125. Given that this was earned on a N10,500 investment, your return on invested capital would amount to a very respectable 39.3%. Of course, keep in mind that if the market drops by 42 points (or just 4.2%), the investment will be a total loss.

Hedging with Stock-Index Future. Stock-index futures also make excellent hedging instruments in that they provide investors with a highly effective way of protecting stock holdings in a declining market. Although this tactic is not perfect, it does enable investors to obtain desired protection against a decline in market value without disturbing their equity holdings. Here is how a short hedge would work: Assume that an investor holds a total of 2,000 shares of stock in a dozen different companies and that the market value of this portfolio is around N235,000. If the investor thinks that the market is about to undergo a temporary sharp decline, he can do one of two things: Sell all of his shares or buy puts on each of the stocks. Clearly, these alternatives are cumbersome and/or costly and therefore undesirable for protecting a widely diversified portfolio. The desired result could also be achieved, however, by short selling stock-index futures. Note that basically the same protection can be obtained in this hedging situation by turning to options and buying a stock index put).

4.0 CONCLUSION

Under this unit we discussed financial futures. We noted that financial futures represent a type of contract in which the underlying commodity is a financial asset, such as debt securities, foreign currencies, or market baskets of common stocks. Even though the financial futures market has not been around for too long, it has today become a dominant force in the whole futures market.

5.0 SUMMARY

Another dimension of the futures market is financial futures, a segment of the market in which futures contracts are traded on a variety of financial instruments. Truly, financial futures are little more than an extension of the commodities and they have similar investment merits. Yet, despite all these similarities, financial futures are unique type of investment instrument.

6.0 TUTOR-MARKED ASSIGNMENT

- * What is the difference between financial futures and commodity futures?
- * Discuss the use of financial futures in speculation and hedging.

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MODULE 4

UNIT 4 MUTUAL FUNDS

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1.0 INTRODUCTION

A well-managed mutual funds outfit can become a large company within a few years, especially when the company is operating in a booming economy. Investing in a mutual fund is a good way for individual investors to accomplish objectives that they could not achieve otherwise.

2.0 OBJECTIVES

After studying this unit, the student should be able to:

- * Describe the basic features of mutual funds and what they have to offer as investment instruments.
- * Discuss the difference between open-end and closed-end mutual funds.

3.0 MAIN CONTENT

3.1 The Mutual Fund Phenomenon

Since the advent of organized capital markets, the questions relating to; which stock or bond to select, when to buy, and when to sell have troubled investors. Such questions facing prospective investors lie at the very heart of the mutual fund concept, and in large part explain the growth that mutual funds have experienced. Many investors lack the time, know-how, or commitment to manage their own portfolios, so they turn to professional fund managers and simply let them decide which securities to buy and when to sell.

Basically, a mutual fund is an investment company that invests its shareholders' money in a diversified portfolio of securities. In other words, a mutual fund is a type of financial services organization that receives money from its shareholders and then invests those funds on their behalf in a diversified portfolio of securities.

Mutual fund industry has grown so much during the last 25 years that it is now the largest financial intermediary almost ahead of even banks. Though we tend to think of mutual fund as an American phenomenon, the fact s that mutual funds, in one form or another, are found in all the major markets of the world including Nigeria.

3.1.1 An Overview of Mutual Funds

Mutual funds investors come from all walks of life and from all income levels. They range from highly inexperienced to highly experienced investors who all share a common view: Each has decided, for one reason or another, to turn over at least, a part of his or her investment management activities to professionals who can do the job better.

Pooled Diversification: An investment in a mutual fund really represents an ownership position in a professionally managed portfolio of securities. When you have shares in a mutual fund, you become a part owner of a portfolio of securities. That is because a mutual fund combines the investment capital of many people who have similar investment goals and invests the funds for those individuals in a wide variety of securities.

In an abstract sense, think of a mutual fund as the financial product that is sold to the public by an investment company. That is, the investment company builds and manages a portfolio of securities and sells ownership interests (shares of stock) in that portfolio through a medium known as a mutual fund. Investors in mutual funds are able to enjoy much wider investment diversification than they could otherwise achieve if they operate individually. The whole idea of mutual fund, in fact, rests on the concept of pooled diversification, which is a process whereby investors buy into a diversified portfolio of securities for the collective benefit of the individual investors. Pooled diversification works very much like health insurance, whereby individuals pool their resources for the collective benefit of all the contributors.

3.1.2 Attractions and Drawbacks of Mutual Fund Ownership

Attractions:

The attractions in the ownership of mutual fund are numerous. One of the most important is diversification which benefits mutual fund shareholders by spreading out holdings over a wide variety of industries and companies. This practice has the effect of reducing the risk inherent in any one investment.

Another appeal of mutual funds is full-time professional management, which relieves investors of many day-to-day management and record keeping headaches. What is more, then fund may be able to offer better investment talents than individual investors can provide.

Still another advantage is that most mutual fund investments can be started with a modest capital outlay. Sometimes no minimum investment is required (just bring in what you have for now). After the initial investment has been made, the investor has the opportunity and freedom to purchase additional shares later.

The services that mutual funds offer also make them appealing to many investors. These services include; automatic reinvestment of dividends, withdrawal plans, and exchange privileges.

Finally, mutual funds offer convenience. They are relatively easy to acquire; the funds handle the paper-work and record keeping, their prices are widely quoted, and it is possible to deal in fractional shares.

Drawbacks:

There are, of course, some major drawbacks to mutual fund ownership. One of the biggest disadvantages is that mutual funds in general can be costly and involve substantial transaction costs. Many funds carry sizeable commission charges sometimes called "load charge."

In addition, a management fee is levied annually for the professional services provided, and it is deducted right off the top, regardless of whether the fund has had a good or a bad year. Yet, even in spite of all the professional management skills and advice, it seems that mutual fund performance over the long run is at best about equal to what you would expect from the market as a whole. There are some notable exceptions, but most funds do little more than keep up with the market.

3.2 How Mutual Funds Are Organized and Run

Although, it is tempting to think of a mutual fund as a single large entity, that view is not really accurate. Various functions, such as; investing, record-keeping, safe-keeping, and others, are split among two or more companies. To begin with, there is the fund itself, which is organized as a separate company or trust and is owned by the shareholders, not by the firm that runs it.

3.2.1 Key Players in a Mutual Fund

We discuss below some of the key players in a mutual fund.

- (a) The Management Company. The management company runs the fund's daily operations. The management company is the original company that created the fund before asking investors to come and invest in the pool.

- (b) The Investment Adviser. The investment adviser buys and sells stocks or bonds and oversees the portfolio. Usually, three parties participate in this phase of the operation:
 - (i) The money manager, who actually runs the portfolio and makes the buy and sell decisions;
 - (ii) Securities analysts, who analyze securities and look for viable investment candidates, and
 - (iii) Traders, who buy and sell big blocks of securities at the best possible price.

- (c) The distributor. He sells fund shares, either directly to the public or through authorized dealers (like major brokerage houses and commercial banks). When you request a prospectus and sales literature, you deal with the distributor.

- (d) The Custodian. The custodian physically safeguards the securities and other assets of the fund, without taking part in the investment decisions. To discourage foul play, an independent party (usually a bank) serves in this capacity.

- (e) The Transfer Agent. He keeps track of purchase and redemption requests from shareholders and maintains other shareholder records.

The separation of duties analyzed above is designed to protect the mutual fund investor/shareholder. Obviously, as a mutual fund investor, you will lose money if your fund's stock or bond holdings go down in value. But that is really the only risk of loss you face, because the chance of your ever losing money from fraud, scandal, or a mutual fund collapse is almost non-existent. Here is why: In addition to the separation of duties we have noted, the only formal link between the mutual fund and the company that manages it (the management company) is a contract that must be renewed (and approved by shareholders) on a regular

basis. One of the provisions of this contractual agreement is that the fund's assets (stocks, bonds, cash or other securities in the portfolio) can never be in the hands of the management company.

Another safeguard is that each fund must have a board of directors, or board of trustees, who are elected by shareholders and are charged with keeping tabs on the management company and renewing its contract.

3.2.2 Mutual Fund Regulations

Let us review some of the major regulatory provisions that apply to mutual funds. To begin with, the Securities Act in every country requires the filing of full information about a mutual fund with the Securities and Exchange Commission (SEC). This Act also requires the fund to provide potential investors with a fund profile or current prospectus, disclosing the fund's management, its investment policies and objectives, and other essential data. In addition, the purchase and sell of mutual fund shares are subject to the antifraud provisions of the Securities Exchange and Investment Advisers Acts.

Most importantly, in order to qualify and occupy the status of an investment company, a fund must comply with the provisions of the country's Investment Company Act. That comprehensive piece of legislation provides the foundation for the regulation of the mutual fund industry and, among other things, establishes standards of income distribution, fee structures, and diversification of assets.

3.3 Essential Characteristics

Although investing in mutual funds has been made as simple as possible, investors nevertheless should have a clear understanding of what they are getting into. For starters, it is essential that you be aware of the many different types of mutual funds available. In addition, you should become familiar with the differences in organizational structures, as well as with the wide array of fees and charges that you might encounter when investing in mutual funds.

3.3.1 Open-End Investment Companies

The term Mutual Fund is commonly used to describe an open-end investment company. In an open-end investment company, investors buy their shares from the mutual fund and sell them back to the same mutual fund. When an investor buys shares in an open-end fund, the fund issues new shares of stock and fills the purchase order with those new shares. There is no limit, other than the extent of investor demand, to the number of shares the fund can issue. All open-end mutual funds stand behind their shares and buy them back when investors decide to sell. Thus, there is never any trading between individuals. Open-end mutual funds are the most popular type of investment company.

Both buy and sell transactions in (open-end) mutual funds are carried out at price based on the current market value of all the securities held in the fund's portfolio. Technically, this will also include the book value of any other assets, such as cash and receivables from securities transactions, that the fund might hold at the time, though for all practical purposes, these other assets generally account for only a tiny fraction of the fund's total portfolio).

3.3.2 Closed-End Investment Companies

Whereas the term mutual fund is supposed to be used only with open-end funds, it is also commonly used to refer to closed-end investment companies. Closed-end investment companies operate with a fixed number of shares outstanding and do not regularly issue new shares of stock. In effect, they have a capital structure, like any other corporation, except that the corporation's business happens to be investing in marketable securities. Shares in closed end investment companies, like those of any other common stock, are actively traded in the secondary market. But, unlike open-end funds, all trading in closed-end funds is done between investors in the open market. The mutual fund plays no role in either buy or sell transactions. Once the shares are issued, the fund is out of the picture. By far, most closed-end investment companies are traded on the Nigerian Stock Exchange and New York Stock. Occasionally some are traded in the Over the Counter (OTC) market.

4.0 CONCLUSION

Under this unit we discussed the mutual fund and the advantages of investing in a mutual fund. Although, there are many advantages open to investors, there are disadvantages and risks too which an investor in a mutual fund faces. We defined mutual fund as an investment company that invests its shareholders' money in a diversified portfolio of securities. An investment in a mutual fund really represents an ownership position in a professionally managed portfolio of securities.

5.0 SUMMARY

We saw that basically, a mutual fund is a type of financial services organization that receives money from its shareholders and then invests those funds on their behalf in a diversified portfolio of securities. In recent times, mutual fund industry has grown so much that it is now about the largest financial intermediary almost ahead of banks. Mutual funds today are found in all the major markets of the world.

6.0 TUTOR-MARKED ASSIGNMENT

- * Discuss three advantages open to an investor in a mutual fund investment

- * What is the main difference between an Open-End Mutual
A Closed-End Mutual Fund

7.0 REFERENCES/FURTHER READING

- Bodie, Z. et al. (2001) Essentials of Investment (Fourth Edition)
Published by McGraw-Hill Company Inc., 1221 Avenue, New York, U.S.A.
- Cohen, J. (1977) Investment Analysis & Portfolio Management (Third Edition)
Richard D. Irwin Inc. New York, U.S.A.
- Gitman, L.J and Joehnk, M.D. (1998). Fundamentals of Investment (Seventh Edition)
Printed by RR Donnelley & Sons Company , U.S.A.
- Rufus, I.A. (2004) Investment Decisions, Concepts, Analysis and Management
Glorious Hope Printers, Glorious Hope House, 53 Jagunmolu Street, Bariga, Lagos.

INVESTMENT ADVICE

Based on personal experience and today's realities in the investment world, the Course Writer provides the following investment advice:

1. If you invest in corporate bonds, beware of "Junk Bonds." These are dishonestly issued corporate bonds which promise to pay high rate of interest because the bonds have high risks involved in them. They are often used for raising money quickly by firms which are in serious financial problem and virtually at the verge of collapse. under the present economic downturn, many of such bonds are in the market.
2. Do not invest in any newly established company, no matter how large, rich or sophisticated the company may look. Consider putting your money in a firm when such company has operated for, at least, five years. This advice is based on the following facts:
 - (a) Some firms sustain themselves, in the short-term, with borrowed funds whose maturity date has not come.
 - (b) Some firms remain afloat by taking new loans to settle old debts with the hope that they will soon be able to stand on their own financially. Five years period will give the investing public an opportunity to know whether a company in this practice of juggling old and new debts will sink or survive.
 - (c) Some dishonest businessmen deliberately establish fake businesses just to cheat investors and disappear into the tin air. We saw this scenario in Nigeria during the last two decades. Many finance companies came on stream and collected savings and fixed deposits from the public only to bolt with the money after a short time.
3. Under the present business climate, it is imperative for any investor in equity securities to exercise due care and caution. This has become very necessary because a "blue chip" firm today can turn "bear" tomorrow in the face of the present world economic downturn.
4. Never engage in a speculative business of any type. That is, a promise of some big profit in future but whose success is uncertain. A pool betting young man once borrowed money from his friend with the promise to pay back double because he was sure that his betting on English Soccer results for the season would hit the jackpot. What happened? The soccer result was a disaster. He became a big debtor overnight and could not pay back the money.

5. Do not make big donation promises in your home town or community with the hope that your future business would thrive for you to discharge the self-imposed obligation. Tomorrow is pregnant with uncertain events. You never can say what will happen. William Shakespeare summarized it when he wrote saying: "Tomorrow is in the womb of time, what it holds no one knows."
6. Do not follow the "bandwagon" in your investment decisions. Always look well before you leap.
7. If you are a money lender, lending money to people with little interest. It is good because you are helping society and people to survive. But be very wise about it. Watch out for people with sugar-coated tongue because many Africans have the mentality of borrowing with thanks and paying back with curses (that is, if you are lucky to get paid at all).
8. "Time" is money, business people say. Surely, time is a valuable commodity. If you invest it in doing something good today, it will yield for you future gains; If you waste your time today doing nothing reasonable, it will produce for you future regrets. As a young person, learn new trade, undertake vocational training, engage in honest and clean business, join good sporting club to practise professional sporting and God will see you through. The bigger gain for all of us at the end is that society will be at peace.



NATIONAL OPEN UNIVERSITY OF NIGERIA

COURSE GUIDE

COURSE CODE: ENT331

COURSE TITLE: INVESTMENT MANAGEMENT ANALYSIS I

COURSE GUIDE

ENT 331: INVESTMENT MANAGEMENT ANALYSIS 1

Course Code	ENT 331
Course Title	Investment Management Analysis I
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INTRODUCTION

ENT 331: Investment Management Analysis 1, is a one semester course work having two credit units. It is available to students on undergraduate programme in the School of Management Sciences at the National Open University of Nigeria.

The course of made up of 16 units covering essential topics in Investment Management Analysis. It also treated in detail investment in common stocks, bonds and preferred stock and discussed the risks and returns inherent in them.

This course guide tells you what the course is all about, the relevant textbooks you should consult, and how to work through your course materials to get the best out of it. It also contains some guidelines on your tutor-marked assignments.

COURSE CONTENTS

The aim of this course “Investment management Analysis 1” is to introduce you to the subject of investment in securities and to teach you how to analyze and manage your investments. The course contains core investment topics such as securities trading, how to measure risks and returns on your investment instruments, and how to manage investment portfolios.

Investment is a daily affair in human life. Sometimes we carry out an investment activity without even being aware that what we are doing is investment. Whenever we put money in any undertaking with a view to making profit out of it in future, what we are doing is investment.

We can also look at investment in its traditional or rudimentary form. For instance, a farmer buys a head of corn and sows the seeds in the soil around his farmland. Within that same annual farming season, each seed of corn germinates, grows to full maturity and produces one

or two heads of corn. That is farming investment in traditional agriculture. However, the course discussed investment in modern commerce and industry which involves the purchase of stocks and bonds in the exchange markets and holding them to maturity to make interest profits.

COURSE AIMS

The course aims to groom the student in the process of investment which prepares him for investment journey through life. Sooner or later, the student, after his studies, will be involved in making one investment or another to make gains to sustain himself and his family. Also, knowledge of investment and the understanding of the tricks and intricacies of risks and returns will be useful to the student in other areas of human endeavour, especially where he has to weigh possible risks and returns in any investment move he wants to make.

COURSE OBJECTIVES

In order to achieve the full aims of the course, the study is divided into coherent units and each unit states, at the beginning, the objective it is out to achieve. You are therefore advised to read through the specific objectives before reading through the unit. However, the following represent some of the broad objectives of the course. That is to say, after studying the course as a whole, you should be able to:

- * Understand the meaning of the term “Investment”
- * Describe the participants in the investment process and the various types of investors
- * Understand the principal types of investment instruments available in the market
- * Describe the basic types of security markets and the characteristics
- * Explain the role of stockbrokers in security transactions
- * Describe steps in the investment process and the establishment of investment goals
- * Discuss investing over the life cycle and investing in different economic climates
- * Understand the key features of short-term investment instruments
- * Review the concept of return, its components and its importance
- * Discuss the importance of earning returns on your investment
- * Discuss the sources of risks in investments
- * Discuss business risk, financial risk, purchasing risk and liquidity risk in investments
- * Discuss the pros and cons of common stock ownership

WORKING THROUGH THIS COURSE

It is imperative that you read through the units carefully consulting the suggested texts and other relevant materials to broaden your understanding. Some of the units may contain self-assessment exercises and tutor-marked assignments to help you. Only when you have gone through all the study materials provided by the National Open University of Nigeria (NOUN) can you satisfy yourself that indeed you have completed the course. Note that at certain points in the course you are expected to submit assignments for assessment, especially the Tutor-Marked Assignment (TMAs). At the end of the course, there will be a final examination to test your general understanding of the course.

COURSE MATERIALS

Major components and study units in the study materials are:

Course Title: ENT 331 INVESTMENT MANAGEMENT ANALYSIS I

Study Units

Module 1

- Unit 1 The Role of Investments
- Unit 2 Fixed income Securities
- Unit 3 Securities Markets
- Unit 4 Investment Planning

Module 2

- Unit 1 Investment Return
- Unit 2 Risk: The other side of the Coin
- Unit 3 Investing in Common Stock
- Unit 4 Buying and selling of Common Stock

Module 3

- Unit 1 Security Analysis
- Unit 2 Investing in Fixed-Income Securities
- Unit 3 Bond Valuation and Analysis
- Unit 4 Preferred Stocks and Convertible Securities

Module 4

- Unit 1 Puts and Calls Options
- Unit 2 Commodities and Financial Futures
- Unit 3 Financial Futures
- Unit 4 Mutual Funds

TEXTBOOKS AND REFERENCES

You should use the prepared text for the course made available to you by NOUN. However, in your own interest, do not limit yourself to this study text. Make effort to read the recommended texts to broaden your horizon on the course.

ASSIGNMENT FILE

The assignment file will be made available to you (where applicable). There, you will find details of all the work you must submit to your tutor for marking. The marks you obtain from these assignments will count towards the final mark you will obtain to hit the required pass-mark for the course.

ASSESSMENT

Your performance on this course will be determined through two major approaches. The first is through your total score in the Tutor-Marked Assignments, and the second is through the final examination that will be conducted at the end of the course. Thus, your assessment in the course is made up of two components:

Tutor-market Assignment	30%
Final Examination	70%

The self-assessment tests which may be provided under some units do not form part of your final assessment. They are meant to help you understand the course better. However, it is important that you complete work on them religiously so that they will help in building you strongly and serving you as mock-examination.

TUTOR-MARKED ASSIGNMENT

At the end of each unit, there is a Tutor-Market Assignment (TMA), which you are encouraged to do and submit accordingly. The study centre manager/ tutorial facilitator will guide you on the number of TMAs to be submitted for grading.

Each unit of this course has a TMA attached to it. You can only do this assignment after covering the materials and exercise in each unit. Normally, the TMAs are kept in a separate file. Currently, they are being administered on-line. When you answer the questions on-line, the system will automatically grade you. Always pay careful attention to the feedback and comments made by your tutor and use them to improve your subsequent assignments.

Do each assignment using materials from your study texts and other sources. Try to demonstrate evidence of proper understanding, and reading widely will help you to do this easily. The assignments are in most cases easy questions. If you have read the study texts provided by NOUN, you will be able to answer them. Cite examples from your own experience (where relevant) while answering the questions. You will impress your tutor and score higher marks if you are able to do this appropriately.

FINAL EXAMINATION AND GRADING

At the end of the course, you are expected to sit for a final examination. The final examination grade is 70% while the remaining 30% is taken from your scores in the TMAs. Naturally, the final examination questions will be taken from the materials you have already read and digested in the various study units. So, you need to do a proper revision and preparation to pass your final examination very well.

HOW TO GET THE BEST OUT OF THIS COURSE

The distance learning system of education is quite different from the traditional or conventional university system. Here, the prepared study texts replace the lecturers, thus providing you with a unique advantage. For instance, you can read and work through the specially designed study materials at your own pace and at a time and place you find suitable to you.

You should understand from the beginning that the contents of the course are to be worked on carefully and thoroughly understood. Step by step approach is recommended. You can read over a unit quickly to see the general run of the contents and then return to it the second time more carefully. You should be prepared to spend a little more time on the units that prove more difficult. Always have a paper and pencil by you to make notes later on and this is why the use of pencil (not pen or biro) is recommended.

FACILITATORS/TUTORS AND TUTORIALS

Full information about learning support services or tutorial contact hours will be communicated to you in due course. You will also be notified of the dates, time and location of these tutorials, together with the name of your tutors. Your tutor will mark and comment on your assignments. Pay attention to the comments and corrections given by your tutor and implement the directives as you make progress.

USEFUL ADVICE

You should endeavour to attend tutorial classes since this is the only opportunity at your disposal to come face to face with your tutor/lecturer and to ask questions on any grey area you may have in your study texts. Before attending tutorial classes, you are advised to thoroughly go through the study texts and then prepare a list of questions you need to ask the tutor. This will afford you opportunity to actively participate in the class discussions.

SUMMARY

Investment is something everybody does. Some do it locally or traditionally and others do it in a sophisticated way, that is, investing in corporate stocks and bonds. As we have earlier noted, the ultimate purpose of any investment move is to make profit. You put the money you have today in an asset with the hope of earning profit or earning interest on your investment. If you put money in a bank's fixed deposit, the bank will pay you the agreed interest at maturity. If you buy common stock in a corporate body, the organization will pay you dividend at the end of each year provided the company has made some profit from which to pay the firm's shareholders dividends.