

**Федеральное государственное автономное образовательное учреждение
высшего профессионального образования
"Национальный исследовательский университет
"Высшая школа экономики"**

Факультет экономических наук
Департамент финансов

Рабочая программа дисциплины
«Оценка стоимости компании - продвинутый уровень»
(Advanced Business Valuation - Advanced Level)
для образовательных программ:
38.04.08.68 «Финансы и кредит» подготовки магистра
«Стратегическое управление финансами фирмы», 1 курс

Разработчики программы

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Одобрена на заседании департамента финансов

«__»_____ 2015 г.

Руководитель департамента

И.В. Ивашковская _____

Рекомендована Академическим советом
образовательной программы ОП «СУФФ»

«__»_____ 2015 г., № протокола _____

Утверждена «__»_____ 2015 г.

Руководитель департамента финансов

И.В. Ивашковская _____

Москва, 2015

Настоящая программа не может быть использована другими подразделениями университета и другими вузами без разрешения подразделения-разработчика программы.



BUSINESS VALUATION-2

Course Outline

Faculty: Economics

Year: 2015-2016

Course name: Business Valuation – Advanced level (Business Valuation-2)

Level: Master, 1 year

Language of instruction: English

Period: Module 3-4

Workload: 80 hours

Lecturers: Svetlana A. Grigorieva, SGrigorieva@hse.ru,

Boris Yatsenko, Boris.Yatsenko@ru.ey.com

Course description:

The Advanced Corporate Valuation Course explores both the theoretical basis and practical application of all major elements of discounted cash flow valuation, relative valuation and asset-based valuation. You learn to differentiate between long-term value-creating strategies and short-term indicators, such as market share, earnings per share, share price and others. The course discusses how to evaluate company's strategic position and develop forecasts using different techniques. Within this course you consider special cases in valuation such as valuation in emerging capital markets, valuation of companies with changing capital structure, valuation of options. You also discuss how to evaluate companies in different industries: mining, telecom, media and finance.

Course objectives:

After completing the course the student will know:

- how to apply traditional valuation techniques (DCF, relative valuation and asset based valuation) in emerging capital markets;
- how to distinguish value creation from value destruction in order to ensure long-term competitive success and survival;
- main methods to value company's intangible assets;
- how to use option pricing methods to value flexibility;
- the specificity of valuing companies in different industries;
- how to apply premiums and discounts in business valuation (control premium, discount for lack of control, discount for lack of marketability).

After completing the course the student will be able to:

- apply different valuation techniques such (DCF, relative valuation and asset based valuation) in emerging capital markets;
- to get and use the necessary information from open excess to apply it to business valuation;
- identify and analyze a company's value drivers and relate these drivers to the value enhancement process;
- develop forecasts using different models;



- value companies with changing capital structure;
- understand the main determinants of multiples;
- apply different models to value company's intangible assets;
- apply option pricing methods to value flexibility;
- value companies from different industries based on the real data.

Recommended Prerequisites:

Corporate Finance-1,2, International Financial Reporting Standards.

Teaching method:

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

Course texts:

Main texts:

1. Damodaran A. Investment Valuation: Tools and Techniques for determining the value of any asset, 2d edition, John Wiley&Sons, 2002 (hse electronic library «Books 24x7»)
2. Hitchner J.R., Financial Valuation: Applications and Models, second edition, John Wiley&Sons, 2006, (hse electronic library «Books 24x7»)

Supplementary texts:

3. Amram M., Kulatilaka N. Real Options – Managing Strategic Investments in an Uncertain World. HBS Press. 1999.
4. Arzac E. Valuation for Mergers, Buyouts and Restructuring. John Wiley&Sons, 2005
5. Branch, M. A. Real Options in Practice. John Wiley & Sons, 2003
6. Copeland N., Antikarov V., Real Options – A Practitioner's Guide. Texere, 2001.
7. 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»)
8. Fernandez P. Valuation methods and Shareholder Value Creation. Academic Press 2002 (hse electronic library «Books 24x7»).
9. Fernandez P. Valuation and Common Sense Book available at SSRN. <http://ssrn.com/abstract=2209089>
10. 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»)
11. King A.M., Fair value for financial reporting: meeting the new FASB requirements, John Wiley&Sons, 2006, (hse electronic library «Books 24x7»)



12. Pereiro L. Valuation in Emerging Markets. A Practical Approach. John Wiley & Sons, Inc. 2002.
13. 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»)
14. Reilly Robert, Schweihs Robert. Valuing Intangible Assets. IRWIN Library of Investment Finance. McGraw-Hill, 2001.
15. Trigeorgis L. Real Options – Managerial Flexibility and Strategy in Resource Allocation. The MIT Press, 2000.
16. Angelis, D. I. Capturing the options value of R&D. Research Technology Management, July-August, 2000, pp. 31-34.
17. 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
18. Black, F. and Scholes, M. The pricing of options and corporate liabilities. Journal of Political Economy, No. 81, 1973, pp. 637-659.
19. Brennan, M., and Schwartz, E. A new approach to evaluating natural resource investments. Midland Corporate Finance Journal, Vol. 3, No. 1, pp. 37-47.
20. Copeland, T. The real options approach to capital allocation. Strategic Finance, October, 2001, pp. 33-37.
21. Cottrell, T., and Sick, G. First mover disadvantage and real options. Journal of Applied Corporate Finance, Vol. 14, No. 2, Summer, 2001, pp. 41-51.
22. Folta, T. B., and Miller, K. D. Real options in equity partnerships. Strategic Management Journal, Vol. 23, 2002, pp. 77-88.
23. 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
24. Hull, J. and White, A. An overview of contingent claims analysis. Canadian Journal of Administrative Sciences, September, 1988, pp. 55-61.
25. Kahn, S. Using option pricing theory to value assets. Option Pricing, April 1992, pp. 82-85.
26. Luehrman T.A., Corporate Valuation and Market Multiples, Harvard Business Review, №16, 2009.
27. Pereiro L.,E., The Valuation of Closely-held Companies in Latin America, Emerging Markets Review, Vol.2, 2001, pp. 2213-2253
28. Fernandez P., 80 common and uncommon errors in company valuation, IESE Research Papers D/550, IESE Business School, 2004.
29. Vonnegut A. Real Options Theories and Investment in Emerging Economies. Emerging Markets Review, 1 – 2000, pp. 82-100.
30. Russian Federal Law on Valuation № 135-ФЗ – www.consultant.ru
31. Russian Federal Valuation Standards 1-6 – www.consultant.ru.



Grading:

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

- Class participation 15%
- Home assignments 45%
(Team projects)
- Final exam 40%
- 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.	28	2	2	24
2. Income approach. Valuing companies by cash flow discounting: main steps, models, and problems.	34	4	4	26
3. Income approach. Capitalization methods and residual income valuation methods.	26	4	4	18
4. Market approach. Valuing companies using multiples.	32	4	4	24
5. The role of cost approach in business valuation.	28	2	2	24
6. Real options and valuation	36	8	8	20
7. Corporate valuation in different industries	44	16	16	12
Total:	228	40	40	148
Essay	1			
Homework	1			

Course outline:

1. Introduction to Valuation.

Purposes of valuation. Business valuation legal and regulatory environment. Professional valuation organizations. Business valuation standards.



Main steps of business valuation process. Standards (types) of firm value: market value, fair value, investment value, liquidation value, book value. Application of specific standard of value. Business valuation approaches and methods: an overview. Valuation across the life cycle of the firm. Necessary information for business valuation. Historical financial statement analysis: spreading, normalizing, common-sizing. The impact of controlling (noncontrolling) ownership interest and marketability on company value: discount for lack of control and discount for lack of marketability. The methods and results used in empirical studies to assess the size of discounts and premiums. The structure of business valuation report.

Main texts:

1. Damodaran A. *Investment Valuation: Tools and Techniques for determining the value of any asset*, 2d edition, John Wiley&Sons, 2002, (hse electronic library «Books 24x7»), Ch. 1-3
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-ФЗ 29.07.1998 г. – www.consultant.ru
4. Russian Federal Valuation Standards 1-6 – www.consultant.ru

2. Income approach. Valuing companies by cash flow discounting: main steps, models, and problems.

Building a financial model. Analysing the historical performance. Normalization process. Adjustments for non-operating assets and liabilities and related income and expenses. Adjustments for nonrecurring and unusual items. Key value drivers. Developing accurate forecasts using 'top-down' and 'bottom-up' techniques. Estimating growth of the firm: historical growth, analysts forecasts, the fundamental determinants of growth. Length of the high growth period: main factors. Estimating terminal value: assumptions, traditional models and specific cases (cyclical companies, firms with negative earnings). Valuation of non-operating assets. Equity and firm valuation. Estimating equity value per share.

Choosing the discounted cash flow model. Free cash flow to the firm (FCFF). Free cash flow to equity (FCFE). Capital cash flow (CCF).

Adjusted present value model (APV): key assumptions and main steps. Building a financial model for companies with changing capital structure.

Valuing emerging-market companies. Valuation issues specific to emerging capital markets. Calculating the cost of equity in emerging markets: the CAPM-models. 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.

Main texts:

1. Damodaran A. *Investment Valuation: Tools and Techniques for determining the value of any asset*, 2d edition, John Wiley&Sons, 2002, (hse electronic library «Books 24x7»), Ch. 10-16, 22

Supplementary texts:

1. Arzac E. *Valuation for Mergers, Buyouts and Restructuring*, John Wiley&Sons, 2005, Ch.2,3,6
2. Pereiro L. *Valuation in Emerging Markets. A Practical Approach*. John Wiley&Sons, Inc, 2002, Ch.2-3
3. Fernandez P. *Valuation Methods and Shareholder Value Creation*. Academic Press, 2002, (hse electronic library «Books 24x7») - Ch.17, 19-21



4. 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, 16, 19

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

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

7. 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

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

3. Income approach. Capitalization methods and residual income valuation methods.

Capitalization method. Calculating normalizing expected economic income: assumptions and methods. The difference between capitalization rate and discount rate. Common mistakes.

Excess cash flow method. The main steps of the method. Determine the fair market value of net tangible assets. Develop «normalized» cash flow. Determine an appropriate blended rate for net tangible assets. Determine the fair market value of the intangible assets. Shortcomings of the method.

Valuation models based on residual income concept. Economic value added (EVA) approach to valuation. Similarities and differences between EVA and free cash flow. Economic value added and market value. Edwards-Bell-Ohlson valuation technique. Advantages and disadvantages of the method.

Main texts:

1. Damodaran A. *Investment Valuation: Tools and Techniques for determining the value of any asset*, 2d edition, John Wiley&Sons, 2002, (hse electronic library «Books 24x7»), Ch. 32

Supplementary texts:

1. Arzac E. *Valuation for Mergers, Buyouts and Restructuring*, John Wiley&Sons, 2005, Ch.5

2. Fernandez P. *Valuation Methods and Shareholder Value Creation*. Academic Press, 2002, (hse electronic library «Books 24x7») - Ch.17, 19-21

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

4. Market approach. Valuing companies using multiples.

The use of multiples in valuation. Criteria for comparable company selection. Choosing multiples for business valuation. Multiples based on capitalization. Multiples based on the company's value. Growth-referenced multiples. Sector multiples. Multiples and their determinants. Relationships among valuation multiples. Multiples and continuation value. Dispersion of the multiples. Cross-country differences in multiples.

Relative valuation in emerging capital markets. Comparable companies from another countries. The importance of country risk adjustments. Methods for multiples cross-border adjustments: the sovereign spread, the relative market coefficients and the regression approach.

Main texts:



1. Damodaran A. *Investment Valuation: Tools and Techniques for determining the value of any asset*, 2d edition, John Wiley&Sons, 2002, (hse electronic library «Books 24x7»), Ch. 17-21

Supplementary texts:

1. Arzac E. *Valuation for Mergers, Buyouts and Restructuring*, John Wiley&Sons, 2005, Ch. 4

2. Fernandez P. *Valuation Methods and Shareholder Value Creation*. Academic Press, 2002, (hse electronic library «Books 24x7»), Ch. 3-5, 8

3. Pereiro L. *Valuation in Emerging Markets. A Practical Approach*. John Wiley&Sons, Inc. 2002, Ch. 4

4. 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.11,12.

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

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

5. The role of cost approach in business valuation.

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

Valuation of intangible assets as one of the main steps of the net asset value method. Identification and classification of intangible assets. Income approach: royalty method, multi-period excess earnings method (MEEM), differential method, greenfield method. Market approach. Cost approach. Valuing brands: Hulihan Valuation Advisors method, Interbrand method, Financial World method. Nature of goodwill. Calculating goodwill: purposes and methods. Intangible asset valuation in practice.

Liquidation value method: assumptions and main steps. Orderly liquidation value. Forced liquidation value. Liquidation expenses. Calculating cost of capital during liquidation.

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.14.

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

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

Topic 6. Real options and valuation.

Capital and portfolio of real options. Merton's approach for valuing risky debt. Estimation of asset value and its volatility. Role of duration. Real option framework for equity valuation. Equity as a compounded option. Types of real options in equity valuation. Growth options. Valuation of the firm with option to expand and option to defer. Application of Black-Scholes-Merton formula for valuing equity and its restrictions. Binomial model and its boundaries. Valuing firms in different industry sectors. Features of real option valuation in emerging markets.

Main texts:

1. Damodaran A. *Investment Valuation: Tools and Techniques for determining the value of any asset*, 2d edition, John Wiley&Sons, 2002, (hse electronic library «Books 24x7»), Ch. 5, 28, 29



Supplementary texts:

1. Amram M., Kulatilaka N. *Rial Options – Managing Strategic Investments in an Uncertain World*. HBS Press. 1999.
2. Branch, M. A. *Real Options in Practice*. John Wiley & Sons, 2003
3. Copeland N., and V. Antikarov. *Real Options – A Practitioner's Guide*. Texere, 2001.
4. Trigeorgis L. *Real Options – Managerial Flexibility and Strategy in Resource Allocation*. The MIT Press, 2000.
5. Angelis, D. I. *Capturing the options value of R&D*. *Research Technology Management*, July-August, 2000, pp. 31-34.
6. Black, F. and Scholes, M. *The pricing of options and corporate liabilities*. *Journal of Political Economy*, No. 81, 1973, pp. 637-659.
7. Brennan, M., and Schwartz, E. *A new approach to evaluating natural resource investments*. *Midland Corporate Finance Journal*, Vol. 3, No. 1, pp. 37-47.
8. Copeland, T. *The real options approach to capital allocation*. *Strategic Finance*, October, 2001, pp. 33-37.
9. Cottrell, T., and Sick, G. *First mover disadvantage and real options*. *Journal of Applied Corporate Finance*, Vol. 14, No. 2, Summer, 2001, pp. 41-51.
10. Folta, T. B., and Miller, K. D. *Real options in equity partnerships*. *Strategic Management Journal*, Vol. 23, 2002, pp. 77-88.
11. Hull, J. and White, A. *An overview of contingent claims analysis*. *Canadian Journal of Administrative Sciences*, September, 1988, pp. 55-61.
12. Kahn, S. *Using option pricing theory to value assets*. *Option Pricing*, April 1992, pp. 82-85.
13. Vonnegut A. *Real Options Theories and Investment in Emerging Economies*. *Emerging Markets Review*, 1 – 2000, pp. 82-100.

7. Corporate valuation in different industries

The specificity of mining, telecom, media and finance industries. Writing the industry survey: main issues and parts. Key performance indicators in mining, telecom, media and finance industries. Building the financial model for companies from different industries: main assumptions and steps. Forecasting sales growth rate, cost of goods sold, sales, general and administrative expenses, capital expenditures and working capital in different industries. Building the pro forma financial statements. Calculating cost of capital in mining, telecom, media and finance industries. Choosing peer companies and multiples in different industries. Valuation in mining, telecom, media and finance industries: case studies based on real data.

Main texts:

1. Hitchner J.R., *Financial Valuation: Applications and Models*, second edition, John Wiley&Sons, 2006 (hse electronic library «Books 24x7») – Ch.26
2. 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.21