

Finance

Finance provides:

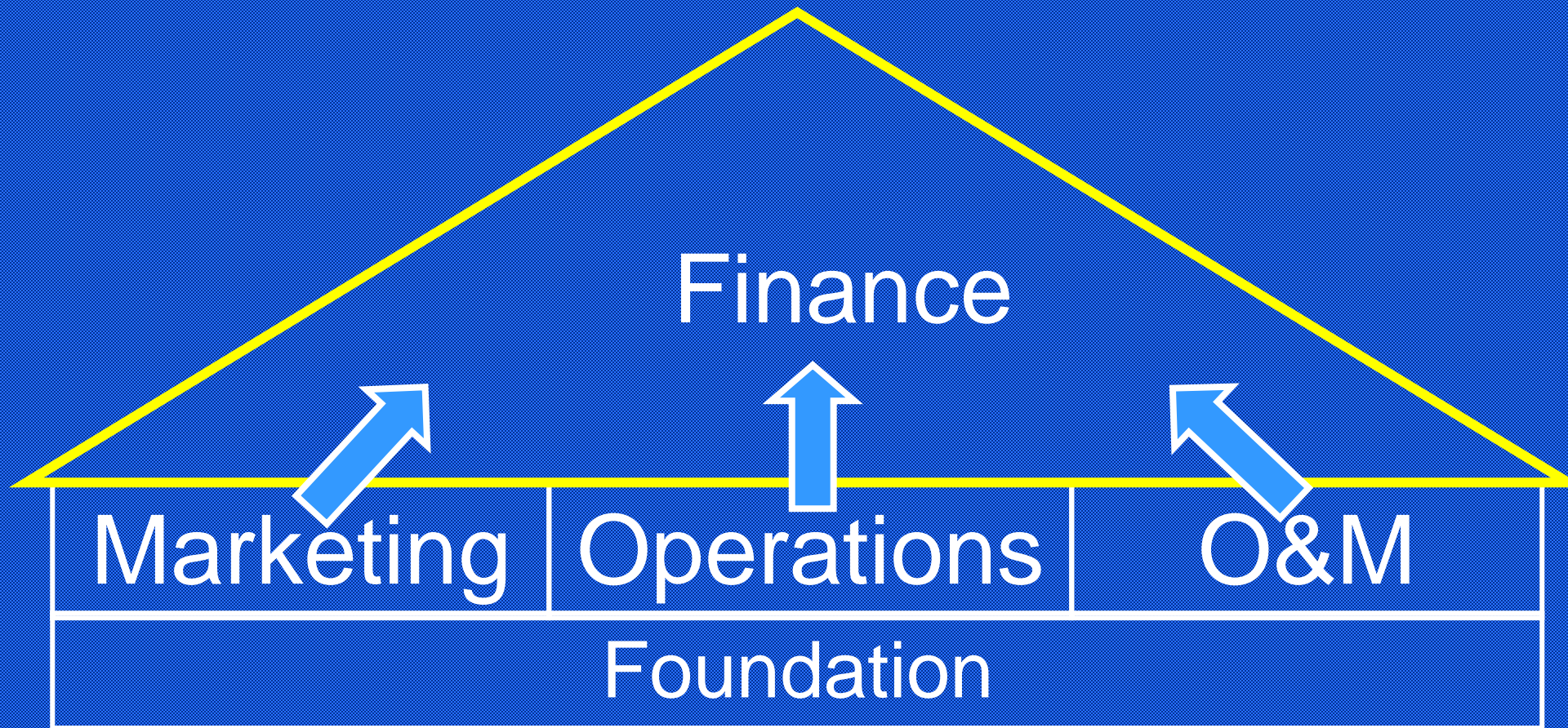
- the needed funds under the most favourable terms, and
- sees to it that the funds are effectively used

Managing Money

“It doesn’t matter what you think about money, you need to be able to manage it.”

Because every individual, organization, institute needs to balance income and expenditure.

Relationship of Finance with other Business Functions



Operations Firms May Need Capital for:

- Land
 - Building
 - Machinery and Equipment
 - Furniture and Fixtures
 - Accounts Receivable
 - Supplies
 - Finished Goods
 - Work-in-Process
 - Raw Materials
 - Cash
 - Pre-Operating Costs
 - Goodwill
 - Patents
- Fixed Assets**
- Current Assets**
- Deferred Charges
like Fixed Assets
(non-tangible)**

Sources of Finance

- Bank Credit/Overdrafts
 - Trade Credit
 - Instalment Credit
 - Customer advances
 - Lease/venture capital
 - Issue of share/debentures
 - Loans from banks/institutions
 - other financial institutions
 - Ploughing back of profits
 - Issue of shares
 - Issue of debentures
 - Loans from banks and other financial institutions
 - Ploughing back of profits
-
- The diagram uses yellow curly braces to group the list items into three categories:
- Short-term financing** (Items 1-4)
 - Medium-term financing** (Items 5-8)
 - Long-term financing** (Items 9-12)

Terminologies

Liabilities

Debtors

Creditors

Provision for liabilities

Long term liabilities

Financial loans

Debenture sold

Capitals & Reserves

Called up share capital

Reserves

Profit & Loss account

Assets

Fixed Assets

Current Assets

Depreciation (negative)

Long term investments

Fixed deposits

Debenture purchased



Fixed Assets



- Two types:
 1. Tangible assets
 2. Intangible assets
- Fixed Assets: These are physical assets of the organization.
- E.g. building, machinery, vehicles, plant
- Intangible Fixed assets: They are investment made in the banks (Fixed Deposits), Transfer of money to other organization
- Total Fixed Assets = sum of above two.



Depreciation

- Amount of value of a given fixed asset falls with time, that is called depreciation.
- It is due to wear & tear, usage of machinery, vehicles etc.
- Depreciation should be deducted from the total fixed assets amount.



Depreciation

- You are familiar with the distinction between fixed and current assets
- A fixed asset being one bought for ongoing use in the business.
- Fixed assets are held and used by a business for a number of years, but they wear out or lose their usefulness over time.
- Every tangible fixed asset has a limited life.
- The only exception is land held freehold or on a very long leasehold.
- The accounts of a business recognize that the cost of a fixed asset is consumed as the asset wears out.

Some definitions of depreciation

- **Depreciation** is an expense based on the expectation that an asset will gradually decline in usefulness due to **time**, wear and tear, or obsolescence. **The cost is spread out over its estimated useful life in the form of an expense given various depreciation methods.**
- Depreciation in very simple terms is the measure of the loss of value of an asset.
- Depreciation is the measure of the wearing out, consumption or other loss of value of a depreciable asset arising from use or obsolescence through technology and market changes
- Depreciation is the allocation of the depreciable amount of an asset over its estimated useful life
- Depreciation is the allocation of the cost of a capital expenditure of an asset to the periods of its use.

Depreciation

- **Depreciation** may be defined as the reduction in value or the effective economic life of an asset arising from the:
 - Passage of time
 - Use or abuse
 - Wear and tear
 - Influence of the elements
 - stoppage of demand for use
- As a fixed asset has a life of over 1 year and is expected to produce revenue over a number of years, it is important to spread the cost of the fixed asset over

Depreciation

- **What are the causes of depreciation?**
- Physical deterioration
- Obsolescence – This is the process of becoming out of date.
- Depletion - Other assets are of wasting character, perhaps due to the extraction of raw materials from them.
- Custom or usage
- Abnormal occurrences Accidents Defects in materials

Depreciation

- The depreciation charge in the profit and loss account represents a cost of expense and can be viewed as the cost of using the fixed asset over the period that the profit and loss account covers.
- This follows the matching concept which requires that revenues are matched with expenses in the year they are incurred

What can be Depreciated?

- It is used in business or held for the production of income.
- It must be expected to last for more than one year.
- In other words, it must have a useful life that extends substantially beyond the year it was placed in service.
- It is a property that wears out, decays, gets used up, becomes obsolete, or loses value from natural causes.
- **Depreciable property** can be either tangible or intangible

Depreciation

- Tangible Depreciable Property Purchased
property you can see or touch: *Livestock (purchased) machinery buildings and improvements, fences, dams, ponds, or terraces irrigation systems and water wells*
- Intangible Depreciable Property Purchased
property that has value that you cannot readily see or touch: *Computer Software Copyrights, patents, trademarks, reputation*

What cannot be depreciated?

- Property placed into service and disposed of in the same year.
- Land (land can never be depreciated)
- Inventory
- Leased property: the value of the lease is already showing up as a rental expense

Depreciation accounting

- Depreciation accounting is a system of accounting, which aims to distribute the cost or other basic value of tangible capital assets, less salvage value, (if any) over the estimated useful life of the unit in a systematic and rational manner (American Institute of Certified Public Accountancy)

Why Study Depreciation Accounting

- Decision makers on the acquisition of fixed assets need to know about depreciation accounting for the following reasons:
 - It is often necessary to reconcile economy studies with accounting of a company. It is frequently necessary to relate economy studies to the accounts for presentation to colleagues, to management and shareholders or to the general public.

- Economy studies for private and public companies require estimates of the amounts and dates of outlays for income tax purposes. The estimates normally involve consideration of depreciation methods that will be used for tax purposes; the methods used must be the ones approved by the tax authorities of the country.
- Several approximate methods used by some analysts for completing the annual cost recovery are related to the two methods of depreciation accounting, i.e., straight line method and sinking fund method

Different Methods of Depreciation Accounting

- The methods have been classified into three categories as follows:
 1. Methods that aim to give a greater write-off in early years of life than the final years of life, e.g., **Declining Balance (DB) method**, and Sum of Years Digits (SOYD) method.
 2. Methods that aim to give uniform write-off through out the entire service life, e.g., **Straight Line (SL) method**.
 3. Methods that aim to give smaller write-off in early years of life than the final years, e.g., Sinking Fund (SF) method.

Straight line Depreciation

- The full service life of an asset as well as the prospective net salvage value are estimated
- The straight line rate is a ratio of the **first cost of the asset** less **salvage value** to the estimated service life in years
- The rate is made a percentage of the first cost
- The method assumes that the readiness of an asset to provide service is the same from year to year

Straight line Depreciation

- This may not be true because an asset may provide more service in it earlier years due to decreasing mechanical efficiency, increasing maintenance costs and likelihood of obsolescence

Method 1: Straight Line (SL) Depreciation Accounting

- The full service life of the asset is first estimated, say, n years.
- The expected net Salvage Value (SV) at the end of the life is also estimated and expressed as percentage of the first cost (FC).
- Annual Depreciation rate is then computed as follows: **$SL \text{ rate in } \% = (100\% - SV\%) / n$** .
- Therefore, the annual depreciation charge = $SL \text{ rate in } \% \times FC$.
- Alternatively, SL annual depreciation charge **$= (FC - SV) / n$**

- Thus, for the SL method, the annual depreciation charge and the book value are given by:

$$D_r = \frac{FC - S_v}{n} = \text{Constant} \dots\dots\dots i$$

$$BV_r = FC - rD_r \dots\dots\dots ii$$

Where;

- BV_r = Book Value at the end of the r^{th} year and
 D_r = the depreciation charge at the end
 r^{th} year = constant.

Note that $BV_0 = FC$, and this the same for all methods.

Example

- A machine tool with a FC = TShs. 35,000,000 has an estimated useful life of 20 years at the end of which the SV is estimated to be TShs. 3,500,000.
- Required:
 - (a) Determine the SV as a %age of the FC
 - (b) Find the SL annual depreciation rate in %age, and
 - (c) Compute the annual depreciation charge in TShs.

Declining balance method

- A certain depreciation rate is used each year to the remaining book value rather than the first cost
- This makes possible to charge more in the earlier years of the asset's life
- For instance, if a depreciation rate of 10% is used for an asset with a first cost of Tshs 40M we shall have Tshs 4M, 3.6M and 3.24M as depreciation for year 1, 2 and 3 in that order

Declining percentage method

- The percentage of the first cost charged off decreases each year of the asset's life
- One pattern might be to charge off perhaps 20% in the first year and may be 10% in the subsequent years

Mathematically: Declining Balance (DB) Depreciation Accounting

- In any DB depreciation accounting, a given depreciation rate, call it d , applied to each year to the remaining BV and SV does not enter into the computation.
- The book value BV_r at the end of the r^{th} year is given by

$$BV_r = FC(1 - d)^r$$

Note again that $BV_0 = FC$

- and the depreciation charge, D_r , at the end r^{th} year is given by

- $$D_r = d(BV_{r-1}) = BV_{r-1} - BV_r$$

.....Equation

(2)

Example

- If $d=10\%$ is applied to an asset that costs TShs. 40,000,000
- 1st year depreciation charge = $0.1 \times 40,000,000 = 4,000,000$, therefore $BV_1 = 40,000,000 - 4,000,000 = 36,000,000$
- 2nd year depreciation charge = $0.1 \times 36,000,000 = 3,600,000$ and $BV_2 = 32,400,000$
- 3rd year depreciation charge = $0.1 \times 32,400,000 = 3,240,000$ and $BV_3 = 29,160,000$; and so, on
- Check that you get the same result using equation (2) above.

Sum of years digits

- The digits corresponding to the number of the years of the estimated life are added together
- A fraction of then formed in which the denominator is the sum of the digits and the numerator changes each year
- For instance, if the first cost is Tshs 60M and 5 years life span.
- Sum of digits = 15. Depreciation rates shall be $5/15$, $4/15$, $3/15$, $2/15$ and $1/15$ for year 1 to year 5 in that order

Mathematically: Sum-of-Years-Digits (SOYD) Depreciation Accounting

- This method gives a greater write off in the early years of life of an asset than in final years. The digits corresponding to the number of years of estimated life are added together to form sum-of-years-digits (SOYD).
- The depreciation charge for each year is determined by multiplying the depreciable cost (DC) = $FC - SV$ by a schedule of fraction as follows:
- The numerator of the fraction for a certain year is the number of years of remaining life for the asset, measured from the beginning of the year.
- The denominator is determined by adding the digits that represent the years of the estimated life of the asset

(SOYD) Cont'd

- First note that the sum-of-year digits (SOYD) from $n = 1$ to n is given by the formula

$$SOYD = \frac{n(n+1)}{2}$$

Let _____

$$C^* = \frac{DC}{SOYD} = \text{constant}$$

- Consider an asset worth TShs.40,000,000 with a net salvage value of TShs.4,000,000 at the end of a life of 20 years.
- $SOYD = n(n+1)/2 = 20 \times 21/2 = 210$; $DC = 40,000,000 - 4,000,000 = 36,000,000$
-
- Therefore, $C^* = DC/SOYD = 36,000,000/210$
- 1st year depreciation charge $D1 = 20 \times (36,000,000/210) =$
- 2nd Year depreciation charge $D2 = 19 \times (36,000,000/210) =$
- 3rd Year depreciation charge $D3 = 18 \times (36,000,000/210) =$
- 20th Year depreciation charge $D20 = 1 \times (36,000,000/210) =$

- And thus, in general, $D_r = (n+1-r)C^*$, $r = 1, 2, 3, \dots$
- The book value at the r^{th} year is given by

$$BV_r = FC - C^*(SOYD_n - SOYD_{n-r})$$

- Note that $BV_0 = FC$
- This method writes off about $\frac{3}{4}$ of the DC in the first half of the estimated life.

Replacement method

- No depreciation is deducted from the first cost
- All expenditure on replacements, renewals, maintenance, are charged directly as expenses for the period

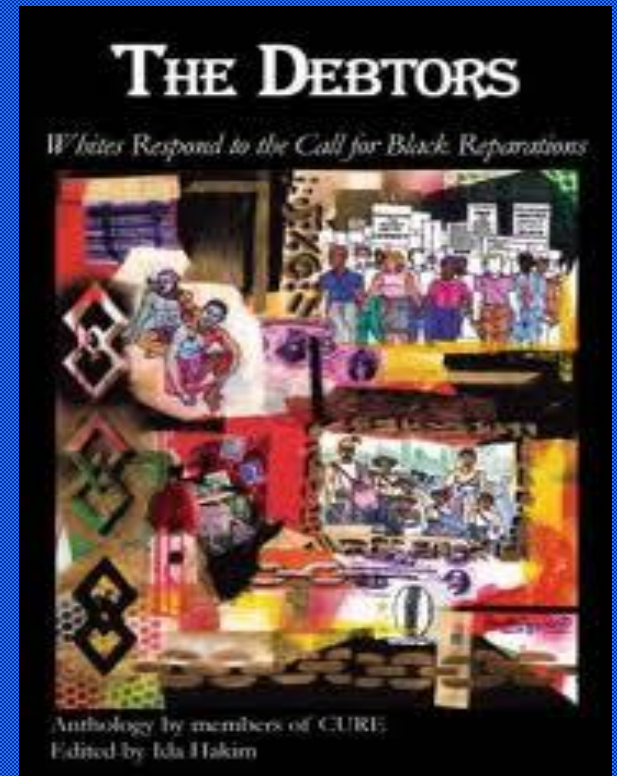
Current Assets

- There are many current assets which are flowing in process.
- Examples:
 - Raw material stock,
 - Finished parts stock,
 - Work in progress (WIP),
 - Balance in the bank account,
 - Cash on hand etc.



Debtors

- Someone (company) who is shortly to pay you money is clearly current asset.
- Customers
- Borrowers



Creditors

- Creditors are people to whom the organization owes money.
- The normal period of credit is 30 days.
- They are negative assets, hence they are called liabilities.
- Suppliers
- Job work vendors

Financial Loans

- One common source of funds is a long term finance loans.
- It is considered as negative asset rather than source of finance as it is associated repayment.
- Repayment is scheduled lasting many years.



Creditors

- It is possible to acquire long-term creditors in the same way as short term ones.
- E.g. purchase of big machineries, involves payment over several years.

Provision for Liabilities

- Prudent management will make an allowance this year for impending liabilities next year.
- This entry on the balance sheet is used to show money set aside for future liabilities.
- They are also called contingent liabilities.

Called up share capital

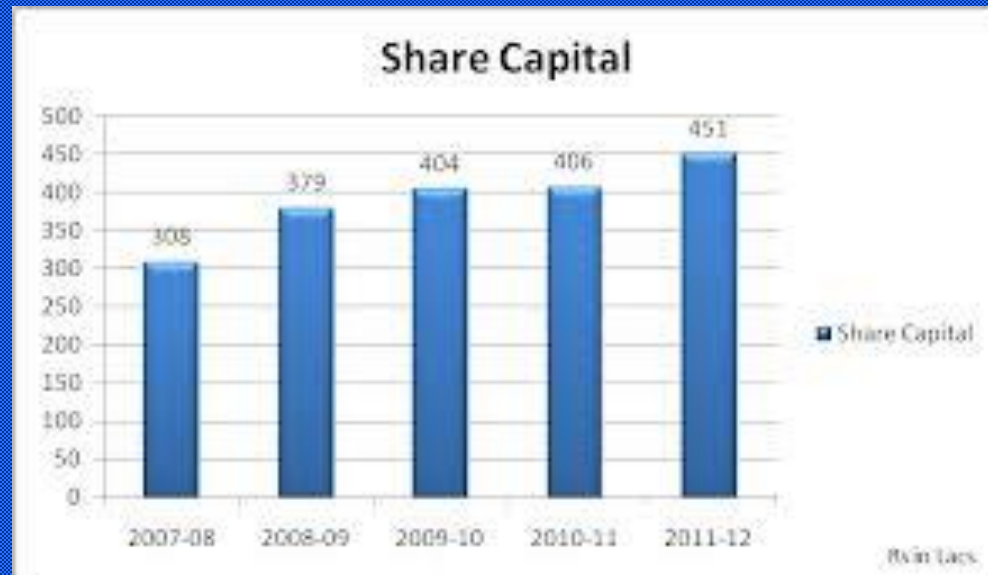
- This is the main source of finance of companies to purchase the assets.
- A common way for an organization to raise money is to issue shares.
- The money so raised is shown as called-up share capital.
- This account contains capital raised from sale of shares at their nominal value.

Reserves

- The total reserves of a company consist of the share premium account and the reserves transferred out of profit at the discretion of the directors.
- Together they comprise the share holders' funds.

Share Premium Account

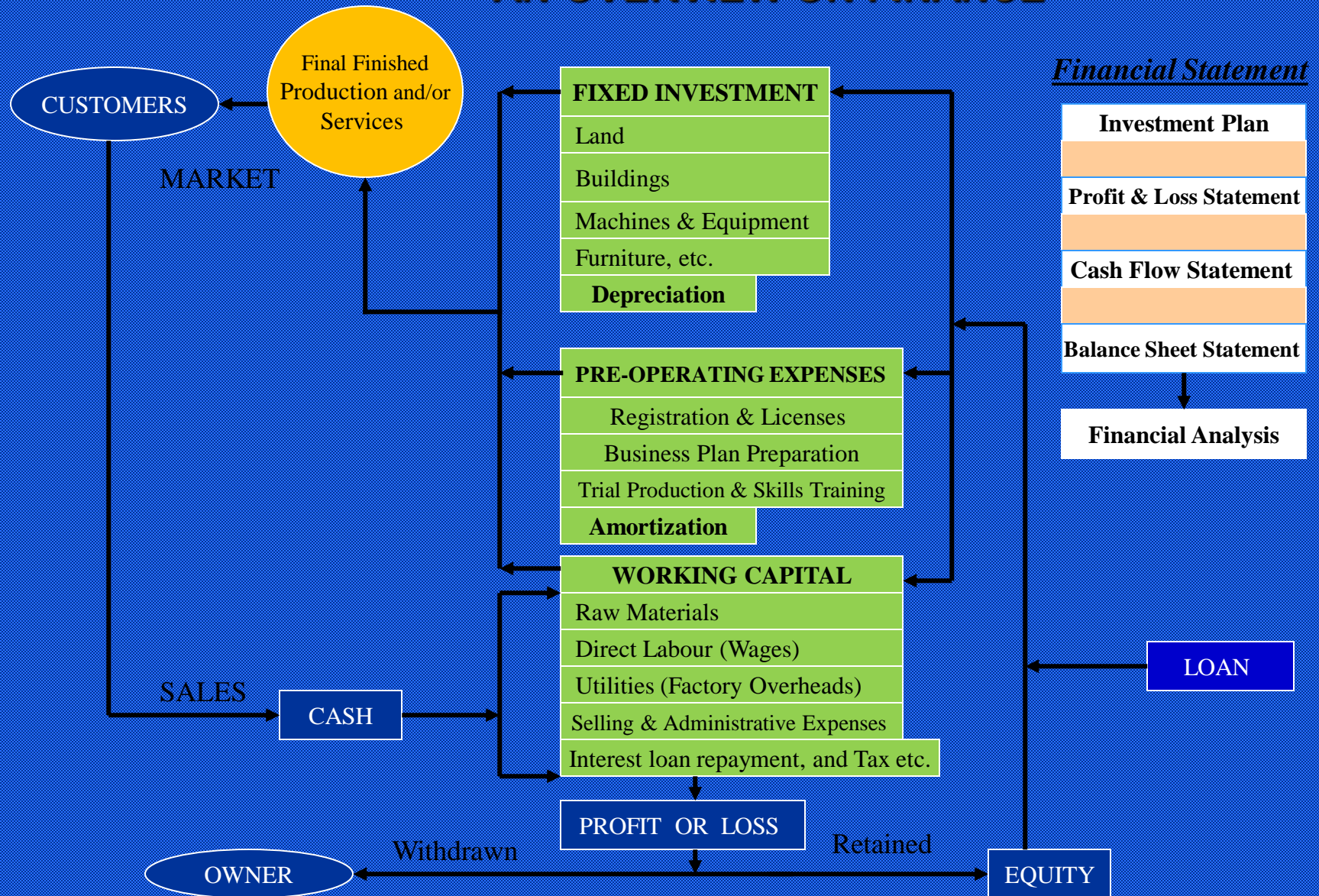
- The amount of money raised by issuing shares at a price above their nominal value.
- Such shares are issued at a premium , hence named.



Profit and Loss Account

- Once the share holder have rectified the decision of the board of directors concerning the amount of any share dividends which are paid for in cash there will be an amount left to balance the balance sheet.
- Positive value is indicating “Profit”.
- Negative value is indicating “Loss”.

AN OVERVIEW ON FINANCE



INVESTMENT PLAN

INVESTMENT PLAN
(in Tshs)
ITEMS
A. FIXED INVESTMENT
1. Land
2. Building
3. Machinery & Equipment
4. Office Equipment
5. Transport Equipment
6. Others
Total Fixed Investment
B. PRE-OPERATING INVESTMENT
1. Business Plan Preparation
2. Licenses and Registration
3. Skills and management Training
4. Trial Production
5. Others
Total Pre-Operating Investment (POI)
C. TOTAL INVESTMENTS (A + B)

Total	Equity	Loan
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INVESTMENT PLAN

DIRECT OPERATING COST			
1. Raw Materials			
2. Direct Labour Costs			
3. Factory Overhead			
Total Direct Operating Costs			
INDIRECT OPERATING COSTS			
1. Owner's Salary			
2. Salary for Marketing Staff			
3. Salary for Production Staff			
4. Salary for Admin. & Finance Staff			
5. Selling & Marketing Costs			
6. Office Supplies			
7. Rentals			
8. Other Expenses			
Total Indirect Operating Costs (1)			
TOTAL ANNUAL OPERATING COSTS			
WORKING CAPITAL REQUIRED			
TOTAL PROJECT COST (C + D)			
DEBT TO EQUITY SHARE (%)			
(1) NOTE that this Indirect Operating Costs Still needs depreciation and POI amortization			

INVESTMENT PLAN (Example of Filling/Service Station)

(in Tshs)

ITEMS		Total	Equity	Loan
A. FIXED INVESTMENT				
1. Land		0	0	0
2. Building		180,000,000	15,789,474	164,210,526
3. Machinery & Equipment		105,000,000	9,210,526	95,789,474
4. Office Equipment		0	0	0
5. Transport Equipment		0	0	0
6. Others		0	0	0
Total Fixed Investments		285,000,000	25,000,000	260,000,000
B. PRE-OPERATING INVESTMENT				
1. Business Plan Preparation		0	0	
2. Licences and Registration		0	0	
3. Skills and Management Training		0	0	
4. Trial Production Costs		0	0	
5. Others (grills/plastering/etc.)		15,780,000	0	
Total Pre-Operating Investment (POI)		15,780,000	0	
C. TOTAL INVESTMENTS (A + B)		300,780,000	25,000,000	275,780,000
D. WORKING CAPITAL				
DIRECT OPERATING COSTS				
1. Raw Materials Costs	1,699,800,000			
2. Direct Labour Costs	51,000,000			
3. Factory Overheads	17,412,600			
Total Direct Operating Costs	1,768,212,600			
INDIRECT OPERATING COSTS				
1. Owner's Salary	4,800,000			
2. Salary for Marketing Staff	0			
3. Salary for Production Staff	0			
4. Salary for Adm.& Finance Staff	0			
5. Business Promotion & entertain	2,340,000			
6. Office Supplies	0			
7. Rent for Land Lease	12,000,000			
8. Other Expenses	0			
Total Indirect Operating Costs	19,140,000			
TOTAL ANNUAL OPERATING C	1,787,352,600			
WORKING CAPITAL REQUIRED		34,372,165	25,000,000	9,372,165
TOTAL PROJECT COST (C + D)		335,152,165	50,000,000	285,152,165
EQUITY SHARE (%)			15	85

PROJECTED PROFIT & LOSS

(In Tshs)					
ITEMS	Year1	Year2	Year3	Year4	Year5
Planned Operations(in Units)					
A.Sales					
B.Direct Operating Cost					
1.Raw Materials Costs					
2.Direct Labour Costs					
3.Factory Overhead					
Total Direct Operating Costs					
C. GROSS PROFIT (A-B)					

cont'd... **Projected Profit & Loss**

ITEMS	Year1	Year2	Year3	Year4	Year5
D.INDIRECT OPERATING COSTS					
1.Owner's Salary					
2.Salary of Marketing Staff					
3.Salary of Production Staff					
4.Salary of Admin.&Finance Staff					
5.Selling & Marketing Costs					
6.Office Supplies					
7.Rentals					
8.Other Expenses					
Total Ind.Ope.Cost Bef.Dep.&POI					

Cont'd... **Projected Profit & Loss**

(In Tshs)					
ITEMS	Year1	Year2	Year3	Year4	Year5
9.Depreciation					
10.POI Amortization					
E.Total Ind.Operating Costs					
F.Operating Profit (C-E)					
G.Interest					
H.Profit Before Tax (F-G)					
I.Tax					
K.Profit (H-I)					
L.Breakeven point (E/C) 100%					

Cont'd... **Projected Profit & Loss**

ITEMS					
Depreciation Calculator	Value (Tsh)	Period (yrs)	Annual Dep'n		
1.BUILDING					
2.Machinery & Equipment					
3.Office Equipment					
4.Vehicles					
5.Others					
Total					
Amortization Calculator	Value (Tsh)	Period (yrs)	Amort/yr		
1.Pre-Operating Investment					

PROJECTED CASH FLOW

(In Tshs)						
ITEMS	Year0	Year1	Year2	Year3	Year4	Year5
Sales						
A.Cash In Flow						
1.Cash Sales						
2.Receivable						
3.Equity						
4.Fixed Investment Loan						
5.Working Capital Loan						
6. Beginning Cash Balance						
Total Cash In Flow						

Cont'd.... **Projected Cash Flow**

ITEMS	Year0	Year1	Year 2	Year3	Year4	Year5
Sales						
B. Cash Out Flow						
1.Total Investment						
2.Direct Operating Costs						
3. Total Ind. Oper. Costs bef. Dep'n and POI						
4.Interest						
5. Tax						
Total Cash Out-Flow						

Cont'd.... **Projected Cash Flow**

ITEMS	Year0	Year1	Year 2	Year3	Year4	Year5
Sales						
C. Net Cash (A-B)						
D. Loan Payments						
1. Principal for Fixed Investment Loan						
2. Principal for Working Cap. Loan						
Total Loan Payments						
E. Ending Cash Balance (C-D)						

BALANCE SHEET

- A **balance sheet** or **statement of financial position** is a summary of the financial balances of a sole proprietorship, partnership or a company.
- It shows Assets and liabilities and owner's equity are listed on specific date like end of financial year.
- **“Assets are equal to sources of the funds”**

Financial snap shot



- A balance sheet is often described as a "snapshot of a company's financial condition" of the four basic financial statements, the balance sheet is the only statement which applies to a **single point in time of a business' calendar year.**
- Balance sheet of “ XYZ Company Pvt. Ltd. As on 31/12/2016.

BALANCE SHEET

$$\text{Total Asset} = \text{Equity} + \text{Liabilities}$$

PROJECTED BALANCE SHEET

(In Tshs)						
ITEMS	Year0	Year1	Year2	Year3	Year4	Year5
1. ASSETS						
1.1 CURRENT ASSETS						
1.Cash						
2.Receivable						
3.Inventories						
Total Current Assets(A)						

Cont'd..... **Projected Balance Sheet**

ITEMS	Year0	Year1	Year2	Year3	Year4	Year5
1.2 Fixed Assets						
1.Land						
2.Building						
3.Machinery & Equipment						
4.Office Equipment						
5.Vehicles						
6.Others						
Total Fixed Assets						

Cont'd.... **Projected Balance Sheet**

ITEMS	Year0	Year1	Year2	Year 3	Year 4	Year5
Accumulated Depreciation						
Book Value of Fixed Assets (B)						
POI						
Accumulated POI						
Book Value of POI (C)						
Total Assets (A+B+C)						
2. Liabilities & Equity						
2.1 Current Liabilities						
1. Account Payable						
2. Working Capital Loan						
Total Current Liabilities(D)						

Projected Balance Sheet Cont'd.

ITEMS	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
2.2 Long Term Liabilities(E)						
1. FIXED Investment Loan						
Total Long Term Liabilities (E)						
3. Equity						
1.Owner's Equity						
2.Profit of Previous Period						
3.Current Profit						
Total Equity (F)						
Total Liabilities & Equity (D+E+F)						
ROI(Profit/Total Assets)x100%						

Format of Balance sheet

Capitals and Reserves

Share capital
Share Premium account
Reserves

Current Liabilities

Payment to be paid
shortly

Long term Liabilities

Loan from banks,
Debentures sold,
Borrowed money

Profit and Loss Account

Fixed assets

building, plant, vehicle, machinery

Current Assets

Cash on hand, bank balance,
raw material stock, finished goods
stock, WIP etc.

Investments

Fixed deposits, Transfer to other
companies, Debenture
Purchased,

Prepare a balance sheet of ABC Pvt. Ltd. with the help of following financial data of a company as on 31/12/2016. Also calculate working capital, and current liquidity ratio.

<u>Details</u>	<u>Amount in Tshs. In 100,000</u>
1. Cash in hand -----	
2. Vehicles -----	
3. Work in Progress -----	
4. Debenture purchased for 4 years -----	
5. Share capital -----	
6. Cash in bank account -----	
7. Raw material stock -----	
8. Finished goods stock -----	
9. Payment to be made in 45 days -----	
10. Payment to be received from customers (30 days)	
11. Loan taken from bank for 5 years -----	
12. Building -----	
13. Share premium account -----	
14. Machines -----	
15. Reserves -----	
16. Debentures sold -----	

Balance sheet example

Following is the data for Niyon Company Ltd. as on 31/12/2016.

1. Cash in hand – 50 lacs
 2. Vehicles – 60 lacs
 3. WIP stock – 48 lacs
 4. Debenture purchased from ABC Ltd. For 4 years – 90 lacs
 5. Share capital – 200 lacs
 6. Cash in bank Account – 63 lacs
 7. Raw material stock – 30 lacs
 8. Finished goods stock – 12 lacs
 9. Payment to be made in 45 days – 25 lacs
 10. Debenture sold for 6 years – 120 lacs
 11. Payment to be received from customers (45 days)– 15 lacs
 12. Loan taken from CRDB (5 years) – 160 lacs
 13. Building – 80 lacs
 14. Share Premium Account – 400 lacs
 15. Machines – 1250 lacs
 16. Reserves – 150 lacs
- **Prepare Balance sheet and find (i) working capital (ii) net worth (iii) liquidity ratio**

Balance sheet of Niyon Company Ltd. As on 31/12/2016

• Liabilities

• Current Liabilities

- Payment to be made in 45 days 25

• Long Term Liabilities

- Debenture sold – 6 years 120
- Loan from CRDB 160
- 280

• Capitals and Reserves

- Share capital 200
- Share Premium Account 400
- Reserves 150
- 750

- Profit and Loss Account 643
- 1698

• Assets

• Fixed Assets

- Building – 80
- Machines - 1250
- Vehicles - 60
- 1390

• Current Assets

- WIP - 48
- Cash in Bank - 63
- Raw material stock - 30
- Finished goods stock - 12
- Payment in 45 days - 15
- Cash on hand - 50
- 218

• Long Term Investment

- Debentures purchased 90
- 1698

Analysis of Balance sheet

- Working Capital = Current Assets – Current Liabilities
- = 218 – 25
- = 193 lacs
- Current Liquidity Ratio =
$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

= 218 / 25 = 8.72
- Acid test ratio =
$$\frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}$$

= (218 – (48+12+30)) / 25
= 5.12

Financial Analysis

Potential entrepreneurs raise the following issues:

- Will the proposed business earn adequate profits?
- Can the future business meet its obligations promptly?
- Will an investment in the proposed business be safe?

Cont..... Financial Analysis

Three sets of ratios are normally measured and examined. These are:

- Profitability,
- Liquidity, and
- Solvency

Profitability

The instruments used to measure profitability are:

- Net Profit Ratio,
- Assets Turnover, and
- Return on Investment (ROI)

Net Profit Ratio

measures the percentage ratio of net profit after taxes to net sales:

$$\frac{\text{Net Profit After Taxes}}{\text{Net Sales}} = \text{Net Profit Ratio}$$

Assets Turnover

is the ratio of annual net sales to the total assets used in the business. It measures the volume of sales derived from each unit of money invested in assets:

$$\frac{\text{Net Sales}}{\text{Total Assets}} = \text{Assets Turnover Ratio}$$

Return on Investment (ROI)

- ROI is the combination of the two ratios above, i.e., net profit and assets turnover ratios.
- It should be noted that neither the net profit ratio nor the assets turnover ratio by themselves provide an adequate analysis of the operating efficiency of the proposed business.
- The net profit ratio ignores the utilisation of assets, while the assets turnover ratio ignores profitability on sales.
- The use of the ROI ratio resolves these deficiencies by reflecting both factors in a single ratio.

Cont... Return on Investment (ROI)

ROI is given by:

Net Profit Ratio: x Assets Turnover Ratio: =

$$\frac{\text{Net Profit After Taxes}}{\text{Net Sales}} \times \frac{\text{Net Sales}}{\text{Total Assets}} =$$

$$\frac{\text{Net Profit After Taxes}}{\text{Total Assets}} = \text{ROI}$$

Liquidity

Examines the proposed business whether it can meet all its future obligations promptly? The set consists of the following ratios:

- Current Ratio,
- Acid Test (or Quick Ratio),
- Average Collection, and
- Inventory Turnover.

Current Ratio

Measures the ability of the proposed business to meet all its ***short-term debts*** by relating current assets and current liabilities.

A 2:1 ratio seems the most desirable one, but may not necessarily be valid in all cases.

Current Ratios are sensitive to the practices within the industry in the country.

Current Assets

Current Liabilities

=

Current Ratio

Solvency

This ratio assesses the financial strength of a proposed business regarding its ability to meet its *long-term financial obligations*.

$$\frac{\text{Total Debt}}{\text{Total Equity}} = \text{Debt-Equity Ratio}$$

Solvency

- For bankers,
- a low debt-equity ratio will be favourable since it indicates that there are enough assets to protect their principal lending.
- For stakeholders,
- a high debt-equity ratio may indicate increases in fixed charges against earnings and can consequently lead to decreases in future dividends

Profit & Loss Statement Using Transactions

Cars of Company X in Dar es Salaam

<i>No</i>	<i>Item</i>	<i>Tshs.</i>
1	Office rent	50,000
2	Interest expenses	25,000
3	Sales	1,000,000
4	Selling & Marketing Costs	20,000
5	Tax Payable	10%
6	Depreciation of Office Equipment	50,000

Profit & Loss Statement Using Transactions Cars of Company X in Dar es Salaam

<i>No</i>	<i>Item</i>	<i>Tshs.</i>
7	Staff Salaries, etc.	130,000
8	Direct Labour	200,000
9	Raw Materials Purchased (in a period)	200,000
10	Raw Materials Beginning	100,000
11	Ending Stock of Materials	50,000
12	Factory Overhead	50,000

P & L Statement for X Company Using Transactions Cards of Company X in Dsm.

<i>Item</i>	<i>Tshs</i>	<i>Tshs</i>
Sales:		1,000
Less: Cost of goods sold		500
Gross Profit		500
Less: Operating Expenses		
Office rent	50	
Selling & administration	150	
Depreciation of office equip.	50	
Total Operating expenses		250

P & L Statement for X Company

Cont'd.

<i>Item</i>	<i>Tshs</i>	<i>Tshs</i>
Operating Profit		250
Less: Interest expenses		25
Net Profit before tax		225
Less: Tax (10%)		22.5
Net Profit after tax		202.5

Balance Sheet (Transaction Cards of Juakali Co. as of 31st August 2002)

Items	<i>Tshs.</i>
1. Cash	450
2. Accounts Receivable	2,000
3. Inventories	6,500
4. Land	1,050
5. Buildings & Improvements (net)	950

Balance Sheet (Transaction Cards Cont'd.)

Items	<i>Tshs.</i>
6. Machinery (net)	1,000
7. Delivery Equipment (net)	500
8. Accounts Payable	450
9. Notes Payable	5,000
10. Capital	6,000
11. Retained Earnings	1,000

Balance Sheet as of 31st August 2002 for Juakali Company

ASSETS	
Current Assets	Tshs.
Cash	450
Accounts receivable	2,000
Inventories	6,500
Sub-Total	8,950

Balance Sheet as of 31st August 2002 for Juakali Company Cont'd.

Fixed Assets	
Land	1,050
Building & Improvement (net)	950
Machinery (net)	1,000
Delivery Equipment (net)	500
Sub-Total	12,450

Balance Sheet Juakali Company

Cont'd.

Liabilities & Owner's Equity	
Liabilities	
Accounts Payable	450
Long-Term Liabilities	
Notes Payable	5,000
Sub-Total	5,450

Balance Sheet Juakali Company

Cont'd.

Owner's Equity	
Capital	6,000
Retained Earnings	1,000
Total Liabilities and Equity	12,450

THANK YOU FOR YOUR ATTENTION!!!!
WISH YOU A SUCCESSFUL FUTURE LIFE

BEST

NEVER GIVE UP,
RATHER GETS UP

WISHES

FOR THE COMING YE

WATCH
YOUR
STEP

