

INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR
Post Graduate Diploma in Management (PGDM)
Financial Management I (FN501)
CREDIT: Full (three credits)
SESSION DURATION: 90 Minutes

Term: II
Year: 2017-18

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Course Introduction: To communicate and develop an understanding of the corporate financial management concepts and their application in real business situations. The focus will be on clear understanding of the criticality of corporate finance for long term sustainability. A clear understanding of implications of financial management decisions on company valuation is essential. This course familiarises the students to the various complexities of corporate finance, agency conflicts and financial planning.

Course objectives: The students should understand and familiarise with:

- Ability to take capital budgeting decisions.
- Various aspects of rewarding the shareholders.
- Basic understanding of finance functions.

Course Pedagogy: The framework of learning will be through classroom lectures, cases and exercises in the class.

Course Readings:

Text:

Financial Management – I.M. Pandey (IMP)

References:

Financial Management: Theory & Practice – Brigham and Erhardt (BE)

Corporate Finance – Ross, Westerfield, *TMH* (RW)

Financial Management & Policy – Horne and Dhamija, *Pearson* (HD)

Course Evaluation Criteria:

| | |
|-----------------------------------|-----|
| Quiz (2 quizzes of 10 marks each) | 20% |
| Mid Term Exam | 20% |
| End Term Exam | 40% |
| Assignments | 20% |

Session-Plan

| Session No. | Topic | Reading |
|-------------|--|---|
| 1-3 | Introduction and Time Value of Money <ul style="list-style-type: none"> Finance functions – LT & ST Finance decisions Profit Vs Wealth maximisation Required rate of return Future Value and Present value concept FV and PV of cash flows – single period, multi period and annuity Preparing loan amortisation schedule | Chapter 1&2 (IMP) Excel exercises |
| 4-6 | Cost of capital <ul style="list-style-type: none"> Cost of debt capital Cost of equity capital using CAPM, Dividend growth model, PE ratios Use of CAPM to calculate cost of equity | Case: HUL and Solidaire Infrastructure (Source: IMP; Chapter 9) Chapter 9 (IMP) |
| 7-10 | Capital Budgeting Decisions – I: Appraisal Techniques <ul style="list-style-type: none"> Meaning and importance Why companies invest? Techniques of project appraisal – NPV, IRR, ARR, PI Problem of multiple IRR | Chapter 8 (IMP) Excel exercises Case: Hind Petrochemicals Co. (Source: IMP; Chapter 10) |
| 11-13 | Capital Budgeting Decisions – II: Cash flow estimation and risk analysis <ul style="list-style-type: none"> Defining cash flows – Initial investment, NCF and Terminal CF Estimating cash flows Nature of risk – estimation and measurement Sensitivity analysis Decision Tree Analysis | Case: Capital Budgeting Management of Bharti Airtel Chapter 10 & 11 (IMP) Excel exercises |
| 14-15 | Financial and Operating Leverage <ul style="list-style-type: none"> Meaning of FL & OL Measures of FL & OL – DFL and DOL FL and shareholder's return: ROE Vs EPS | Chapter 14 (IMP) |
| 16-17 | Long Term Financing <ul style="list-style-type: none"> Equity financing – IPOs, FPOs, Underwriting, Rights issue Debentures – Features, types Term loans Leases | Chapter 20 (IMP) Chapter 19 (BE) |
| 18-20 | Introductory Financial Derivatives <ul style="list-style-type: none"> Options Futures and forwards Swaps Using derivatives in corporate finance | Chapter 8 (BE) |

Case: Solidaire Infrastructure Co.

Solidaire Infrastructure Co. (SIC) has three businesses organised under three separate divisions. The cement division has its plant in Gujarat. It sells about 2/3rd of its cement in Gujarat and the remaining in Rajasthan and MP. The fertiliser unit in Gujarat sells in Gujarat, Maharashtra and MP. The power generation unit, under LT agreement, supplies 3/4th of the power to Gujarat at an agreed upon price which is periodically revised. All the three divisions are profitable and they have plans to expand their activities in future. The table below gives the financial data of SIC:

(All fig. in Rs million)

| | Cement Div. | Fertiliser Div. | Power Div. | SIC |
|-----------------------|-------------|-----------------|------------|------|
| Sales | 700 | 450 | 350 | 1500 |
| PAT | 29 | 17 | 24 | 70 |
| Assets | 550 | 230 | 420 | 1200 |
| Current Assets | 210 | 100 | 20 | 330 |
| Equity (market value) | | | | 1000 |
| Debt | | | | 1800 |

SIC has so far used the corporate wide WACC as a cut off rate for allocating funds to divisions. The company uses the CAPM method to find k_e . Its equity beta is 1.5. It uses the yield on 30-year G-Sec, which is currently 5.6% as its risk free rate and as its projects are also of long term nature. The company estimates show how that the 30 year simple average of the Sensex returns is 17.6% and that of the G-Sec is 7.8%. The current DE ratio is 2.5 and the after tax borrowing rate is 8%. The power division has opposed the use of WACC as cut off rate. The divisional head argues that his division is not subjected to demand uncertainty and it has a steady cash flow. He also thinks that the power division has a higher debt capacity; as an independent company it could easily borrow four times its equity. The CEO and other divisional heads thought that the corporate wide cut off rate would ensure that only the highly profitable projects will be accepted and that the company will be able to maximise shareholder's wealth. The target DE ratio for the fertiliser and cement division are 2 and 2.5 respectively. The CFO, however did not subscribe to this reasoning. According to him, the cut off rates of divisions should reflect their unique risk-return characteristics and debt bearing capacities. Each division has its own economic sector in which it competes with other firms. He suggested that the cut off rates of divisions should be calculated as if it were independent companies. Their risks and debt bearing capacities should be considered in the calculations by using data of comparable firms. He asked his assistant to collect data and other information so that he could find the cut off rates of the three divisions. The assistant was unable to find a comparable firm in power sector as most of the firms are under government control and they did not have market data. The other information about the fertiliser and cement divisions are given in the table below:

(Rs million, except beta)

| | X Fertiliser Co. | Y Cement Ltd. |
|----------------|------------------|---------------|
| Sales | 550 | 850 |
| PAT | 23 | 41 |
| Assets | 320 | 700 |
| Current Assets | 140 | 300 |

| | | |
|------|-----|------|
| MVE | 150 | 320 |
| Debt | 220 | 650 |
| Beta | 1.2 | 1.36 |

Q1. Estimate the WACC of SIC and cost of capital for the divisions.

Q2. State your position with regard to company wide cut off Vs. divisional cut offQ3. Cal

(Source: *Financial Management, I.M. Pandey, 11e, p.215*)

Case: Hind Petrochemicals Co.

The central government has a refinery in a backward area of Western India. The petrochemical plants of Hind Petrochemicals (HPC) are situated in South and East. They want to expand in the West. HPC's existing capacity is 9.5 metric tonnes (MT) and the government refinery has a capacity of 3.5 MT. HPC has a strategic interest in acquiring the refinery. As a part of its privatisation policy, the government is willing to sell the plant at Rs 1550 million. The corporate planning department of HPC has estimated the profit from the refinery operation as given in the table below:

| | Year (All in Rs million) | | | | |
|--------------------|--------------------------|------|------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 |
| Sales | 5730 | 5930 | 5870 | 3790 | 4500 |
| Salaries | 1450 | 1500 | 1850 | 1030 | 1210 |
| S&D Costs | 760 | 770 | 1080 | 530 | 650 |
| Materials consumed | 180 | 270 | 290 | 200 | 230 |
| Depreciation | 1500 | 1500 | 1500 | 1500 | 1500 |
| Office expenses | 400 | 400 | 400 | 400 | 400 |
| Survey costs | 40 | -- | -- | -- | -- |
| Finance cost | 750 | 750 | 750 | 750 | 750 |
| PBT | 650 | 740 | 0 | (620) | (240) |
| (-) Tax@35% | 230 | 260 | 0 | 0 | 0 |
| PAT | 420 | 480 | 0 | (620) | (240) |

According to the company appointed valuers, the refinery will require a further investment of Rs 5950 million in machinery and Rs 300 million in working capital before starting operations. According to the valuer, if the company so desired, the refinery including these could be sold for Rs 3800 million after 5 years. In that case, the company will have to incur Rs 200 million at the end of economic life of 5 years of the refinery to clean the site. The initial cost of valuers' work was Rs 25 million and they will be paid an additional Rs 15 million in the first year, if the company buys the refinery.

The company has a policy of charging depreciation on straight line basis but for tax purpose WDV method is used. The depreciation rate is 25%. Corporate overhead costs include the 3/4th costs as corporate OH allocation and 1/4th incurred by the corporate office exclusively for the project. The company proposes to finance the project with 5-year, 10% loan from bank. The management of the company requires a minimum return of 15% on this project.

The executives of the company are not unanimous on the feasibility of the project. The finance controller has not recommended the project as it earns profit in the first two years only. The production manager, however feels that given the location of the project, the company will have a strategic advantage and could meet demand easily. The marketing manager argues that the company should look at the investment's payback period. According to her, the depreciation included in the profit estimate is the recovery of the investment and also the company has profit in the first two years.

- Q1. Should the project be accepted? Use the most suitable method of evaluation to give your recommendations.
- Q2. Does your decision change if you use any other method?

(Source: Financial Management, I.M. Pandey, 11e, p.249)