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

Факультет экономических наук
Департамент финансов

Рабочая программа дисциплины «Оценка стоимости компании 2
(продвинутый уровень)»
(Advanced Business Valuation)

для образовательной программы «Стратегическое управление финансами фирмы»
направления 38.04.08 «Финансы и кредит»
подготовки магистра

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Одобrena на заседании департамента финансов
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Руководитель департамента
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Утверждена Академическим советом образовательной программы
«Стратегическое управление финансами фирмы»
«___»____________ 201_ г., № протокола_________________

Академический руководитель образовательной программы
А.Н. Степанова ___________________

Москва, 2016
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Syllabus

ADVANCED BUSINESS VALUATION

Faculty: Economics
Year: 2016/17
Course name: Advanced Business Valuation
Level: Master
Language of instruction: English
Period: January, 26 – June, 10
Workload: 72 hours of classes

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Course description:
The Advanced Business 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 high levered firms, firms with negative earnings, private firms, and valuation of options. You also discuss how to evaluate companies in different industries: mining, telecom, media and finance. Participants are provided with the opportunity to work in small teams in order to prepare reviews of empirical literature, cases and analytical tasks based on real data.

The key goal of this course is to provide students with sufficient theoretical knowledge and practical experience to be able to value a company using different valuation models (DCF, APV, Residual income, Multiples) in normal and special cases.

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 value firms with changing capital structure and high levered firms;
- the advantages and disadvantages of Residual income models;
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).

**Competencies:**

After completing the course the student develops the following competencies:

- is willing to work with information from a variety of sources (CK-6) – cases, analytical tasks devoted to business valuation based on the data from financial statements and financial data from open access;
- is able to generalize and discuss the results of theoretical and empirical studies and to reveal the possible directions for further research in examined area (ПК-1) – literature reviews;
- is willing to present the results of team work devoted to a particular theme (ПК-8) – literature reviews, cases, analytical tasks;
- is able to reveal and analyse company’s key value drivers (ПК-14) – exercises, cases;
- is able to apply different models to value company’s intangible assets (ПК-17) – cases;
- is able to justify the efficiency of company’s strategic decisions (acquisitions, recapitalization, other long-term investments) and make recommendations (ПК-20; ПК-25) – cases, analytical tasks.

**Recommended Prerequisites:**

Corporate Finance-1,2, International Financial Reporting Standards

**Teaching method:**

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

**Course texts:**

**Main texts:**

Supplementary texts:
Professionals, Financial Valuation and Litigation Expert, Issue 1
applied corporate finance, volume 12 number 4, pp. 94-101

**Grading:**

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

- Home assignments 60%
  (5 team projects)
- Final case 15%
- Final exam 25%

Total 100%

**Grades criteria:**

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
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<tbody>
<tr>
<td>0</td>
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<td>8</td>
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**Teaching hours for topics and activities:**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Total (hours)</th>
<th>Class (hours) including</th>
<th>Self study</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Lectures</td>
<td>Practice</td>
</tr>
<tr>
<td>1. Introduction to valuation</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2. Premiums and discounts in business valuation</td>
<td>24</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3. Income approach. Valuing companies by cash flow discounting: main steps, models, and problems.</td>
<td>34</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>4. Income approach. Capitalization methods and residual income valuation methods.</td>
<td>24</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
Course outline:

1. **Introduction to valuation**


**Main texts:**

2. **Premiums and discounts in business valuation**

   The impact of controlling (non-controlling) ownership interest and marketability on company value: control premium (CP), discount for lack of control (DLOC) and discount for lack of marketability (DLOM).


   Liquidity and marketability. Factors that decrease the illiquidity discount. Main methods used to measure marketability discount (restricted stock studies, pre-IPO studies, option pricing, bid-ask spread, multiple method, Mercer approach (QMDM)). Determinants of DLOM.

   The size of premiums and discounts: results of empirical studies. Features of applying premiums and discounts in practice (for companies from developed and emerging capital markets).

**Main texts:**

**Supplementary texts:**


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


Valuing companies with changing capital structure. Original adjusted present value model (APV), compressed APV, recursive WACC model: key assumptions and main steps. Valuation of companies with high leverage (LBO case).

Main texts:

Supplementary texts:
1. Arzac E. Valuation for Mergers, Buyouts and Restructuring, John Wiley&Sons, 2005, Ch.2,3,6


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.


Main texts:

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


Relative valuation in emerging capital markets. Comparable companies from another countries. The importance of country risk adjustments (the sovereign spread method, the relative market coefficients and the regression approach).
Main texts:

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

6. The role of cost approach in business valuation. Valuation of intangible assets

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


Main texts:

Supplementary texts:

Topic 7. Real options and valuation.


**Main texts:**

**Supplementary texts:**

8. 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:**
Preliminary list of cases and analytical tasks (in teams):

1. Literature review «Premiums and Discounts in Business Valuation». The main points that should be highlighted and discussed by each team:
   - Methods that are applied by researchers to calculate and analyze control premiums and discounts for lack of marketability.
   - Samples that are used by researches
   - Results (values of premiums and discounts) that the authors have obtained by analyzing companies from developed and emerging capital markets (the comparative analysis of results).
   - Main determinants of control premiums and discounts of lack of marketability
   - The ability to assess control premiums and discounts for lack of marketability based on Russian data (discussion)

2. Harvard Business School Case «Valuation of AirThread Connections». This case is devoted to valuation of the company using APV method.

3. Literature review «Applying multiples in business valuation in developed and emerging capital markets». The aim of this review is to analyze and discuss the following problems based on the results of empirical studies: number of comparable firms in the sample, criteria for comparable company selection, determinants of different multiples, ways to determine the final figure from public company method.

4. Kellog School of Management «Universal Display Corporation: Go Long or Short?». This case is devoted to valuation of the company using income and market approach to business valuation.

5. Analytical task. This task is devoted to real option valuation. The aim of this task is to apply real option technique to Russian companies.

6. Final case: valuation of Russian companies in the following industries: mining, telecom, media and finance, based on the financial data from open access. The students should apply all appropriate methods and techniques to value firms in these industries.

List of self-control questions:

1. What are the main myths of valuation?
2. What are the main purposes for business valuation?
3. What is the difference between market value, fair value and investment value?
4. What are the main steps of valuation procedure?
5. What information is needed for corporate valuation?
6. What does the term normalization of company’s financial statements mean? Why is it important to normalize historical financial statements?
7. What is control? What are the main prerogatives of ownership control?
8. Please, give the definition of the discount for lack of marketability.
9. What is the difference between liquidity and marketability?
10. What levels of value do you now?
11. What are the advantages and disadvantages of different methods that we can use to estimate the control premium (M&A method, block transaction method, event study, dual-class ownership)?
12. Please, describe the idea of the Mercer approach to control premium estimation.
13. What are the advantages and disadvantages of different methods that we can use to estimate the DLOM (restricted stock, pre-IPO, option pricing, multiples)?
14. Please, describe the QMDM model.
15. How to apply premiums and discounts in business valuation?
16. What entity-level and shareholder-level discounts do you know?
17. What is the main idea of income approach to business valuation?
18. What is the difference between DCF method and capitalization method?
19. Please, write and explain the FCFF and FCFE formula.
20. Please, write and explain the CCF formula.
21. What is the main premise of DCF model?
22. What are the key value drivers?
23. How could we define the company’s future growth rate?
24. What is the difference between marginal tax rate and effective tax rate?
25. What is the difference between working capital and net working capital?
26. What methods are used to forecast the company’s future cash flows?
27. How we should take into account the company’s non-operating expenses, one-time charges, reserves, provisions and foreign currency?
28. What factors influence the length of the explicit forecast period?
29. What are the main characteristics of stable (mature) companies?
30. What methods can be used to calculate terminal value?
31. What models should we use to calculate cost of equity in emerging capital markets?
32. How to estimate value per share?
33. What is the difference between discount rate and capitalization rate?
34. What methods we should apply to value firms with changing capital structure?
35. What are the differences between the following models: original APV, compressed APV, recursive WACC?
36. Please, show the algorithm of excess cash flow method.
37. How to estimate the discount rate for net tangible assets under excess cash flow method?
38. What is the idea of economic profit model?
39. Please, discuss the similarities and differences between EVA and free cash flow.
40. Please, show the algorithm of Edwards-Bell-Ohlson valuation technique.
41. What is the main idea of market approach to business valuation?
42. What is the difference between public company method and M&A method to business valuation?
43. What are the basic steps of using multiples?
44. How could you define the comparable firm?
45. At what characteristics of comparable firms we should look at first of all according to empirical studies?
46. Please, discuss the advantages and disadvantages of different multiples (P/E, EV/EBITDA, P/BVequity, EV/Sales)
47. What are the main determinants of P/E ratio; EV/S ratio; P/BVequity ratio, EV/EBITDA?
48. Suppose the situation: you value a firm in emerging capital market. For this firm you find the peers from developed capital markets. Do you need any adjustments to the multiples in this situation? If, yes, please, explain how would you make the adjustments. If, no, explain why.
49. Please, describe Merton’s approach for valuing risky debt.
50. What are the types of real options in equity valuation?
51. How to value firms with option to expand and option to defer?
52. What are the features of real option valuation in emerging markets?
53. What are the main steps of net asset value method?
54. What does it mean: to construct a value-basis balance sheet?
55. Please, give the algorithm of liquidation value method?
56. Please, give the definition and classification of intangible assets.
57. What approaches and methods could we use to find the fair value of intangible assets?
58. What method should we use to estimate value of brands?
59. What are the features of valuing companies in media industry (finance, telecom and mining)?
60. What are the main steps of industry analysis?
61. What are the value drivers of companies in different industries: mining, telecom, media and finance?

**Grading**

The grade is based on team projects (60%), final case (15%) and final exam (25%).
Team projects include literature reviews, cases and analytical tasks that are prepared in teams up to 5 students. There will be two literature reviews, three cases and one analytical task during the course. Final exam includes theoretical and practical questions in the form of open questions, tests (multiple choice) and exercises.