**INTRODUCTION**

**Business Finance also referred to as Corporate Finance is concerned with the planning and controlling of the firm’s financial resources**. It is a branch of economics, although seen increasingly as a separate discipline in recent times. Still, it has no unique body of knowledge of its own, and draws heavily on economics for its theoretical concepts.

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

* [**Areas/Scope of Corporate Finance**](http://www.mbaknol.com/financial-management/areasscope-of-financial-management/)
* Corporate Finance, 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 Corporate Finance has widened to cover capital structure, dividend policies, profit planning and control, AND depreciation policies. Some of the functional areas covered in Corporate Finance 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 Corporate Finance.
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 Corporate Finance 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 Corporate Finance**](http://www.mbaknol.com/financial-management/objectives-of-financial-management/)

Corporate Finance 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 Corporate Finance 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 Corporate Finance 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.

**SEPARATION OF OWNERSHIP FROM MANAGEMENT AND THE AGENCY CONFLICT (refer to class discussion)**

In large businesses separation of ownership and management is a practical necessity. Major corporations may have hundreds of thousands of shareholders. There is no way for all of them to be actively involved in management: It would be like running Egerton University through a series of small meetings for all its students, lecturers and administrators. Authority has to be delegated to managers.

The separation of ownership and management has clear advantages. It allows share ownership to change without interfering with the operation of the business. It allows the firm to hire professional managers. But it also brings problems if the managers’ and owners’ objectives differ. This is referred to as the AGENCY CONFLICTS whereby rather than attending to the wishes of shareholders, managers may seek a more leisurely or luxurious working lifestyle; they may shun unpopular decisions, or they may attempt to build an empire with their shareholders’ money. Such conflicts between shareholders’ and managers’ objectives create *principal–* *agent problems.* The shareholders are the principals; the managers are their agents.

Shareholders want management to increase the value of the firm, but managers may have their own axes to grind or nests to feather. **Agency costs** are incurred when

(1) Managers do not attempt to maximize firm value and

(2) Shareholders incur costs to monitor the managers and influence their actions.

Of course, there are no costs when the shareholders are also the managers. That is one of the advantages of a sole proprietorship. Owner–managers have no conflicts of interest.

**COSTS OF THE AGENCY RELATIONSHIP**

There are costs involved with any effort to minimize the potential for conflict between the principal’s interest and the agent’s interest. Such costs are called ***agency costs***, and they are of three types: monitoring costs, bonding costs, and residual loss.

***Monitoring costs*** are costs incurred by the principal to monitor or limit the actions of the agent. In a corporation, shareholders may require managers to periodically report on their activities via audited accounting statements, which are sent to shareholders. The accountants’ fees and the management time lost in preparing such statements are monitoring costs. Another example is the implicit cost incurred when shareholders limit the decision-making power of managers. By doing so, the owners may miss profitable investment opportunities; the foregone profit is a monitoring cost. The board of directors of corporation has a ***fiduciary duty*** to shareholders; that is the legal responsibility to make decisions (or to see that decisions are made) that are in the best interests of shareholders. Part of that responsibility is to ensure that managerial decisions are also in the best interests of the shareholders. Therefore, at least part of the cost of having directors is a monitoring cost.

***Bonding costs*** are incurred by agents to assure principals that they will act in the principal’s best interest. The name comes from the agent’s promise or bond to take certain actions. A manager may enter into a contract that requires him or her to stay on with the firm even though another company acquires it; an implicit cost is then incurred by the manager, who foregoes other employment opportunities.

Even when monitoring and bonding devices are used, there may be some divergence between the interests of principals and those of agents. The resulting cost, called the ***residual loss***, is the implicit cost that results because the principal’s and the agent’s interests cannot be perfectly aligned even when monitoring and bonding costs are incurred.

**REVIEW QUESTIONS**

1. In most large corporations, ownership and management are separated. What are the main implications of this separation? (8 mks)

**2.** What are agency costs and what causes them? How can agency conflicts be minimized? (**Need further reading here**) (4 mks)

**3.** Discuss the scope of Corporate Finance (8 mks).

**PRINCIPLES OF VALUATION**

**TIME VALUE OF MONEY AND THE OPPORTUNITY COST OF CAPITAL**

Your guest house has burned down, fortunately without injury to you or your employees, leaving you with a vacant lot worth Ksh. 500,000 and a check for Ksh. 2,000,000 from the fire insurance company. You consider rebuilding, but your real estate adviser suggests putting up an office building instead. The construction cost would be Ksh. 3,000,000, and there would also be the cost of the land, which might otherwise be sold for Ksh. 500,000. On the other hand, your adviser foresees a shortage of office space and predicts that a year from now the new building would fetch Ksh. 4,000,000 if you sold it. Thus you would be investing Ksh. 3,500,000 now in the expectation of realizing Ksh. 4,000,000 a year hence. You should go ahead if the **present value (PV)** of the expected Ksh. 4,000,000 payoff is greater than the investment of Ksh. 3,500,000. Therefore, you

need to ask, What is the value today of Ksh. 4,000,000 to be received one year from now, and is that present value greater than Ksh. 3,500,000?

**CALCULATING PRESENT VALUE**

The present value of Ksh. 4,000,000 one year from now must be less than Ksh. 4,000,000. After all, *a shilling today is worth more than a shilling tomorrow,* because the shilling today can be invested to start earning interest immediately. This is the first basic principle of finance.

Thus, the present value of a delayed payoff may be found by multiplying the payoff by a **discount factor** which is less than 1. (If the discount factor were more than 1, a Shi lling today would be worth *less* than a Shilling tomorrow.) If *C*1 denotes the expected payoff at period 1 (one year hence), then

Present value (PV) = discount factor x *C*1

This discount factor is the value today of Ksh. 1 received in the future. It is usually expressed as the reciprocal of 1 plus a *rate of return:* The rate of return *r* is the reward that investors demand for accepting delayed payment.

Now we can value the real estate investment, assuming for the moment that the Ksh. 4,000,000 payoff is a sure thing. The office building is not the only way to obtain Ksh. 4,000,000 a year from now. You could invest in Government of Kenya securities (Treasury Bills) maturing in a year. Suppose these securities offer 7 percent interest. How much would you have to invest in them in order to receive Ksh. 4,000,000 at the end of the year?

To calculate present value, we discount expected payoffs by the rate of return offered by equivalent investment alternatives in the capital market. This rate of return is often referred to as the **discount rate, hurdle rate,** or **opportunity cost** **of capital.** It is called the *opportunity cost* because it is the return foregone by investing in the project rather than investing in securities. In our example the opportunity cost was 7 percent.

Always remember: A Ksh. in the hand today is worth more than a Ksh. Promised sometime in the future, i.e., money has time value!

If you have it today, you can invest it or use it. It is rather difficult to invest or use a promise of some future funds.

1. Future Value and Compounding

* Investing for single period

FV = P (1+r), where P = principal invested, and r = the interest rate on the investment.

What is the FV of Ksh.500 invested for one year at 10%; FV = Ksh.500 (1.10) = Ksh.550.

* Investing for more than one period

FV = P (1+r)t, where t = the number of periods in the future

What is the FV of Ksh.500 invested for 2 years at 10%; FV = Ksh.500 (1.10)2 = Ksh.500 (1.21) = Ksh.605

Note: there are two elements in the Ksh.105 interest;

* + There is the interest on the principal; Ksh.50 each year (total Ksh.100), and
  + There is the interest on the first year’s interest; Ksh.50 x .10 = Ksh.5

This is the result of compounding. For example, the same Ksh.500 left on deposit for 5 years, at simple and compound interest would be, after 5 years: Simple interest: Ksh.750, Compound interest: Ksh.805

How does one calculate the factor (1+r)t ? You can do it manually, using your calculator, your computer or the Future Value Tables (found, along with Present Value and Annuity Tables, in most basic Corporate Finance textbooks).

* The Financial Tables
  + For any interest rate and time period, the table will give the value of Ksh.1 for that number of periods in the future.

1. Present Value and Discounting
   * What is Present Value?

It is the current value of a future cash flow(s), discounted at an appropriate discount factor (or interest rate). This follows the same principle as compounding.

Alternatively: What will we need today, invested at that same rate, to give us an amount equal to the future cash flow?

Recall that FV = P (V)(1+r)t ; let’s do some simple algebra, then

PV = FV/(1+r)t , where r is the discount rate for t periods of time in the future

* Let’s look at a single period example:

An antique auto dealer can buy a “mint condition” 2003 Toyota auto for Ksh.60,000. He is certain that he can resell the car in one year for Ksh.70,000. He also has the opportunity to make a well-collateralized loan to an acquaintance for one year at 12% (assume essentially no risk). What should he do?

Before solving this problem, let’s introduce the concept of “Opportunity Cost.” Opportunity cost is simply the best alternative financial opportunity that exists, at the same risk level as the one under consideration. In the auto example, it is the 12% certain, that he can earn on the loan. Therefore, the appropriate discount rate is 12%.

PV = Ksh.70,000/(1+0.12) = Ksh.62,500 vs. the Ksh.60,000 that he must pay for the car today. If he made the loan, then his PV (at 12%, of course) is Ksh.60,000. (If he makes the loan to his acquaintance, he will receive in one year Ksh.67,200 – his Ksh.60,000 plus the 12% interest, or Ksh.7200. Ksh.67, 200/1.12) = Ksh.60, 000.)

* Present value of multiple periods

Suppose that your favorite uncle promises you Ksh.100, 000 for your 30th birthday, which is 8 years from now. He also says that if you are in a hurry, he will give you Ksh.50, 000 tomorrow, which is your 22nd birthday. You know that you can earn 7.5% (per year) on an 8 year government bond. What do you want to do?

PV = FV/(1+r)t , which in this case is PV = Ksh.100,000/(1+0.075)8

PV = Ksh.56,070 vs. the Ksh.50,000 you can have tomorrow. So, unless you badly need the cash now, you would be better off to accept the Ksh.100,000 on your 30th birthday.

Alternatively, FV8 = (Ksh.50,000)(1+0.075)8 = Ksh.89,175 vs. the Ksh.100,000

* An interesting approximation: The Rule of 72

To quickly and easily estimate how long it will take to double an investment, with a given compound interest rate, r, take 72/r.

For example, how long will it take to double Ksh.10,000 @ 6%, 8.25%, and 10%? 72/6 = 12 years (actually 11.89 years); 72/8.25 = 8.73 years (actually 8.74 years); 72/10 = 7.2 years (actually 7.27 years).

1. The Present and Future Value of Multiple Cash Flows

* There are two ways to calculate the future value or the present value of multiple cash flows:

**FUTURE VALUE**: Compound the accumulated value period by period, or calculate the FV of each cash flow and sum them.

**PRESENT VALUE:** Discount back one period at a time, summing as you go, or discount each amount to time period 0 (the present), and sum them.

Let’s look at some examples:

**FUTURE VALUE**

Assume you deposit Ksh.2000 today (t0), Ksh.1000 in one year (t1) and Ksh.3000 in two years (t2), all at 8%. What will your deposit be worth at the end of the third year?

FV = (Ksh.2000)(1.08)4 + (Ksh.1000)(1.08)3 + (Ksh.3000)(1.08)2 = Ksh………………

**PRESENT VALUE**

You know that you will need Ksh.1200 one year from now, Ksh.1500 after two years, and Ksh.2000 after 3 years. How much will you have to deposit today @ 8% to have the necessary amounts?

PV = Ksh.1200/1.08 + Ksh.1500/(1.08)2 + (Ksh.2000)/(1.08)3 = Ksh.3985

Suppose your stock broker told you that if you made an investment with him of Ksh.4200, you could have Ksh.1200 in one year, Ksh.1500 in 2 years, and Ksh.2200 in 3 years. Would you do it? By inspection of the previous example, would you do it?

You are offered an investment that pays Ksh.5000 after 4 years, Ksh.6000 after 5 years and Ksh.8000 after 6 years. You want to earn 12% on this investment. How much would you pay for it today?

PV = Ksh.5000/(1.12)4 + Ksh.6000/(1.12)5 + Ksh.8000/(1.12)6 = Ksh.3178 + Ksh.3405 + Ksh.4053 = Ksh.10,636

1. **VALUING LEVEL CASH FLOWS: ANNUITIES AND PERPETUITIES**

**ANNUITY CASH FLOWS**

An annuity is a series of constant cash flows that occur at regular intervals for a fixed number of periods, for example:

The repayment of a mortgage or car loan

Lease payments on a property

* The Present Value of an Annuity

We could simply discount all of the cash flows at the appropriate rate, but it could become cumbersome. There is a shortcut.

The Present Value of a series of *t* cash flows, of an amount, *C,* at a discount rate, *r*, can be represented by the following equation

1

1 - (1+r)t

APV = C x .

r

We can calculate by hand, or use the annuity tables in any Corporate Finance text to get the value of

1 .

1 - (1+r)t

. = PVIAF (PV interest annuity factor)

r

Example:

How much can you afford to spend for a new car which you will finance?

1. You examine your budget and find that you can afford Ksh.632/month for 48 months.
2. You go to your bank and find that they will give you a loan for 48 months @ 1% interest per month (12% per year).

Your bank loan payments are an annuity

1 – (1/1+0.01)48

APV = Ksh.632 x 0.01 = Ksh.632 (1 – 0.6203) = Ksh.24, 000

0.01

You can afford to pay Ksh.24,000 for the car.

Alternatively, we can go to the annuity tables (PV) and find the PVIF for 48 periods at 1.0% = 37.9740. Then 37.9740 x Ksh.632 = Ksh.24, 000.

* The Future Value of an Annuity

Same principles as the APV, but it is the value at the end of *t* periods of a constant stream of cash flows, *C*, at an interest rate of *r*.

(1+r)t - 1

The value is given by AFV = C x r

(Future value annuity table gives the value of the factor to multiply times C)

* The Present Value of a Perpetuity

A Perpetuity is an annuity where the cash flow stream is infinite (t = ∞)

This is a convergent infinite series where PV = C/r

All we need to do is look at the APV equation at *t* goes to ∞; we see that

APV∞ = C x (1-0)/r which = C/r

The perpetuity is an important concept in valuation practice, so remember it!!

Some examples

1. You are thinking of buying preferred shares of stock in a company that will pay you Ksh.8.00 per year dividend. You know that you can get 5% on similar risk investments elsewhere. What is the most that you should be willing to pay for these shares?

A non-callable preferred stock is like a perpetuity, so PV = C/r, and PV = Ksh.8.00/0.05 = Ksh.160

1. JBS Corp. wants to sell preferred shares at Ksh.100/share. A similar issue from another company is priced at Ksh.60 per share and pays Ksh.5 per share annual dividend. What dividend must JBS Corp. pay to get their price of Ksh.100?

Ksh.60 = Ksh.5/r, so r = 0.0833, which is what JBS preferred stock will have to yield.

(Ksh.100)(0.0833) = Ksh.8.33 as the annual dividend

**EXTENSIONS**

* **Delayed annuities.**
* **Annuity due**

**To be discussed in class**