**INTRODUCTION**

**Financial management is that managerial activity which is concerned with the planning and controlling of the firm’s financial resources**. It was a branch of economics till 1890, and as a separate discipline, it is of recent origin. Still, it has no unique body of knowledge of its own, and draws heavily on economics for its theoretical concepts.

In general financial management is the effective & efficient utilization of financial resources. It means creating balance among financial planning, procurement of funds, profit administration & sources of funds.

**Definitions of financial management:**

* According to **Solomon**, “Financial management is concerned with the efficient use of an important economic resource, namely, capital funds.”
* According to **J. L. Massie**, “Financial management is the operational activity of a business that is responsible for obtaining and effectively utilizing the funds necessary for efficient operation.”
* According to **Weston & Brigham**, “Financial management is an area of financial decision making harmonizing individual motives & enterprise goals.”
* According to **Howard & Upton**, “Financial management is the application of the planning & control functions of the finance function.”
* According to **J. F. Bradley**, “Financial management is the area of business management devoted to the judicious use of capital & careful selection of sources of capital in order to enable a spending unit to move in the direction of reaching its goals.”

**Main features of financial management:**

On the basis of the above definitions, the following are the main characteristics of financial management-

* **Analytical Thinking-**Under financial management financial problems are analyzed and considered. Study of trend of actual figures is made and ratio analysis is done.
* **Continuous Process-**previously financial management was required rarely but now the financial manager remains busy throughout the year.
* **Basis of Managerial Decisions-** All managerial decisions relating to finance are taken after considering the report prepared by the finance manager. The financial management is the base of managerial decisions.
* **Maintaining Balance between Risk and Profitability-**Larger the risk in the business larger is the expectation of profits. Financial management maintains balance between the risk and profitability.
* **Coordination between Process-** There is always a coordination between various processed of the business.
* **Centralized Nature-** Financial management is of a centralized nature. Other activities can be decentralized but there is only one department for financial management.

[**Areas/Scope of financial management**](http://www.mbaknol.com/financial-management/areasscope-of-financial-management/)

Financial management, at present is not confined to raising and allocating funds. The study of financial institutions like stock exchange, capital, market, etc. is also emphasized because they influenced under writing of securities & corporate promotion. The scope of FM has widened to cover capital structure, dividend policies, profit planning and control, AND depreciation policies. Some of the functional areas covered in financial management are as follows:-

1. **Determining financial needs:-** A finance manager is supposed to meet financial needs of the enterprise. For this purpose, he should determine financial needs of the concern. Funds are needed to meet promotional expenses, fixed and working capital needs. The requirement of fixed assets is related to types of industry. A manufacturing concern will require more investments in fixed assets than a trading concern. The working capital needs depend upon scale of operations. Larger the scale of operations, the higher will be the needs for working capital. A wrong assessment of financial needs may jeopardize the survival of a concern.
2. **Choosing the sources of funds:-** A number of sources may be available for raising funds. A concern may be resort to issue of share capital and debentures. Financial institutions may be requested to provide long-term funds. The working capital needs may be met by getting cash credit or overdraft facilities from commercial bands. A finance manager has to be very careful & cautions in approaching different sources.
3. **Financial analysis and interpretation:-** The analysis & interpretation of financial statements is an important task of a finance manager. He is expected to know about the profitability, liquidity position, short term and long-term financial position of the concern. For this purpose, a number of ratios have to be calculated. The interpretation of various ratios is also essential to reach certain conclusions Financial analysis and interpretation has become an important area of financial management.
4. **Cost-volume profit analysis:-** This is popularly known as “CVP relationship”. For this purpose, fixed costs, variable costs and semi variable costs have to be analyzed. Fixed costs are more or less constant for varying sales volumes. Variable costs vary according to the sales volume. Semi-variable costs are either fixed or variable in the short-term. The financial manager has to ensure that the income of the firm will cover its variable costs, for there is no point in being in business, if this is not accomplished. Moreover, a firm will have to generate an adequate income to cover its fixed costs as well. The financial manager has to find out the break-even point that is, the point at which the total costs are matched by total sales or total revenue.
5. **Working capital management:-** Working capital refers to that part of firm’s capital which is required for financing short-term or current assets such as cash, receivables and inventories. It is essential to maintain proper level of these assets. Finance manager is required to determine the quantum of such assets.
6. **Dividend policy: -** Dividend is the reward of the shareholders for investments made by them in the shares of the company. The investors are interested in earning the maximum return on their investments whereas management wants to retain profits for future financing. These contradictory aims will have to be reconciled in the interests of shareholders and the company. Dividend policy is an important area of financial management because the interest of the shareholders and the needs of the company are directly related to it.
7. **Capital budgeting: -** Capital budgeting is the process of making investment decisions in capital expenditures. It is an expenditure, the benefits of which are expected to be received over a period of time exceeding one year. It is expenditure for acquiring or improving the fixed assets, the benefits of which are expected to be received over a number of years in future. Capital budgeting decisions are vital to any organization. Any unsound investment decision may prove to be fatal for the very existence of the concern.

[Objectives of Financial Management](http://www.mbaknol.com/financial-management/objectives-of-financial-management/)

Financial management provides a frame work for selecting a proper course of action and deciding a viable commercial strategy.  The main objective of a business is to maximize the owner’s economic welfare.  This objective can be achieved by;

1. Profit Maximization, and
2. Wealth Maximization.

**1. Profit Maximization.** Profit earning is the main aim of every economic activity.  A business being an economic institution must earn profit to cover its costs and provide funds for growth.  No business can survive without earning profit.  Profit is a measure of efficiency of a business enterprise.  Profits also serve as a protection against risks which cannot be ensured.  The accumulated profits enable a business to face risks like fall in prices, competition from other units, adverse government policies etc.  Thus, profit maximization is considered as the main objective of business.  The following arguments are advanced in favor of profit maximization as the objective of business:

1. When profit-earning is the aim of business then profit maximization should be the obvious objective.
2. Profitability is a barometer for measuring efficiency and economic prosperity of a business enterprise
3. Economic and business conditions do not remain same at all times.  There may be adverse business conditions like recession, depression, severe competition etc. A business will be able to survive under unfavorable situation, only if it has some past earnings to rely upon. Therefore, a business should try to earn more and more when situation is favorable.
4. Profits are the main sources of finance for the growth of a business. So, a business should aim at maximization of profits for enabling its growth and development.
5. Profitability is essential for fulfilling social goals also.  A firm by pursuing the objective of profit maximization also maximizes socio-economic welfare.

However, profit maximization objective has been criticized on many grounds. They are:

* A firm pursuing the objective of profit maximization starts exploiting workers and the consumers. Hence, it is immoral and leads to a number of corrupt practices.
* It is also argued that profit maximization should be the objective in the conditions of perfect competition and in the wake of imperfect competition today, it cannot be the legitimate objective of a firm
* One has to reconcile the conflicting interests of all the parties connected with the firm.  Thus, profit maximization as an objective of financial management has been considered inadequate.  Even as an operational criterion for maximizing owner’s economic welfare, profit maximization has been rejected because of the following drawbacks;
* The term ‘profit’ is vague and it cannot be precisely defined.  It means different things for different people. Should we consider short-term profits or long-term profits? Does it mean total profits or earnings per share? Even if, we take the meaning of profits as earnings per share and maximize the earnings per share, it does not necessarily mean increase in the market value of share and the owner’s economic welfare.
* Profit maximization objective ignores the time value of money and does not consider the magnitude and timing of earnings.  It treats all earnings as equal when they occur in different periods. It ignores the fact that cash received today is more important than the same amount of cash received after, three years.
* It does not take into consideration the risk of the prospective earnings stream.  Some projects are more risky than other.
* The effect of dividend policy on the market price of shares is also not considered in the objective of profit maximization.

**2. Wealth Maximization.** Wealth maximization is the appropriate objective of an enterprise. When the firm maximizes the stockholder’s wealth, the individual stockholder can use this wealth to maximize his individual utility.  It means that by maximizing stockholder’s wealth the firm is operating consistently towards maximizing stockholder’s utility.

A stockholder’s current wealth in the firm is the product of the number of shares owned, multiplied with the current stock price per share.

This objective helps in increasing the value of shares in the market. The share’s market price serves as a performance index or report card of its progress.  It also indicates how well management is doing on behalf of the shareholder.

However, the maximization of the market price of the shares should be in the long run. Every financial decision should be based on cost-benefit analysis.  If the benefit is more than the cost, the decision will help in maximizing the wealth.

**Implications of Wealth maximization.** There is a rationale in applying wealth maximizing policy as an operating financial management policy.  It serves the interests of suppliers of loaned capital, employees, management and society.  Besides shareholders, there are short-term and long-term suppliers of funds who have financial interests in the concern.  Short-term lenders are primarily interested in liquidity position so that they get their payments in time. The long-term lenders get a fixed rate of interest from the earnings and also have a priority over shareholders in return of their funds. Wealth maximization objective not only serves shareholder’s interests by increasing the value of holdings but ensures security to lenders also. The economic interest of society is served if various resources are put to economical and efficient use.

**Criticism of Wealth Maximization.** The wealth maximization objective has also been criticized by certain financial theorists mainly on following accounts;

1. It is a prescriptive idea. The objective is not descriptive of what the firms actually do.
2. The objective of wealth maximization is not necessarily socially desirable.
3. There is some controversy as to whether the objective is to maximize the stockholders wealth or the wealth of the firm which includes other financial claimholders such as debenture holders, preferred stockholders, etc.,
4. The objective of wealth maximization may also face difficulties when ownership and management are separated as is the case in most of the large corporate form of organizations.

In spite of all the criticism, we are of the opinion that wealth maximization is the most appropriate objective of a firm and the side costs in the form of conflicts between the stockholders and debenture holders, firm and society and stock holders and managers can be minimized.

**THE PRINCIPLES OF VALUATION**

**Bond valuation**

**Bond Terminology**

|  |  |
| --- | --- |
| *Coupon rate ...* | ... is another name for interest rate. This term comes from when interest was paid by clipping a coupon from the bottom of the bond certificate. |
| *Notes ...* | ... refer to shorter-term debt instruments, with maturities typically less than five years; bills refer to shorter-term debt instruments issued by governments, the most famous being GoK Treasury bills. |
| *Par value ...* | ... is the bond's face value (or principal); under older corporate law, it refers to the uniform price all investors must pay for the bond. |
| *Maturity...* | ... .is the date the firm promises to repay the par value of the bond. The bond ceases to exist at the maturity date. |
| *Indenture...* | ...is the debt contract that includes the details of the issue such as the repayment provisions and restrictive covenants. |
| *Debt ratings ...* | .....are the "grades" assigned to a bond issue reflecting an assessment of that issue's risk. The most prevalent rating agencies are Moody's and Standard and Poor's. For example, Moody's rates issues from Aaa (the best) to C, which means the issue has "an extremely poor prospect of ever attaining any real investment standing." |

Bonds are long-term debt instruments used by business firms and governments to raise money. Most bonds pay interest *semi-annually* at a stated *interest* *rate* with an initial *maturity* of 10 to 30 years with a *face value* of Ksh. 1,000 that must be repaid at maturity.

A company sells its bonds, in the sense that it gives a promise of future payments in return for current cash.

**Private issues** are sold to a small group of investors, often big institutional investors like mutual funds and insurance companies. These bonds can trade among institutional investors in private markets. Under the federal securities laws, formal disclosure is not required for privately-issued bonds.

**Public issues** are sold to dispersed investors, usually through an underwriting syndicate of securities firms. These bonds often trade in public markets, such as the NYSE. The federal securities laws require that publicly-issued bonds be registered with the SEC, and issuers must provide investors an extensive disclosure document known as a "prospectus".

There are different types of bonds:

* **Mortgage bonds** are backed by real assets pledged as security.
* **Debentures** are not backed by any security.
* **Subordinate bonds** can only be paid after senior obligations are satisfied.
* **Convertible bonds** offer the investor the option to convert bonds to shares of the firm's equity.
* **Income bonds** are so named because interest payments are only made if the company generates sufficient income.
* **Zero coupon bonds** pay no coupons, and their return is purely from purchasing at a discount.
* **Floating rate bonds** are so named because the coupon rate is tied to some basic rate such as T-bill rates. These provide protection against inflation and interest rate risk and keep bonds selling close to their par values.
* **Puttable bonds** offer the option of returning the bonds at face value.
* **Junk bonds** are high risk, high return bonds. Typically, these are issued by lower-rated entities and are often tied to mergers or leveraged buyouts.

**Nature of corporate bonds.** Most bonds state that the issuer (sometimes called the “borrower” or “seller”) agrees to pay the buyer (sometimes called the “investor” or “lender”) a series of fixed interest payments. Usually these payments are to be made every six months (semi-annually) until the bond matures. To determine the amount of interest that a bond pays, simply multiply its coupon rate times the bond’s par value (sometimes called its “face value” or "principal”).This par value is usually Ksh.1,000 and is printed on the bond. The coupon rate is also printed on the bond and does not change during the bond’s life.

For example, if KCB issues a bond whose coupon rate is 10%, this means that the bond pays the buyer 0.10 × 1,000 or Ksh. 100 per year. Because the interest payment is made semi-annually, the buyer actually receives $50 every six months. Despite the fact of semi-annual payment, the coupon rate is always stated on annual basis.

The bond will also state its maturity date. On that date the issuer will make the last interest payment and also pay the buyer the par value or principal. If the KCB bond matures in 10 years and has a 10% coupon rate, the company will pay the buyer Ksh. 50 every six months for 10 years plus Ksh. 1,000 at the end of the tenth year (or 20th period).

What price will the buyer pay for this stream of interest payments and single principal payment? Don’t assume that price will be the par value. Rather, the bond will be sold for the prevailing market price—that is, how much the buyer is willing to pay for the particular issuer’s promise to make the bond payments. This will be a present value calculation, and its determination will depend on several factors, primarily the risk of the investment as perceived by the bond purchasers. General Electric, with its long history of profitability and quality management, will have a better credit rating than the newly founded “Jack’s Light Bulb and Jet Engine Company.” Because bricks and mortar booksellers are currently more profitable and stable than online booksellers, Barnes & Noble will be seen as a safer investment than Amazon. Accordingly, the buyer will likely value GE’s and Barnes & Noble’s bonds more highly than Jack’s or Amazon’s bonds.

**Government bonds.** The same comparisons can be made in the public sector. Governments that are fiscally disciplined and well managed are seen as better credit risks. This is why you’ll often hear elected officials touting their government’s “AAA” or otherwise high credit rating. They’re simply referring the power of their city, state, or other entity to raise public money through bonds on the most favourable terms.

**BOND VALUATION**

1. Value of a bond is the PV of all coupon payments plus the principal repayment, discounted at the *opportunity cost* for similar bonds. This is the price that the market will pay for the bond. It may be less than, equal to or even higher than the face value.

Example: for the Bond with the following features (Ksh.1000 face value, 9%, due 4/1/2022, issued 4/1/2002, with interest payable each April 1 and October 1;

If the market rate of interest is 12% (opportunity cost), then the price, or PV, is:

PV = [Ksh.45] 1-[1/(1+.06)40] + Ksh.1000.00 = Ksh.774

.06 (1+.06)40

This price (Ksh.774) gives a yield to maturity of 12%

NB: Coupons are being paid semi- annually i.e. 6% per half year.

The Yield to Maturity- YTM (the basis for bond pricing)

1. YTM- The discounted rate of return on a bond – this is the discount rate, r, that equates the PV of the expected bond cash flows to the current price, P0

P0 = int1 + int2 + … + intn + face valuen

(1+r)1 (1+r)2 (1+r)n (1+r)n

Example: a 9%, 10-year bond with a face value of Ksh.1000 sells at Ksh.920. What is its yield to maturity? For simplicity, assume interest is payable only once per year.

P0 = Ksh.920 = Ksh.90.00 + Ksh.90.00 + … + Ksh.90.00 + Ksh.1000

(1+r)1 (1+r)2 (1+r)10 (1+r)10

or

P0 = Ksh.920 = Ksh.90 x 1 - [1/(1+r)10] + Ksh.1000 , solve for r

r r

* Bond Prices

Bonds will sell at *Face Value*, at a *Discount*, or at a *Premium*.

1. Face Value: Bonds sell at face value when market interest rates for similar bonds are the same as the coupon on the bond.

Example: A Ksh.1000, 10-year bond with a 9% coupon rate, will sell at Ksh.1000 when similar bonds are yielding 9%

1. Discount: Bonds sell at a discount to face value when similar bonds have higher yields.

Example: The bond in the example above will sell at Ksh.939 when market yields on similar bonds are 10%. The bond is selling at a Ksh.61 discount to face value and its yield to market is 10%

1. Premium: Bonds sell at a premium when similar bonds in the current market have lower yields.

Example: Again, in the example above, the bond will sell for Ksh.1067 when similar bonds are yielding 8%. The bond is selling at a Ksh.67 premium to face value and its yield to market is 8%

Common Stock Valuation

* Valuation is based on the same principle of Present Value as bonds, but there are some complications
  + Uncertainty associated with future cash flows in the forms of dividends and share price
  + Difficulty in determining an appropriate discount rate (risk must be explicitly addressed)

Common Stock Cash Flows

Suppose we have a one-year horizon. Price = P0, then

P0 = D1 + P1 , where D1 = next year dividend

(1+r) (1+r) P1 = Selling Price

r = our opportunity cost

Suppose whoever buys the stock at price P1 also has a one-year horizon, then

P1 = D2 + P2 , so substituting

(1+r) (1+r)

P0 = D1 + D2 + P2 , and so on

(1+r) (1+r)2 (1+r)2

In actual fact, with each buyer looking for future dividends and an expected selling price, the general valuation equation is the PV of all future dividends:

P0 = D1 + D2 + D3 + … + DH , where H is a long time

(1+r)1 (1+r)2 (1+r)3 (1+r)H

It is not possible to calculate a unique present value of an infinite stream of dividends that vary, so some simplifying assumptions are made, usually concerning the growth of the dividends (usually earning; assuming a constant payout ratio)

* + - Zero growth
    - Constant growth
    - Non-constant growth (growth phases)

The Zero Growth Case

In the Zero Growth Case, we have a perpetuity

P0 = D1 + D2 + D3 + … + D∞ ,

(1+r)1 (1+r)2 (1+r)3  (1+r)∞

Where D1 = D2 = D3 = … = D∞, and recall that

PVperpetuity = C/r

Example: A preferred stock pays a Ksh.12 dividend annually. If your opportunity cost is 15%, how much is this stock worth to you?

P0 = Ksh.12/0.15 = Ksh.80

The Constant Growth Case

A common stock with a constant dividend growth rate is like a perpetuity that is growing at this rate. We can develop the equation of a constant growth perpetuity as follows:

P0 = D1 + D2 + D3 + … + D∞ ,

(1+r)1 (1+r)2 (1+r)3  (1+r)∞

with a constant growth rate , g, this equation becomes

P0 = D(1+g)1 + D(1+g)2 + D(1+g)3 + … + D(1+g)∞ ,

(1+r)1 (1+r)2 (1+r)3  (1+r)∞

this is a convergent series

P0 = D0(1+g) = D1 , for r>g

r-g r-g

Example: Suppose you want to buy a share of Swiss Farms, S.A., a dairy products company. Swiss Farms paid a recent dividend at an annual rate of Ksh.2.00 per common share. After talking to your broker, you expect the dividends to continue to increase at 5%/year, like the past four years. Your opportunity cost is 12%. What is this stock worth to you?

Non-Constant Growth Case

Suppose the dividend growth rate changes during the period of evaluation. There is usually a period of supra-normal growth, followed by a normal growth rate. (Important: Supra-normal growth cannot be sustained for extended periods)

Illustration: Earnings (and dividends) growing at a 20% rate would more than double in 4 years; triple in about 6 years; and increase by more than 6 times in 10 years. This is not likely.

To estimate the value of a stock with non-constant growth requires that the different growth rate periods be handled separately.

Example: Suppose that Husky Corporation’s dividends this year is Ksh.1.20 per share and that dividends will grow at 10% per year for the next three years, followed by a 6% annual growth rate. The appropriate discount rate for Husky Corporation’s common stock is 12%. What is the value of a share of Husky Corporation common stock?

To value this stock, first compute the present value of the first three dividend payments as follows:

Year Growth Rate (g) Expected Dividend Present Value

1 10% Ksh.1.3200 Ksh.1.1786

2 10% Ksh.1.4500 Ksh.1.1575

3 10% Ksh.1.5972 Ksh.1.1369

The present value of the first three dividend payments is Ksh.3.4730. Next, compute the dividend for year 4:

D4 = Ksh.1.20 x (1.10)3 x (1.06) = Ksh.1.6930

The price as of year 3 can be determined by using the formula for the present value of a stock whose dividends grow at a constant rate:

P3 = D4 = Ksh.1.6930 = Ksh.28.2167

r-g .12 - .06

Note that the above formula values the stock as of year 3, using the year 4 dividend in the numerator. To find the present value, as of year 0, of this year 3 price:

PV = Ksh.28.2167 = Ksh.20.0841

(1.12)3

Therefore, P0 = Ksh.3.4730 + Ksh.20.0841 = Ksh.23.56