



IIT ROORKEE



NPTEL ONLINE
CERTIFICATION COURSE

Project Management for Managers

Lec – 18

Financing of Projects

Dr. M.K. Barua

Department of Management
Indian Institute of Technology Roorkee



The two broad sources of finance available to a firm are :
shareholders' funds (equity funds) and loan funds (debt funds).

Basic Differences between Equity and Debt????????????????



Equity

- Equity shareholders have a **residual** claim on the income and the wealth of the firm
- Equity ordinarily has **indefinite** life
- Equity investors enjoy the prerogative to **control** the **affairs** of the firm
- Dividend paid to equity shareholders is **not a tax** deductible payment

Debt

- Creditors (suppliers of debt) have a fixed claim in the form of interest and principal payment
- Debt has a **fixed maturity**
- Debt investors play a passive role – of course, they impose certain restrictions on the way the firm is run to protect their interest
- Interest paid to creditors is a **tax deductible payment**



Key Factors in Determining the Debt - Equity Ratio

The key factors in determining the debt-equity ratio for a project are:

- **Cost:** lenders require a lower rate of return compared to equity share holder. **Debt is cheaper but riskier source of finance, whereas equity is a costlier but safer source of finance.**
- **Nature of assets:** (tangible-electricity-more of debt, intangible-brand & software-less of debt)
- **Business risk:** Refers to the variability of earning power (demand variability, price variability, variability of input prices, proportion of fixed operating cost (of the total cost –risk is higher))



The key factors in determining the debt-equity ratio for a project are:

Norms of lenders: DER= 2:1, 1:1, for high capital incentive project (power) 2.33:1

Control considerations: Capital structure depends on **extent of equity stake** want by **promoters**. If cost of project is 10000, promoters can invest 2000. If they want minimum 50% of stake in the equity of the project, **the total equity cannot exceed 4000**. Hence, balance 6000 in debt form (1.5:1). If they want a minimum stake of 40% in the equity of the project, **the total equity cannot exceed 5000 (1:1)**.

Market conditions: if equity mkt is **buoyant** and equity shares can be issued at an attractive premium the project may rely more **on equity**. If **equity mkt is depressed**, the project may depend on **debt**.



A Checklist

Use more equity when

- The **corporate tax rate applicable is negligible**
- Business risk exposure **is high**
- Dilution **of control** is **not an** important issue
- The **assets** of the project are mostly **intangible**
- The project has many valuable **growth options**

Use more debt when

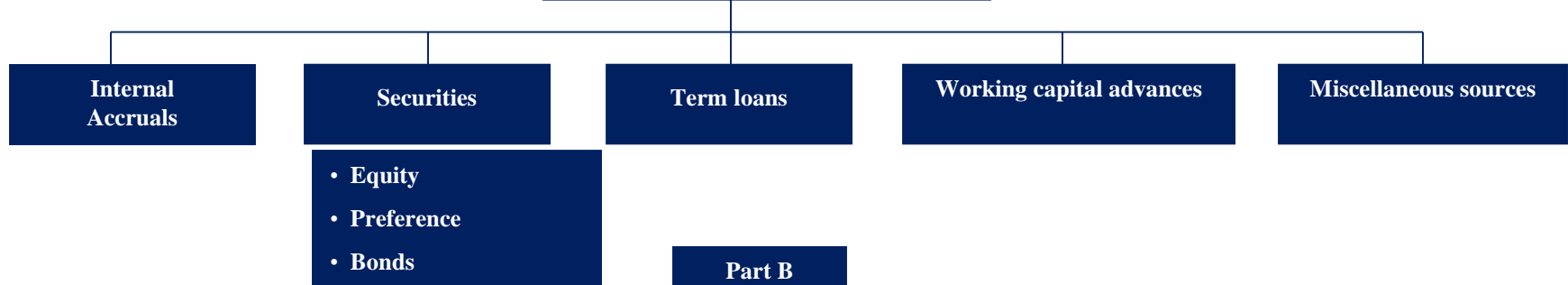
- The corporate tax rate applicable is **high**
- Business risk exposure **is low**
- Dilution of control is an issue
- The assets of the project are mostly tangible
- The project has **few growth** options



Sources of Finance

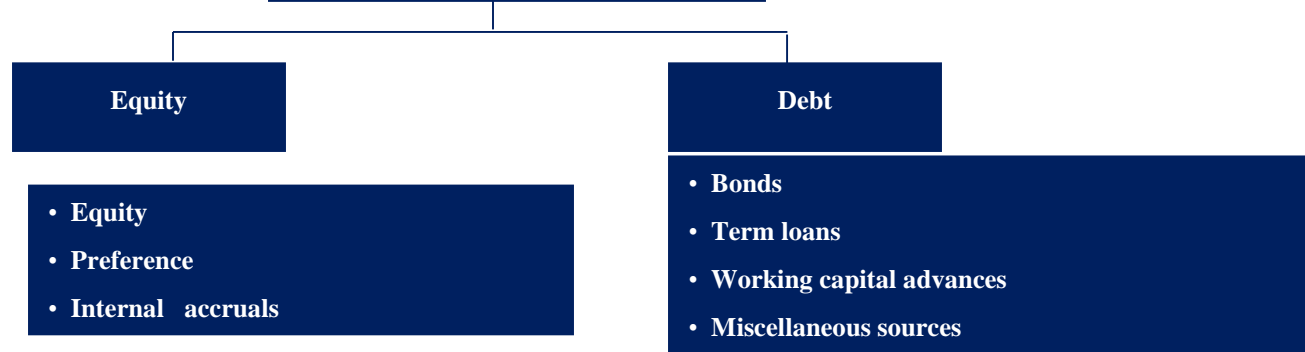
Part A

Sources of Finance



Part B

Sources of Finance



Public and Private Sources of Capital: A firm can raise **equity and debt capital** from both **public and private sources**. Capital raised from public sources is in the form of **securities offered to public** through an **offer document filed with SEBI**.

Private capital comes either in the form of loans given by banks and financial institution or in the form of issue of securities like shares, preference shares, and debentures which are privately placed with a small group of sophisticated investors like PE funds, VC firms, financial institutions, insurance companies, mutual funds, and wealthy individuals.



The typical pattern of financing: When a company is formed, it first issues equity shares to the promoters (founders) and also, in most cases, to a select group of investors.

As the company grows, it may rely on the following methods of raising equity capital: initial public offering, seasoned offering, rights issue, private placement, and preferential allotment.



Internal Accruals

Internal accruals of a firm consist of depreciation amortization, and retained earnings (that portion of equity earning which are ploughed back in the firm) (part of equity earnings- 30 to 80% of profit after tax for financing growth)

Ex. Cost of m/c 10,000, life 5 yrs, no salvage value after 5 yrs, annual depreciation charges 2,000, Each year a deprecation cost of Rs 2,000 will be shown in PLA. It is non-cash charge.

Pros

- **Readily** available (management need not talk to shareholder or lenders)
- No dilution of control

Cons

- Opportunity cost of retained earning is **high as it** is equal to the cost of equity –remember the retained earnings, in essence, **dividend forgone by equity shareholders.**
- Limited amount.



Equity Capital

Equity capital represents ownership capital as equity shareholders collectively own the company. They enjoy the rewards and bear the risks of ownership

Authorized, Issued, Subscribed, and Paid up Capital:

The amount of capital that a company can potentially issue, as per its memorandum, represents the *authorized* capital.

The amount offered by the company to the investors is called the *issue* capital.

The part of issued capital which has been subscribed by the investors represents the *subscribed* capital.

The actual amount paid up by the investors is called the *paid up* capital-typically the Issued, Subscribed, and Paid-up are the same .



Rights of Equity Shareholders

- Right to Income: PAT-preferred dividend
- Right to Control: Select board of directors, right to vote on a resolution, etc
- Pre-emptive Right: Shareholders maintain their proportional ownership by purchasing the additional equity shares issued by the firm . (Ex. 1000,000 outstanding shares, proposes to issue 200,00, equity SH has 100 shares has right to)
- Right in Liquidation: As in case of income, equity shareholders have a residual claim over assets of the firm , after settling claims of (Debenture holders, secured and unsecured lender, other creditors, preferred share holders).



Advantages of equity capital:

1. **Long** term source of finance.
2. In case of **insufficient** cash - no need to pay **dividend**.
3. Presently, equity dividends are tax-exempt in the hands of investors.
4. Equity capital **has no maturity** date and hence the firm has no obligation to redeem.

Disadvantages equity capital :

1. Sale of equity shares to outsider dilutes the control of existing owners.
2. The cost of equity capital is high, **usually the highest**. The rate of return required by equity SH is higher than the rate of return required by any other investors.
3. The cost of **issuing equity shares is generally higher** than the cost of issuing other types of securities. Underwriting commission, brokerage costs, and other issue expenses are high for equity issues.



Preference Capital

Preference capital represents a **hybrid form of financing**. It partake some characteristics of **equity** and some attributes of **debt**.

It resembles **equity**

- (i) preference dividend is payable only out of distributable profits
- (ii) preference dividend **is not an obligatory payment**
- (iii) preference dividend **is not a tax deductible** payment

It resembles **debenture**

- (i) the **dividend rate** of preference capital is **fixed**
- (ii) the claim of preference SHs is **prior** to the claim of equity SHs
- (iii) preference SHs **do not normally enjoys the right to vote**.



Preference Capital

Pros

- No legal obligation to pay dividends
- Enhances creditworthiness
- No dilution of control

Cons

- **Costly source**
- Skipping preference dividends adversely affects image
- **Voting rights under certain conditions**



Debentures (or Bonds)???????



For large publicly traded firms, debentures are a viable alternative to term loan. Akin to promissory notes, debentures are instruments for raising debt finance. Debenture holders are the creditors of the company. The obligation of a company toward its debenture holders is similar to that of a borrower who promises to pay **interest and principal at specified times**. Debentures often provide **more flexibility than term loans** as they offer greater choice with respect to **maturity, interest rate, security, repayment, and special features**.



- **Trustee:** Appointed through deed, bank, or FI or Insurer, the borrowing firm will fulfill contractual obligations.
- **Security:** Debenture issues in India are typically secured by **mortgage/charges on the immovable properties** of the company and a floating charge on its other assets. Occasionally, companies issue **unsecured debentures**, not backed by specific assets of the firm, but by its general credit.
- **Maturity:** Corporate debt may be short term , medium term (1- 5 yrs) or long term (5-12 yrs) . Corporate debt of **less** than one year is called **commercial paper** .



- **Redemption:** Debentures are typically redeemable in nature.
- **Fixed rate vs. floating rate:** Debenture may carry fixed or floating or zero rate of interest.
- **Embedded options:** Debenture may carry a “call” feature (redemption at certain price before maturity period), “put” feature (at specified time and predetermined prices)



Advantages and Disadvantages of Debt Financing

Advantages

- Interest on debt is a tax deductible expense, whereas equity and preference dividends are paid out of profit after tax.
- No **dilution** of control: because debt holder are not entitled to vote
- Lower issue costs
- Debt servicing burden is generally fixed in nominal terms
- Tailor-made maturity: to the needs of borrowing firm



Advantages and Disadvantages of Debt Financing

Disadvantages

- Fixed interest and principal repayment obligation, failure to this may lead to bankruptcy.
- Debt financing increases financial leverage which, according to CAPM, raises the cost of equity to the firm.
- Debt contracts impose restrictions that limit the borrowing firm's financial and operating flexibility, which may impair firm's ability to resort to value maximizing behavior.



The following are the main difference between a debenture and a share:

1. A person having the debentures is called debenture holder whereas a person holding the shares is called shareholder.
2. Debenture holder is a creditor of the company and cannot take part in the management of the company while a shareholder is the owner of the company. It is the basic distinction between a debenture and a share.
3. Debenture holders will get interest on debentures and will be paid in all circumstances, whether there is profit or loss will not affect the payment of interest on debentures.
4. Shareholder will get a portion of the profits called dividend which is dependent on the profits of the company. It can be declared by the directors of the company out of profits only.
5. Shares cannot be converted into debentures whereas debentures can be converted into shares.



The following are the main difference between a debenture and a share:

6. Debentures will get priority in getting the money back as compared to shareholder in case of liquidation of a company.

7. There are no restriction on issue of debentures at a discount, whereas shares at discount can be issued only after observing certain legal formalities.

8. Convertible debentures which can be converted into shares at the option of debenture holder can be issued whereas shares convertible into debentures cannot be issued.

9. There can be mortgage debentures i.e. assets of the company can be mortgaged in favour of debenture holders. But there can be no mortgage for shares. Assets of the company cannot be mortgaged in favour of shareholders.



Methods of Offering

There are different ways in which a company may raise finances in the primary market

Public offering: Sale of security to the members of the public. IPO (The first public offering of equity shares of a company , which is followed by a listing of its shares on the stock market.).

Benefits

- Access to a larger pool of capital
- Respectability
- Lower cost of capital compared to private placement
- Liquidity

Costs

- Dilution
- Loss of flexibility
- Disclosures and accountability
- Periodic costs



Methods of Offering

Seasonal equity offering (as companies need more finances, they are likely to make further trip to capital market also called secondary offerings) .

Bond offering (similar to IPO with some differences- the prospectus for a bond offering typically emphasis on a company 's stable cash flow whereas prospectus for an equity offering highlights the company's growth prospects., etc)



Methods of Offering

There are different ways in which a company may raise finances in the primary market

Rights issue: Involves selling securities in the primary market by issuing rights to the existing SHs.

When a company issues **additional equity capital** , it has to be offered in the first instance to the existing SHs on pro rata basis.

SHs may forfeit this right, partially or fully , to enable company to issue additional capital to public.



Methods of Offering

Private placement: Issue of securities to a select group of persons not exceeding 49. Private placement of **shares and convertible debentures** by a listed company can be of two types.

Preferential allotment: When a company issues shares or debentures to select group of in terms of provisions persons (pricing, disclosures, lock-in period) of chapter XIII of SEBI (DIP) guidelines.

Qualifies Institutional Placement (QIP): A QIP is an issue of equity shares or convertible securities to Qualified Institutional Buyers in terms of the provisions of Chapter XIII A of SEBI (DIP) guidelines.



Summary Comparison of the Various Methods

	Public Issue	Rights Issue	Private Placement	Preferential Allotment
• Amount that can be raised	Large	Moderate	Moderate	Moderate
• Cost of issue	High	Negligible	Negligible	Negligible
• Dilution of control	Yes	No	Yes	Depends
• Degree of underpricing	Large	Irrelevant	Small	No
• Market perception	Negative	Neutral	Neutral	Neutral



Term Loans

Term loans, also referred to as term finance, represent a source of **debt finance which is generally repayable in less than 10 years**.

Features of term loans (IFCI, ICICI, IDBI, SFCs, Commercial Banks)

1. **Currency:** Rupee (for land , building, miscellaneous fixed assets, margin money for working capital, etc) and foreign currency.
2. **Security:** Term loans typically represent secured borrowings. Usually the assets, which are financed with the term loan, provide the prime security .
3. **Inters payment and principal repayment:** Are definite obligations that are payable irrespective of the financial situation of the firm.
4. **Restrictive covenants:** Term loan providers put certain conditions; Broad-base its board of directors and team in consultations with them, bring additional funds in the form of unsecured loans, refrain from undertaking new projects, obtain clearances and NOCs from respective agencies, seek their consent if going for extra borrowings)



Working Capital Advances

WC advance by commercial banks represents the most important source for financing current assets.

- **Cash credits / overdrafts:** a predetermined limit is for borrowing is specified by the bank. A borrower can draw as often as required subject to a limit and adequate security. Interest is charged on running balance not on the limit sanctioned.
- **Loans :** These are advances of fixed amounts to the borrower. Interest is on entire amount irrespective of how much he draws.
- **Purchase / discount of bills:** A bill usually arises out of transaction. The seller of goods draws the bill on the purchaser . On acceptance of the bill by the purchaser , the seller offers it to the bank for discount/purchase. When the bank discount/purchases the bill, it releases the funds to the seller. The bank presents the bill to the purchase on the due date and gets its payment
- **Letter of credit:** A letter of credit is an arrangement whereby a bank helps its customer to obtain a credit from its (suppliers). Bank undertakes responsibility to honor the obligation of its customer, should the customer fail to do so.



Miscellaneous Sources

- **Deferred credit:** When supplier of machinery offers deferred credit facility, a bank guarantee should be furnished by the buyer.
- **Lease and hire purchase finance:**
 - **Lasing** (The lessee cannot claim depreciation. The entire lease rental is a tax – deductible expense for the lessee. The lessee, not being the owner of the asset, does not enjoy the salvage value of the asset.)
 - **Hire-Purchase** (The hirer is entitled to claim depreciation. Only the interest component of the hire purchase installment is a tax-deductible expense for the hirer. The hirer, being the owner of the asset, enjoys the salvage value of the asset)
- **Unsecured loans and deposits:** Are typically provided by the promoters to fill the gap between the promoters' contribution required by the financial institutions and the equity capital subscribed by the promoters.

