

Valuation of Firms

Finance & Accounting Area Elective, PGP-II, 2015-'16

Credits	0.75
Slots	PGP II - Slots IX - X
Course facilitators	Profs.:Joshy Jacob & Sobhesh Kumar Agarwalla

Objectives

The course is expected to take participants through the challenges involved in valuation of businesses. The course builds on the issues raised on corporate valuation in the first year course, Corporate Finance. The initial part of the course discusses the commonly followed approaches in dealing with different complexities of the firm while attempting a valuation. The later part of the course focuses on the application of the valuation principles to unique business/firm contexts.

The participants' exposure to the nuances of valuation would help them meet the challenges of financial decisions involving valuation, such as, disposal and acquisition of corporate assets, and negotiation of strategic business partnerships, to name a few.

Pedagogy

The course maintains focus on the application of concepts. It uses a combination of lectures, exercises and case discussions. The conceptual background required for the case preparation is made available in the readings.

Textbook

- **Investment Valuation: Tools and Techniques for Determining the Value of any Asset**, University Edition, *3rd Edition* by Aswath Damodaran (referred as **AD**).

Other Readings

- **Real Estate Finance and Investment** *Thirteenth Edition* by William B. Brueggeman and Jeffrey D. Fisher (referred as **BF**).
- **Bank Valuation & Value-Based Management** *2009* by Jean Dermine (referred as **Dermine**).
- **Valuation - Measuring and Managing the value of companies** *Fifth Edition* by Tim Koller, Marc Goedhart & David Wessels (referred as **KGW**), McKinsey & Company.

Apart from the identified textbook, a number of other readings are also used in the course.

Course evaluation

Component	Weightage
Class participation	10%
Quizzes (2)	20%
End-term examination	40%
Project & presentation	30%

Group projects

The project focusses on the application of the valuation concepts to a real-life situation such as a complex business firm. It involves the choice of appropriate valuation methods for different units of the business, estimation of discount rates, scenario building of cash flows, and identification and valuation of liabilities, to estimate the the value of a firm. Further details of the project are provided towards the end of this outline.

Contacts

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Session outline

Session	Topic, Reading & Case	
1.	<i>Topic</i>	Valuation framework: Estimation of ROIC & reinvestment rate
	<i>Read</i>	Ch. 9-11 (AD)
	<i>Read</i>	Ch. 8-9 (KGW)
	<i>Case</i>	<i>Lecture session with exercises</i>
2.	<i>Topic</i>	Issues in DCF valuation - Dealing with cash and cross-holdings
	<i>Read</i>	(a) Ch. 16 (AD)
		(b) What is a dollar worth?
	<i>Lecture</i>	<i>session with exercises</i>
3.	<i>Topic</i>	Issues in FCF valuation – Stock options/warrants/convertibles
	<i>Read</i>	Ch. 16 (AD)
	<i>Read</i>	Ch. 12 (KGW)
	<i>Lecture</i>	<i>session with exercises</i>
4.	<i>Topic</i>	Relative valuation
	<i>Read</i>	Ch. 17 -20 (AD)
	<i>Case</i>	Exercises on relative valuation
5.	<i>Topic</i>	Value of control
	<i>Read</i>	(a) The value of control: implications for control premia
		(b) The value of corporate voting rights and control: A cross-country analysis
	<i>Case</i>	Magna International (A) and (B)
6.	<i>Topic</i>	Applications of real options in valuation
	<i>Read</i>	(a) Ch. 28-29 (AD)
		(b) The Role of Real Options in Capital Budgeting: Theory and Practice
		(C) The Role of Volatility in Power Plant Financing
	<i>Case</i>	Contractual Innovation in the UK Energy Markets: Enron Europe
		The Eastern Group, and The Sutton Bridge Project
7.	<i>Topic</i>	Valuation in the context of mergers & acquisitions
	<i>Read</i>	Ch.13 (KGW)
	<i>Case</i>	Lupin's foray into Japan (F&A 0495)
8.	<i>Topic</i>	Valuation of large firms – putting it all together
	<i>Read</i>	No specific readings
	<i>Case</i>	<i>to be distributed</i>
Special Situations in valuation		
9.	<i>Topic</i>	Valuation of private and family firms
	<i>Read</i>	Ch. 24 (AD)
	<i>Case</i>	Baidu.com, Inc.: Valuation at IPO
		Spyder Active Sports–2004 (206027)
10.	<i>Topic</i>	Venture capital approach to valuation
	<i>Read</i>	Ch. 23 (AD)
	<i>Case</i>	Hertz Corporation (A) (9-208-030)
11–12	<i>Topic</i>	Financial firms
	<i>Read</i>	(a) Ch. 21 (AD)
		(b) Economic and Strategic Drivers of Bank Valuation & Valuation of Fee-Based Activities (Ch. 7 & 8 Dermine)
	<i>Case</i>	(a) Comerica Incorporated: The valuation dilemma (UV1410)
		(b) Provident Life and Accident Insurance: The Acquisition of Paul Revere (9-202-044)
13–14	<i>Topic</i>	Real estate and REIT
	<i>Read</i>	(a) Ch.26 (AD)
		(b) Technical Note and Discussion on Real Estate Valuation (IBET): Back of the Envelope (BOE) on Bonhomme Place- A Case within a Case
		(c) Real Estate Investment Trusts (Ch. 21 of BF)
	<i>Cases:</i>	(a) Capital field: A room with a view (207091)
		(b) The right of acquisition: 3 options in commercial real estate (KEL820)
15	Project presentations	

The exercises required for the sessions shall be send across to the class on a weekly basis.

Group projects

The group project involves application of the concepts discussed in the course to the valuation of a medium or large sized Indian business firm. The scope of the project involves (a) the choice of appropriate valuation methods for different business units (b) estimation of return on invested capital and reinvestment rates (c) estimation of discount rates (c) scenario building for operating cash flows (d) valuation of non-operating assets (e) identification of liabilities, and (f) employing appropriate relative valuation approaches.

Target firm

The target firms for the projects shall be decided within two weeks from the start of the course.

Approach of the analysis

The project work should cover the following aspects involved in the valuation of firms.

1. DCF approach:
 - (a) Cost of capital: Details of the business-wise estimate of WACC
 - (b) Valuation of operating assets: Should include financial forecasts of individual businesses, estimation of continuing value etc.
 - (c) Valuation of non-operating assets: Identification and estimation of the value of non-operating assets such as excess cash, excess land, intellectual property rights, cross-holdings etc.
 - (d) Valuation of non-equity claims: Debt, contingent liabilities, and other non-equity claims.
 - (e) Adjustment for different classes of equity claims (if any): Differential voting shares, value of options embedded in convertibles, warrants, ESOP's etc.
2. Relative valuation of the firm: A comparison of the relative valuation approach with DCF valuation should be attempted. You need to justify the choice of comparables firms, and the metrics chosen for the valuation.
3. Real options approach (if any of the operations of the firm merit the approach). Need to justify, why you think real-options approach is more appropriate for the chosen business operations of the firm. Provide details of the option model and its inputs.

Evaluation

The groups shall present the details of the valuation approach and results during the presentation session of the course (the last session). The projects would be evaluated mostly on the basis of the presentation. The project report should be short not exceeding 8-10 pages, giving highlights of the approach adopted. The report should be accompanied by worksheets detailing the approach.

Group Composition

You are free to choose a group with 6-members. Unless required, the groups shall not be formed by the course facilitators.