# FINANCING DECISIONS BY SANJUKTA MOHANTY

## DEBENTURES

- A debenture is a long-term debt or promissory note for raising loan capital.
- Debenture holders are the creditors of the firm.

# FEATURES OF A DEBENTURE:

- **1. Fixed income security:** The interest payments are made to the debenture holders at a fixed interest rate also known as the contractual rate of interest. Payment of interest is legally binding on a company. Debenture is tax deductible for computing the company's corporate tax.
- **2. Maturity:** Debentures are issued for a fixed period of time. The maturity of a debenture indicates the duration at which the company will redeem the par value to debenture holders.

**3. Indenture:** An indenture or debenture trust deed is a legal agreement between the company issuing the debentures and the debenture trustee who represents the debenture holders. Generally a financial institution, or a bank or an insurance company is appointed as a trustee to protect the interest of the debenture holders.

#### 4. Security: Debentures are classified into two categories:

- Secured Debentures: A secured debenture is secured by a lien on the company's specific assets. If the company defaults, the trustee can seize the security on behalf of the debenture holders.
- Unsecured Debentures: Debentures that are not protected by any security are called unsecured or naked debentures.

- **5. Yield:** The current yield on a debenture is the ratio of the annual interest payment to the debenture's market price.
- The YTM is the discount rate that equates the present value of the interest and principal payments made over the life of the debenture with the current market price of the debentures.

6. Claim on assets and income: Debenture holders have a claim on the company's earnings and priority over the shareholders. Hence, debenture interest has to be paid before paying any dividends to preference and ordinary shares. In case of liquidation also, the debenture holders have a claim on assets and priority over the shareholders. The secured debenture holders have a priority over the unsecured debenture holders.

### **CLASSIFICATION OF DEBENTURES**

- A debenture can be convertible or non-convertible.
- convertible debenture- is one which can be converted partly or fully into shares at a specified period of time.
- Non-Convertible Debentures (NCDs)- These are debentures which do not have the feature of conversion. They are payable on maturity.

# Advantages of debentures as a long-term source of finance:

- 1.Less expensive: Compared to equity, financing debentures involves less cost because:
- They involve fixed interest payments; so investors consider them to be less risky and therefore, require a lower rate of return.
- Interest payments are tax-deductible.
- 2. Dilution of ownership: Debenture-holders are creditors and not owners. They are not entitled to any voting rights.

3. Fixed payment of interest: Debenture-holders do not participate in the extraordinary earnings of the firm and payment in their case is limited to the interest payment.

### DISADVANTAGES OF DEBENTURES AS A LONG-TERM SOURCE OF FINANCE

- 1. Obligatory Payments: The payment of interest and repayment of principal are a legal obligation for the company and the company might be forced even into liquidation if it does not pay dividends.
- 2. Financial risk: Debentures result in increase in financial leverage and this might be disadvantageous to firms having fluctuating sales and earnings.

## **RETENTION OF PROFIT**

• Profits generated by a company that are not distributed to shareholders as dividends but are

either reinvested in the business or kept as a reserve for specific objectives (such as to pay off a debt or purchase a capital asset) known as retained earnings.

## THE BALANCE SHEET (LIABILITY SIDE)

#### ASSET SIDE

**Current assets** 

+ <u>Non-current assets</u> Total assets

### LIABILITY SIDE

### **Current liabilities**

- + Long-term liabilities
- + <u>Stockholders' equity</u> Total liabilities

### BALANCE SHEET (LIABILITY SIDE)

• Equity is the residual balance.

Assets - liabilities = equity.

- Equity is commonly called stockholders' equity .
- It represents the financing provided by the stockholders along with the earnings from the business not paid out as dividends.

# BALANCE SHEET

• **Stockholders' Equity** is divided into two categories: contributed capital and retained earnings.

 Contributed capital
+ <u>Retained earnings</u> Total stockholders' equity

- **Contributed capital** is the amount of cash (or other assets) provided by the shareholders.
- **Retained earnings** is the total earnings that have not been distributed to owners as dividends.

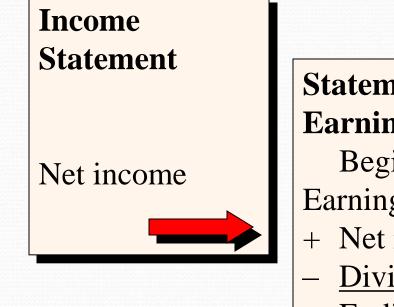
### STATEMENT OF RETAINED EARNINGS

The Balance Sheet must be prepared after

**1.Income statement .**(A summary of the revenue and expenses ).

**2.Statement of Retained Earnings** in order to have calculated the ending balance of Retained Earnings.

# **ORDER OF PREPARATION**



# **Statement of Retained Earnings Beginning Retained** Earnings + Net income - Dividends Ending retained earnings

**Balance Sheet** 

Ending Balance Retained Earnings

# **Stockholders' Equity with Deficit**

**Balance Sheet (partial)** 

Stockholders' equity Paid-in capital Common stock **Retained earnings (deficit)** Total stockholders' equity



A debit balance in retained earnings is identified as a DEFICIT. It is reported as a deduction in the stockholders' equity section, as shown above.

# **Capital Rationing**

- The usual problem in finance is to accept all projects with positive net present values, but sometimes the capital budgets are fixed or limited & the financial officer may want to maximize the return on investments available, with that limited amount of money to invest.
- Capital rationing occurs when a firm or division has limited resources.
- so companies "filter" out the worst projects by limiting the total amount of projects that can be accepted.

• Thus selecting the mix of acceptable projects that provides the highest overall NET PRESENT VALUE (NPV) when a company has a limit on the budget for capital spending is known as Capital rationing.

### **DECISION RULES**

### **A.** Capital Rationing Situation

- Select the projects whose rates of return are higher than the cut-off rate
- Arrange them in the declining order of their rate of return and
- Select projects starting from the top of the list till the capital available is exhausted.

### **B. No Capital Rationing Situation**

• Select all projects whose rate of return are higher than the cut-off rate.

### **C. Mutually Exclusive Projects**

• Select the one that offers highest rate of return.

**Capital Rationing: An Example** (Firm's Cost of Capital = 12%)

Independent projects ranked according to their IRRs:

<b>Project</b>	<b>Project Size</b>	IRR
Ε	\$20,000	21.0%
В	25,000	19.0
G	25,000	18.0
Η	10,000	17.5
D	25,000	16.5
Α	15,000	14.0
F	15,000	11.0
С	30,000	10.0

#### CAPITAL RATIONING EXAMPLE (CONTINUED)

• <u>No Capital Rationing</u> - Only projects F and C would be rejected. The firm's capital budget would be \$120,000.

• <u>Capital Rationing</u> - Suppose the capital budget is constrained to be \$80,000. Using the IRR criterion, only projects E, B, G, and H, would be accepted, even though projects D and A would also add value to the firm. Also note, however, that a theoretical optimum could be reached only be evaluating all possible combinations of projects in order to determine the portfolio of projects with the highest NPV.