

Financing of Projects

Unit - 5

Contents

- Capital structure
- Menu of financing
- Equity capital
- Internal accruals
- Term loans
- Debentures
- Working capital advance
- Miscellaneous sources
- Raising of venture capital
- Raising capital in international markets

Financing of Projects

- Project financing is intertwined with project planning, analysis and selection
- A capital project entails investment in land, plant and machinery, miscellaneous fixed assets, technical know-how, distribution network and working capital

- Financing decisions are relatively easier than investment decisions

Financing Decisions	Investment Decisions
Take place in capital markets which are approximately perfect	Take place in real markets which tend to be imperfect
The value of similar financial assets can be observed & studied	The value of the capital projects have to be estimated
There are few opportunities in the realm of financing that have an NPV that is significantly different from zero	There are many opportunities in the realm of capital budgeting that have an NPV that is significantly different from zero

Capital Structure

- Shareholder's funds (Equity capital, retained earnings, preference capital)
- Loan funds (debenture capital, term loans, deferred credit, fixed deposit, and working capital advance)

Equity	Debt
Equity shareholders have a residual claim on the income and the wealth of the firm	Creditors have a fixed claim in the form of interest and principal amount
Dividend paid to equity shareholders is not a tax deductible payment	Interest paid to creditors is a tax deductible payment
Has an indefinite life	Has a fixed maturity
Equity investors enjoy the prerogative to control the affairs of the firm	Debt investors play a passive role

Key factors in determining the Debt-Equity Ratio

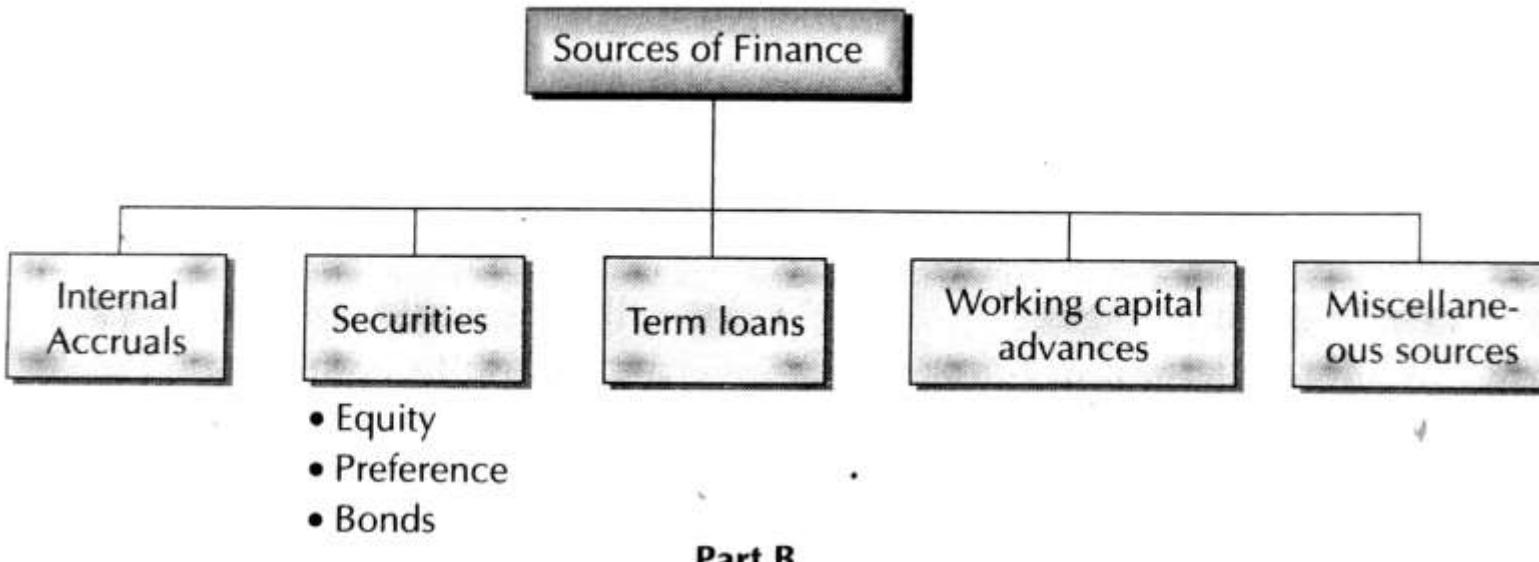
- Cost
- Nature of assets
- Business risk
- Norms of lenders
- Control considerations
- Market conditions

- **Equity versus Debt**

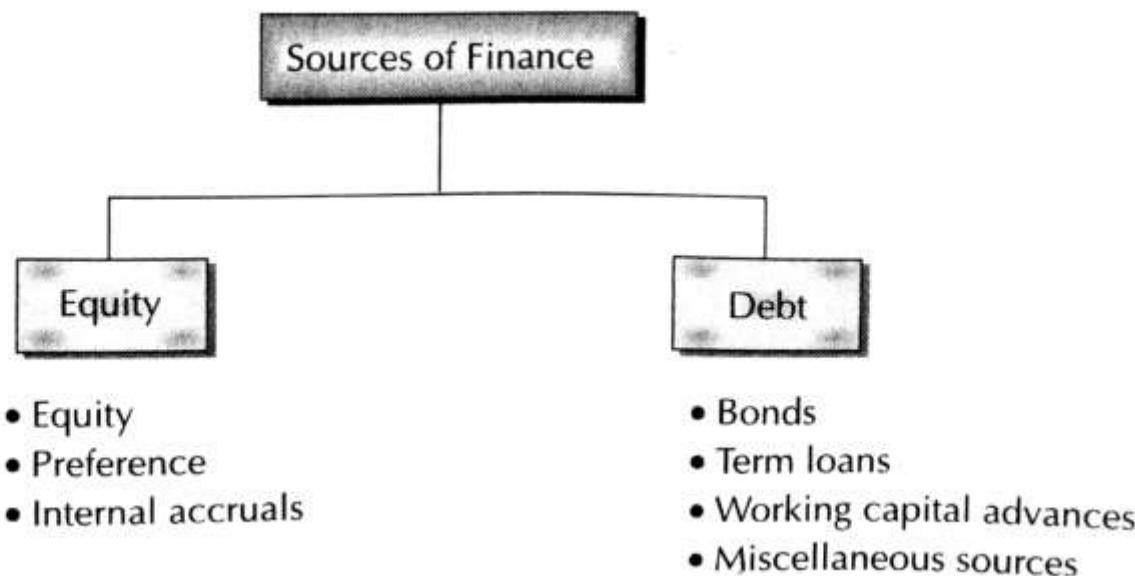
Use more equity when	Use more debt when
The tax rate applicable is negligible	The tax rate applicable is high
Business risk exposure is high	Business risk exposure is low
Dilution of control is not an important issue	Dilution of control is an issue
The assets of the project are mostly intangible	The assets of the project are mostly tangible
The project has many valuable growth options	The project has few growth options

Menu of Financing

Part A



Part B



Sources of Finance

- Public and Private Sources of Capital
- The Typical Pattern of Financing

- Internal Accruals

- Consist of depreciation charges and retained earnings
- Depreciation represents the allocation of capital expenditure to various periods over which the capital expenditure is expected to benefit the firm
- Retained earnings are that portion of equity earnings which are ploughed back in the firm
- Internal accruals are readily available
- Eliminates issue costs and losses on account of underpricing
- No dilution of control
- Stock market generally views an equity issue with skepticism, however, internal accruals do not carry such negative connotation

- Disadvantages of internal accruals

- Amount available may be limited
- The opportunity cost of retained earnings is quite high as – retained earnings, in essence represent dividends foregone by equity shareholders
- The opportunity cost of depreciation-generated funds is equal to the weighted average cost of the firm
- Comforted by the easy availability of internal accruals and the notion that they have a low cost, managements may invest in sub-marginal projects that destroy shareholder value

Equity Capital

- Terms involved
 - Authorized, Issued, Subscribed, and Paid-up Capital
 - Par value, Issue price, book value, and market value
- Rights of equity shareholders
 - Right to income
 - Right to control
 - Pre-emptive right
 - Right in liquidation

- Advantages of Equity Capital

- No compulsion to pay dividends
- Has no maturity date, hence no obligation to redeem
- Enhances the creditworthiness of the company
- Equity dividends are tax-exempt in the hands of investors

- Disadvantages of Equity Capital

- Dilutes the control of existing owners
- Cost of equity capital is high
- Equity dividends are paid out of profit after tax, whereas interest payments are tax-deductible expenses
- The cost of issuing equity shares is generally higher than the cost of issuing other types of securities

Preference Capital

- A hybrid form financing – equity and debentures
- It resembles equity in the following ways:
 - Preference dividend is payable only out of distributable profits
 - It is not obligatory payment
 - Not a tax-deductible payment
- It resembles debentures in the following ways:
 - Dividend rate is usually fixed
 - The share of preference share holders is prior to the claim of equity share holders
 - Preference share holders do not normally enjoy the right to vote

Types of preference shares

- Cumulative and non-cumulative preference shares
- Participating and non-participating preference shares
- Redeemable and non-redeemable preference shares
- Convertible and non-convertible preference shares

Advantages of preference capital

- No legal obligation to pay preference dividend
- No redemption liability
- Regarded as part of net worth
- Do not carry voting right, hence no dilution of control
- No security of assets is provided to preference share holders

Shortcomings of preference capital

- More expensive than debt capital
- Skipping payment of preference dividends adversely affect the image of the firm in the capital market
- Shareholders have a prior claim on the assets and earnings of the firm
- If a firms skips preference dividends for three years, it has to grant voting rights

Debentures (or bonds)

- Debenture holders are the creditors of the company
- Features
 - Appointment of trustee
 - Typically secured by mortgages / charges on the immovable properties
 - Corporate debt may be short, medium or long term
 - Typically redeemable in nature
 - May carry fixed or floating rate of interest or zero rate of interest
 - Call feature: provides the issuing company the option to redeem at a certain price before the maturity period
 - Put feature: gives the holder the right to seek redemption at specified times at predetermined prices

Innovations in debentures

- Deep Discount Bonds
- Convertible debentures
- Floating rate bonds
- Secured premium notes
- Indexed bonds

- Advantages of Debt Financing
 - Interest on debt is a tax-deductible expense
 - No dilution of control
 - Payments are limited to interest and principal
 - Issue costs of debt are significantly lower
 - Protection against high unanticipated inflation
 - Maturity of a debt instrument can be tailored to the needs of the borrowing firm
- Disadvantages of Debt Financing
 - Failure to meet the obligations can cause a great deal of financial embarrassment and even lead to bankruptcy
 - Increases financial leverage
 - Impose restrictions that limit the borrowing firm's financial and operating flexibility
 - If the rate of inflation turns out to be unexpectedly low, the real cost of debt will be greater than expected

Methods of offering

- Public offering
 - Initial public offering
 - Seasoned equity offering (secondary offerings)
 - Bond offering
- Rights issue
- Private placement
- Private placement of bonds
- Preferential allotment

Term Loans

- Term loans or term finance, represent a source of debt finance which is generally repayable in less than 10 years
- Features of term loans
 - Currency
 - Security
 - Interest payment and principal repayment
 - Restrictive covenants

- Term Loan Procedure
 - Submission of loan application
 - Initial processing of loan application
 - Appraisal of the proposed project
 - Issue of the letter of sanction
 - Acceptance of terms and conditions by the borrowing unit
 - Execution of loan agreement
 - Creation of security
 - Disbursement of loans
 - Monitoring
- Syndicated Loans

Working Capital Advances

- Forms of bank finance
 - Cash credits / overdrafts
 - Loans
 - Purchase / Discount bills
 - Letter of credit
- Application and processing
- Sanction and terms and conditions
- Security – Hypothecation, Pledge
- Margin amount

Miscellaneous sources

- Deferred credit
- Lease and hire purchase finance
- Unsecured loans and deposits
- Special schemes of institutions
- Subsidies and sales tax deferrals and exemption
- Short-terms loans from financial institutions
- Commercial paper
- Factoring
- Securitization

- Deferred credit
 - Suppliers provide deferred credit facility under which payment for the purchase of machinery is made over a period of time
 - Interest rate and period of payment vary
 - Usually supplier insists for bank guarantee
- Lease finance and Hire purchase- supplementary form of debt finance
- Lease finance: A lease represents a contractual arrangement whereby the lessor grants the lessee the right to use an asset in return for periodic lease rental payment
- Two broad types – Finance lease and Operating lease

Hire-Purchase

- The hiree purchases the asset and gives it on hire to the hirer
- The hirer pays regular hire-purchase instalments over a specified period of time
- The hiree charges interests on a flat basis
- Total interest collected by the hiree is allocated over several years

Leasing	Hire-Purchase
The lessee cannot claim depreciation	The hirer is entitled to claim depreciation
The entire lease rental is a tax-deductible expense for the lessee	Only the interest component of the hire-purchase instalment is a tax-deductible expense for the hirer
The lessee, not being the owner of the asset, does not enjoy the salvage value of the asset	The hirer, being the owner of the asset, enjoys the salvage value of the asset

- Unsecured loans and deposits
- Special schemes of institutions
 - Bill Rediscounting scheme
 - Suppliers' line of credit
- Subsidies and Sales tax deferments and exemptions
- Short-term loans from financial institutions
- Commercial paper
- Factoring
- Securitization

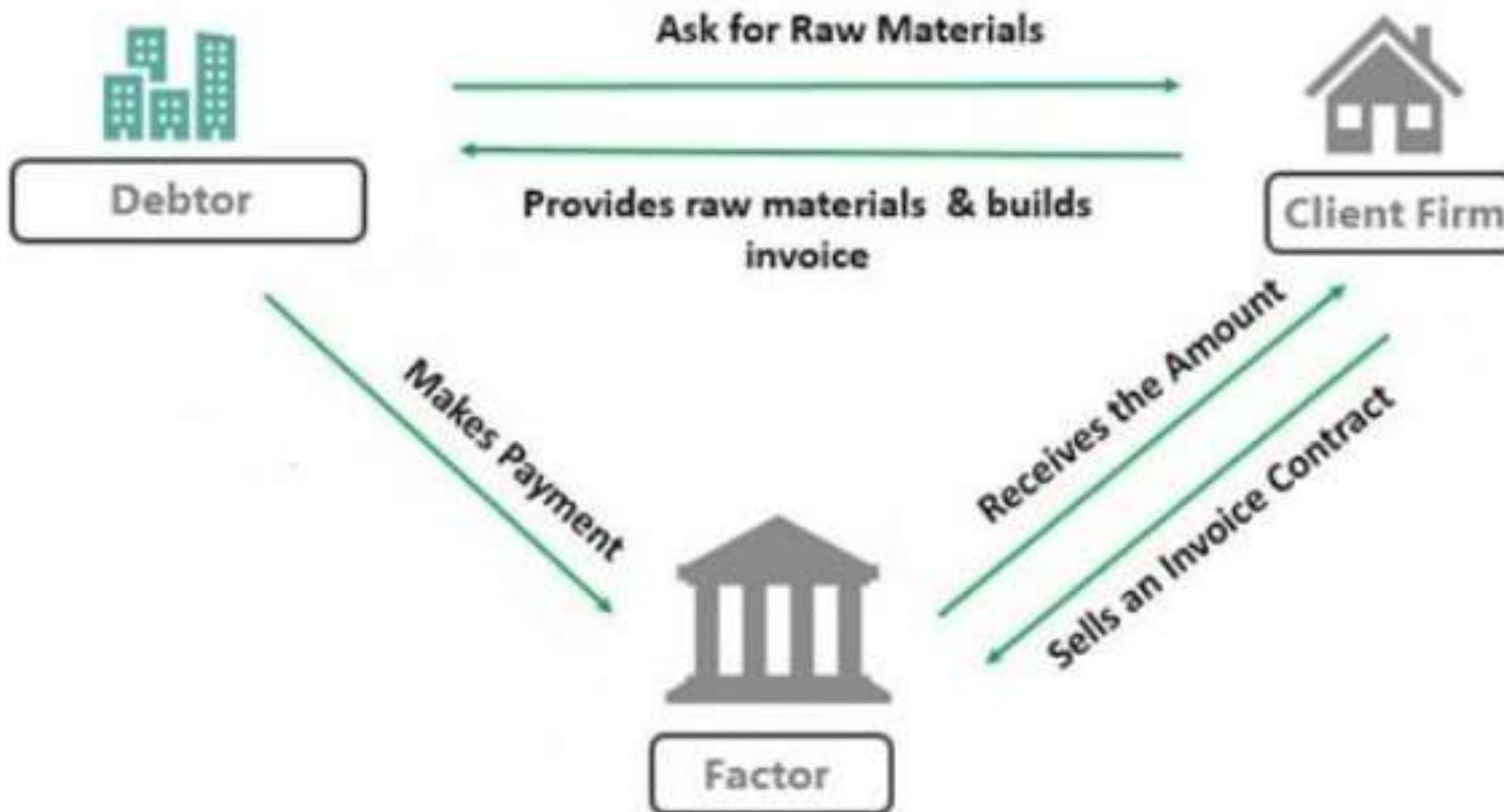
Factoring

- Factoring in finance is a source of immediate capital
- It is acquired in exchange for accounts receivable
- Hence, it is a financial arrangement between a financial institution (factor) and a small or medium-sized firm (client)
- A factor purchases trade debts or receivables from a client firm at a discounted price.

- Features of Factoring Arrangement
 - Factoring involves three parties—a factor, a client, and a debtor
 - The factor is the financial institution that offers finance to a client (in exchange for receivables)
 - The client is the firm that sells its receivables; the debtor is the party who owes the trade debt
 - The debtor, therefore, ends up paying the factor instead of the original business.

- The process of factoring in finance is an immediate source of money for the firms
- Client firms transfer accounts receivables to a factoring company (factor) at a lower price than the unpaid invoice.
- The factor acquires debts and earns a margin when they encash the full value of the debt.
- But these short-term financings involve significant credit risks
- Therefore, in recourse factoring, the credit risk is borne by the client—if the debtor defaults, the client firm repays the factor
- Most clients opt for non-recourse factoring. Here, the entire risk is borne by the factor.

Factoring in Finance



- Raising venture capital
- Raising capital in international markets
 - Euromarkets
 - Eurocurrency loans
 - Eurocurrency bonds
 - Foreign domestic markets
 - US capital market
 - Other markets
 - Export credit schemes
 - Buyer's credit
 - Supplier's credit

Venture Capital

- Introduction
- VC investment Appraisal Process and Management
- The Indian VC industry and regulations
- How to approach a VC fund

Introduction

- A new private company that is not yet ready or willing to tap the public financial markets may seek venture capital (VC)
- VC is provided by VC funds, which are prepared to finance risky projects that appear to have promising prospects

VC Investors

- Include financial institutions, corporations, individuals
- VC funds: Pools of capital constituted for investing in relatively high-risk opportunities in anticipation of potentially high risk adjusted rates of return

Features of VC investment which distinguish it from other finance sources

- High uncertainty levels
 - Technology risk
 - Product market risk
 - Management risk
 - Liquidity risk
- Information disclosure

The VC investment appraisal process and management

- Assessment of business and management
 - The emphasis of evaluation is on the following aspects
 - Management team
 - Business strategy
 - Exit focus
- Valuation of a VC transaction
 - Identify the amount of capital to be invested by the investor
 - Identify the target rate of return
 - Estimate the multiple of the original investment that will fetch the required rate of return over the anticipated holding period
 - Project the market value of the firm
 - Estimate the percentage of the projected value that the investor needs to claim

- The valuation of deals is influenced by the following factors
 - Outlook for the economy
 - Capital market conditions
 - Industry related factors
 - Deal related factors
 - Demand for and supply of capital
- Deal Structuring
- Investor – investee relationship
- Post financing relationship
- Exit from investments

Comparison between VC and PE

Feature	VC	PE
Investment Target	<ul style="list-style-type: none">• Early stage businesses, expansion• Innovative products, services, technologies• Heavily dependent on external financing• Unlisted companies	<ul style="list-style-type: none">• Later stage businesses, involves operational or financial restructuring, with or without management team and/or ownership changes• Mature products, services• Generally have large cash flows• May be listed or unlisted
Horizon	<ul style="list-style-type: none">• Medium to long term: 3-8 years	Medium: 2-5 years
Risks	<ul style="list-style-type: none">• May be one or more of technology, product development, market response to product / service, management, operational and liquidity of investment	<ul style="list-style-type: none">• Limited to product-market risks and does not involve the other elements listed in the case of VC
Structure	<ul style="list-style-type: none">• Equity or equity-type instruments such as convertible debt or preference shares• Syndication of investment, if any, among fellow VCs	<ul style="list-style-type: none">• Equity and debt combinations• Syndicate may include financial institutions

Comparison between VC and PE, contd.....

Feature	VC	PE
Post Financing engagement	<ul style="list-style-type: none">Active as it encompasses board composition, top management team recruitment, strategy formulation and internal systems processes and controls	<ul style="list-style-type: none">Less activeInvolvement limited to ensuring high quality governance
Investment management team	<ul style="list-style-type: none">Former managers and entrepreneurs with tremendous experience and vast, powerful networks in professional and industrial circles, primarily keeping in mind the post financing engagement needs	<ul style="list-style-type: none">Primarily, former financial market professionals

- The Indian VC industry
- Regulation of VC industry in India

References

- **Projects: Planning, Analysis, Financing, Implementation, and Review**
 - Prasanna Chandra, 5th edition, Tata McGraw-Hill publishing company limited, 2005
- **Project Management:** Choudhry S., Tata McGraw-Hill, 2010
- **Project management a system approach to planning scheduling and controlling-** Harold Kerzner, CBS Publisher and distributors, 2002.
- **A management guide to PERT and CPM-** WEIST and LeVY Eastern Economy of PH 2002.
- T R Banga, N K Agarwal and S C Sharma -**Industrial engineering and Management Sciences**, -Khanna Publishers