

Syllabus

PRINCIPLES OF BUSINESS VALUATION

Bachelor level

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Course description:

The course will introduce students to the most frequently used quantitative valuation techniques. The main topics covered include (1) discounted cash flow methods (2) relative valuation using multiples (3) asset-based approach. Particular attention is paid to evaluation of individual groups of assets under the net asset value method: financial assets, real estate, tangible real property, intangible assets. The focus of the course is on the evaluation of companies in emerging capital markets. Students will learn how to conduct firm valuation in terms of high levels of macroeconomic uncertainty, illiquid capital markets, and high levels of political risks. Participants are provided with the opportunity to work in small teams and value different groups of assets and firms in emerging capital markets. The course is taught in collaboration with the managers and partners of Ernst & Young Company.

Course objectives:

After completing the course the student will understand and be able to:

- apply different valuation techniques such as Dividend-models, FCFF, FCFE, relative valuation and asset based valuation;
- apply the primary methods to measure value of different groups of company assets;
- identify and analyze a company's value drivers and relate these drivers to the value enhancement process;
- understand the features of corporate valuation in emerging capital markets.

Recommended Prerequisites:

Statistics, Microeconomics, Corporate Finance-1, Accounting

Teaching method:

- lectures;
- practical exercises;
- case studies;
- analytical tasks;
- team projects;
- self study;
- final exam.

Course texts:**Main texts:**

Pratt S.P., Reilly R.F., Schweihs R.P., Valuing a Business: The Analysis and Appraisal of Closely Held Companies, McGraw-Hill Co., 2000, (hse electronic library «Books 24x7»)

Pratt S.P., Niculita A.V., Valuing a Business: The Analysis and Appraisal of Closely Held Companies, 5th Edition, McGraw-Hill Co., 2008.

Hitchner J.R., Financial Valuation: Applications and Models, second edition, John Wiley&Sons, 2006, (hse electronic library «Books 24x7»)

Supplementary texts:

1. Copeland T., Koller T., Murrin J., Valuation: measuring and managing the value of companies, Third edition, John Wiley&Sons, 2000, (hse electronic library «Books 24x7»)
2. Mard M.J., Hitchner J.R., Hyden S.D., Valuation for financial reporting: fair value measurements and reporting, intangible assets, goodwill and impairment, 2nd Edition, John Willey&Sons, 2007, (hse electronic library «Books 24x7»)
3. King A.M., Fair value for financial reporting: meeting the new FASB requirements, John Wiley&Sons, 2006, (hse electronic library «Books 24x7»)
4. Reilly Robert, Schweihs Robert. Valuing Intangible Assets. IRWIN Library of Investment Finance. McGraw-Hill, 2001.
5. The Appraisal of Real Estate, 13th Edition, Thirteenth Edition Appraisal Institute, 2008
6. Valuing Machinery and equipment: the fundamentals of appraising machinery and technical assets / by Machinery and Technical Specialties Committee of the American Society of Appraisers.- 2nd ed., 2005
7. Estridge J., Lougee B. Measuring Free Cash Flows for Equity Valuation: Pitfalls and Possible Solutions. Journal of Applied Corporate Finance, Vol.19, №.2, 2007, pp.60-71
8. Garcia-Sanchez J., Preve L., Sarria-Allende V., Valuation in Emerging Markets: A Simulation Approach. Journal of Applied Corporate Finance, Vol.22, №2, 2010, pp.100-108
9. Pereiro L.,E., The Valuation of Closely-held Companies in Latin America, Emerging Markets Review, Vol.2, 2001, pp. 2213-2253
10. Luehrman T.A., Corporate Valuation and Market Multiples, Harvard Business Review, №16, 2009.
11. Fernandez P., 80 common and uncommon errors in company valuation, IESE Research Papers D/550, IESE Business School, 2004.
12. Russian Federal Low on Valuation № 135-Ф3 – www.consultant.ru
13. Russian Federal Valuation Standards 1-6 – www.consultant.ru.

Grading:

Grading in the course will be based on the following criteria:

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|-----------------------|-------------|
| • Class participation | 15% |
| • Final team project | 35% |
| • <u>Final exam</u> | 50% |
| Total | 100% |

Grades criteria:

From	To	Mark
0	4	Not passed
4	5	Satisfactory
6	7	Good
8	10	Excellent

Teaching hours for topics and activities:

<i>Topic</i>	<i>Total (hours)</i>	<i>Class (hours) including</i>		<i>Self study</i>
		<i>Lectures</i>	<i>Practice</i>	
1. Introduction to Valuation	10	2		8
2. Income approach: discounted cash flow methods, capitalization method	26	6	8	12
3. Market approach: public company method, merger and acquisition method	18	4	4	10
4. Cost approach: net asset value method, liquidation value method	20	4 <i>E&Y</i>		16
5. Cost approach: individual asset valuation procedures	34	8 <i>E&Y</i>	4 <i>E&Y</i>	22
Total:	108	24	16	68

Course outline:

1. Introduction to Valuation.

Business valuation legal and regulatory environment. Business valuation standards.

The role and the process of valuation. Types of firm value: market value, fair value, investment value, intrinsic value, liquidation value, book value. Business valuation approaches and methods. Valuation across the life cycle of the firm. The main steps of corporate valuation. The impact of controlling (noncontrolling) ownership interest and marketability on company value: discount for lack of control and discount for lack of marketability. The structure of business valuation report.

Necessary information to conduct business valuation: company specific data, data about the company's industry and economic environment.

Financial review and pro forma analysis.

Main texts:

1. Pratt S.P., Reilly R.F., Schweihs R.P., *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, McGraw-Hill Co., 2008 (hse electronic library «Books 24x7») – Ch.3,3,7,8.

2. Hitchner J.R., *Financial Valuation: Applications and Models*, second edition, John Wiley&Sons, 2006 (hse electronic library «Books 24x7») – Ch.1-3

3. Russian Federal Law on Valuation № 135-Ф3 29.07.1998 г. – www.consultant.ru

4. Russian Federal Valuation Standards 1-6– www.consultant.ru

2. Income approach: discounted cash flow methods, capitalization method.

Dividend discount models: assumptions and limitations.

Free cash flow to equity (FCFE) discount models. Free cash flow to firm (FCFF) discount models. Building a financial model: length of the high growth period, forecasting future performance, the main models of estimating terminal value.

The equity premium and the cost of capital. The capital asset pricing model (CAPM) approach. The Fama-French three-factor model. Arbitrage pricing theory. Build-up model. The cost of equity of large (small) capitalization companies. The cost of debt and other components of the capital structure. Estimation of the cost of capital in practice.

Valuation issues specific to emerging capital markets: effects of inflation on financial analysis, incorporating emerging market risks in valuation. Calculating the cost of capital in emerging markets: the CAPM-spread model.

Capitalization method. Difference between capitalization rate and discount rate. Limitations of the method.

Main texts:

1. Pratt S.P., Reilly R.F., Schweih's R.P., *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, McGraw-Hill Co., 2008 (hse electronic library «Books 24x7») – Ch.9,10.

2. Hitchner J.R., *Financial Valuation: Applications and Models*, second edition, John Wiley&Sons, 2006 (hse electronic library «Books 24x7») – Ch.4,5

Supplementary texts:

1. Copeland T., Koller T., Murrin J., *Valuation: measuring and managing the value of companies*, Third edition, John Wiley&Sons, 2000 (hse electronic library «Books 24x7») – Ch.9-12, 19

2. Estridge J., Lougee B. *Measuring Free Cash Flows for Equity Valuation: Pitfalls and Possible Solutions*. *Journal of Applied Corporate Finance*, Vol.19, N.2

3. Garcia-Sanchez J., Preve L., Sarria-Allende V., *Valuation in Emerging Markets: A Simulation Approach*. *Journal of Applied Corporate Finance*, Vol.22, №2, 2010, pp.100-108

4. Pereiro L.,E., *The Valuation of Closely-held Companies in Latin America*, *Emerging Markets Review*, Vol.2, 2001, pp. 2213-2253

3. Market approach: public company method, merger and acquisition method.

Fundamental principals of relative valuation. Difference between public company method and merger and acquisition method. Basic steps of relative valuation. Criteria for comparable company selection. The most commonly used multiples and its determinants: P/E, EV/S, EV/EBITDA, P/BV. Sector multiples. Multiples and continuation value. Adjusting multiples for leverage and growth. Pitfalls of relative valuation.

Relative valuation in emerging capital markets. Factors affecting valuation ratios.

Main texts:

1. Pratt S.P., Reilly R.F., Schweih's R.P., *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, McGraw-Hill Co., 2008 (hse electronic library «Books 24x7») – Ch.11,12.

2. Hitchner J.R., *Financial Valuation: Applications and Models*, second edition, John Wiley&Sons, 2006 (hse electronic library «Books 24x7») – Ch.6.

Supplementary texts:

1. Luehrman T.A., *Corporate Valuation and Market Multiples*, *Harvard Business Review*, №16, 2009.

4. Cost approach: net asset value method, liquidation value method.

Fundamentals of cost approach. Cost approach versus book value. Main steps of net asset value method. Identify assets and liabilities to be revalued. Construct a value-basis balance sheet. Liquidation value method.

Using cost approach for IFRS and US GAAP financial statement preparation: allocation of purchase price in M&A deal. Goodwill. Advantages and disadvantages of cost approach.

Main texts:

1. Pratt S.P., Reilly R.F., Schweih's R.P., *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, McGraw-Hill Co., 2008 (hse electronic library «Books 24x7») – Ch.14.

2. Hitchner J.R., *Financial Valuation: Applications and Models*, second edition, John Wiley&Sons, 2006 (hse electronic library «Books 24x7») – Ch.7, 21.

5. Cost approach: individual asset valuation procedures.

Valuation of intangible assets. Identification and classification of intangible assets. Income approach: royalty method, multi-period excess earnings method (MEEM), differential method, greenfield method. Market approach. Cost approach. Intangible asset valuation in practice.

Real estate valuation. Real estate classification. Necessary information to conduct real estate valuation. Income approach: discounted cash flow method, capitalization method. Potential gross income, net operating income, discount rate calculation. Market approach. Basic steps of cost approach. Accounting depreciation versus appraisal depreciation. Types of depreciation: physical depreciation, functional obsolescence, economic obsolescence. Depreciation estimates. Real estate valuation in practice.

Machinery and equipment valuation. Machinery and equipment classification. The life cycle of the equipment. The influence of different types of depreciation on machinery and equipment valuation. Market approach. Cost approach. Income approach. Machinery and equipment valuation in practice.

Main texts:

1. Pratt S.P., Reilly R.F., Schweih's R.P., *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, McGraw-Hill Co., 2008 (hse electronic library «Books 24x7») – Ch.14.

2. Hitchner J.R., *Financial Valuation: Applications and Models*, second edition, John Wiley&Sons, 2006 (hse electronic library «Books 24x7») – Ch.7, 21.

Supplementary texts:

1. Mard M.J., Hitchner J.R., Hyden S.D., *Valuation for financial reporting: fair value measurements and reporting, intangible assets, goodwill and impairment*, 2nd Edition, John Wiley&Sons, 2007, (hse electronic library «Books 24x7»)

2. King A.M., *Fair value for financial reporting: meeting the new FASB requirements*, John Wiley&Sons, 2006, (hse electronic library «Books 24x7»)-Ch.9

3. Reilly Robert, Schweih's Robert. *Valuing Intangible Assets*. IRWIN Library of Investment Finance. McGraw-Hill, 2001.

4. *The Appraisal of Real Estate, 13th Edition, Thirteenth Edition Appraisal Institute, 2008*

5. *Valuing Machinery and equipment: the fundamentals of appraising machinery and technical assets / by Machinery and Technical Specialties Committee of the American Society of Appraisers.- 2nd ed., 2005*