

Syllabus of the course «Finance (advanced)»

Approved by
Academic council of the Global Business
Master's programme
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ECTS	3 taught at HSE (9 overall)
Contact hours	24 taught at HSE
Self-study	114 taught at HSE
Year	1 st Master
Teaching format	Full time (without online part)

I. COURSE AIM, LEARNING OUTCOMES AND PREREQUISITES

The objectives of mastering the discipline "Finance (advanced level)" are to form students' complex knowledge about modern directions of development of the theory and practice of corporate finance, models of analysis of the company's financial decisions, results and tools for their empirical testing in mature and emerging markets.

To master an academic discipline, students must possess the following knowledge and competencies:

- Know the prerequisites for the construction, structure and economic conclusions of microeconomic, macroeconomic and econometric models;
- Be able to formulate and solve problems arising in the course of research and teaching activities that require in-depth professional knowledge;
- Be able to choose adequate methods and models for the study of specific micro and macroeconomic processes, adapt existing methods to the requirements of the specifics of the tasks, as well as develop new methods;
- Present the results of theoretical and applied research in the form of written works;
- Have the skills of independent research.
- Know the basics of accounting and / or management accounting
- Know the basics of macroeconomics, microeconomics, statistics

The main provisions of the discipline should be used further in the study of the following disciplines:

- Project seminar
- Projects
- International Marketing

To successfully complete this course the students should have the following knowledge and competences:

- Basic economics and financial terminology in English
- Foundations of financial calculations with MS Excel and other tools
- Understanding of how to read and interpret financial statements.

II. COURSE CONTENT

Topic 1. Fiscal and Monetary Policy.

The essence of taxes, their role in the development of economic relations. Taxation and budget process. State and tax policy. The system of principles of taxation: economic, legal and organizational. The tax system of the Russian Federation, its legal regulation. The concept of a tax system. Types of taxes: federal, regional, local. Features and composition of federal taxes. Features and composition of regional taxes. Features and composition of local taxes. Elements of tax. The object of taxation. The tax base. Tax rates. Tax exemptions. The structure of the tax authorities of the Russian Federation. The Federal Tax Service.

The economic essence of corporate income tax. His role in the formation of budget revenues. Regulatory regulation of the procedure for calculating and paying corporate income tax.

The essence of the value added tax. Its role in the formation of revenue budgets. Regulatory regulation of the procedure for calculating and paying value added tax.

Characteristics of excise. Their role in the formation of budget revenues. Regulatory regulation of the procedure for calculating and paying excises. List of excisable goods. Payers of excise.

Special tax regimes.

Monetary policy of the Bank of Russia.

Topic 2. Financial Markets

The structure of the stock market. Securities market: stock market, bond market. Financial intermediaries. Financial risks. Banking sector.

Topic 3. Corporate finance and firm valuation: interconnection of conceptual provisions

Fundamental principles and approaches to evaluation. The method of discounted cash flows and the principles of calculating the present value of the company as an asset generating cash flow.

Factors determining the value of the company and their grouping. Evaluation of the ability of the company to generate cash flows from the assets used, the expected growth rate of cash flows, the time it takes to achieve stable growth and the cost of capital.

The method of comparison. Principles of choice of analog companies.

The reasons for the differences in the results of evaluation obtained on the basis of various methods. Analysis of situations and identification of conditions for the occurrence of financial bubbles.

Cash flow of the company (FCFF) and owners (FFCE), especially the calculation of the present value (PV), terminal value (TV), will dissect the value of the company through the expected dividend flow.

Topic 4. Current research on capital structure

The role of capital costs in modern financial analysis of the company. Cost of equity and methods for analyzing market risk premiums: historical and forecast methods for analyzing market risk premiums. Empirical studies of the adequacy of the "accounting" and "fundamental" beta.

Analysis of the return expected by the owners of the corporation in the growing capital markets. Systematic and non-systematic risks in a growing capital market. Types of barriers to diversifying unsystematic risks in growing capital markets.

Principles for analyzing expected returns based on the CAPM model in growing capital markets. Country risk and its components. Yield spread as an indicator of country risk. The problem of accounting for unsystematic risk in the analysis of profitability, expected by the owner of the corporation in a growing market. Modifications of CAPM for the emerging market (specific use of global CAPM, national CAPM, adjusted CAPM). Alternative approaches to analyzing the cost of equity in growing markets: principles of the D-CAPM Estrada model, cumulative methods.

The role of the concept of capital structure in modern financial analysis. MM theorem as a methodological basis for the study of capital structure. Development of models for the analysis of capital structure in the context of weakening the assumptions of the basic theorem of MM.

Methods and results of the study of the role of information asymmetry in the choice of capital structure. The capital structure of Russian companies and the principles of its research.

Stages of development of a compromise concept: the need to move from static to dynamic compromise models of capital structure. Studies of tax benefits associated with debt financing. Principles of modeling the choice of capital structure depending on the tax factor (Graham, 2003). Quantitative assessment of tax savings associated with debt financing. Dynamic trade-off models of the structure of capital with the condition of the absence of transaction costs (Brennan / Schwartz, 1984). Revision of financial leverage (mean reversion of financial leverage) and movement towards the target capital structure. Key results of empirical studies of the compromise concept of capital structure.

Principles of a model (hierarchy) of financing (pecking order of financing) and methods for testing it (Shyam-Synders, 1991; Frank / Goyal, 2003; Fama / French, 2002). Signal argument of the order (hierarchy) of financing. The model of the hierarchy of choice of sources of financing, taking into account the participation of shareholders in new issues of shares (the pecking or funding sources with the asymmetry of company risk information (Halos / Heider, 2004).

Theme 5. Current research on the models of investor payments policy.

Dividend Disputes: Right and Left Radical Theories and Their Empirical Support. Signal payment policy models. Investigations of the signal effects of payment policies to investors. Patterns of stock repurchase policies and their empirical research

"Stylized Facts" Lintner and their testing. Country comparisons of dividend payout policies: empirical studies on Canadian and Australian companies (Chateau (1979) and Shevlin (1982)), French (MacDonald et al. (1975)), United Kingdom (Lasfer (1996)).

Signal payment policy models and their development. Model of knowledgeable clients (Alen / Bernardo / Welch, 2000), changes in signal effects (Grullon / Michaely / Swamianathan, 2002). Basic test methods for signaling corporate payment policy models: event method, time series analysis (Fama / French, 2001). Key results of empirical studies of payoff effects signal effects. Stylized facts of stock repurchase transactions. The cost of adverse selection in stock repurchase

transactions (Brennan / Thakor, 1990). Empirical evidence of stock repurchases. Lintner's stylized fact model adjustment (Grullon / Michaely, 2002). Decisions on stock repurchases and options for you-management schemes (Weisbenner, 2000). A study of the determinants of corporate wwp policies in the new economy (Brav / Graham / Harvey / Michaeli, 2003). Dividend premium in new issues (Baker / Wurgler, 2000). New dividend policy factors: debt rating, stock buyback, investor sentiment and dividend premium phenomenon (Baker / Wurgler, 2000).

III. GRADING

The teacher assesses the work of students in seminars and practical classes: activity in the classroom, active discussion of articles, the correct solution of problems. Estimates for the work at the seminars and practical classes teacher puts in the work sheet. The score on a 10-point scale for work in seminars and practical classes is determined before the intermediate or final control

- G class.

The cumulative current control score G_{cum} takes into account the student's current control results as follows:

$$G_{cum} = 0.8 * G_{h/w} + 0.2 * G_{class}$$

The resulting grade for the discipline is calculated as follows:

$$G_{final1} = 0.6 * G_{cum} + 0.4 * G_{exam}$$

Grades are rounded arithmetically.

Where G_{final1} - is the grade received by the students at HSE – Nizhny Novgorod at the end of the second module.

The final grade that appears in the diploma is calculated in the following way:

$$G_{final} = 0,3 G_{final1} + 0,3G_{final2} + 0,4G_{final3}$$

where $G_{cumulative2}$ – is the grade received by the students at Johannes Kepler University (Austria) during their mobility period;

$G_{cumulative3}$ – is the grade received by the students at University of Bergamo (Italy) during their mobility period.

IV. SAMPLE ASSESSMENT TOOLS

Tools for ongoing assessment

1. You have been asked to calculate the debt ratio for a firm that has the following components to its financing mix –

- The firm has 1 million shares outstanding, trading at \$ 50 per share.
- The firm has \$ 25 million in straight debt, carrying a market interest rate of 8%.
- The firm has 20,000 10-year convertible bonds outstanding, with a face value of \$1000, a market value of \$1100, and a coupon rate of 5% paid twice a year.

Estimate the debt ratio for this firm.

2. Rubberman Corporation, a manufacturer of consumer plastic products, is evaluating its capital structure. The balance sheet of the company is as follows (in millions):

Assets		Liabilities	
Fixed Assets	4000	Debt	2500
Current Assets	1000	Equity	2500

In addition, you are provided the following information:

- The debt is in the form of long term bonds, with a coupon rate of 10%. The bonds are currently rated AA and are selling at a yield of 12% (the market value of the bonds is 80% of the face value).
- The firm currently has 50 million shares outstanding, and the current market price is \$80 per share. The firm pays a dividend of \$4 per share and has a price/earnings ratio of 10.
- The stock currently has a beta of 1.2. The six-month Treasury bill rate is 8%.
- The tax rate for this firm is 40%.

- What is the debt/equity ratio for this firm in book value terms? in market value terms?
- What is the debt/(debt+equity) ratio for this firm in book value terms? in market value terms?
- What is the firm's after-tax cost of debt?
- What is the firm's cost of equity?
- What is the firm's current cost of capital?

3. Now assume that Rubberman Corporation is considering a project that requires an initial investment of \$100 million and has the following projected income statement:

EBIT	\$20 million
- Interest	\$4 million
EBT	\$16 million
Taxes	\$6.40 million
Net Income	\$9.60 million

(Depreciation for the project is expected to be \$5 million a year forever.)

This project is going to be financed at the same debt/equity ratio as the overall firm and is expected to last forever. Assume that there are no principal repayments on the debt (it too is perpetual).

- Evaluate this project from the equity investors' standpoint. Does it make sense?
- Evaluate this project from the firm's standpoint. Does it make sense?
- In general, when would you use the cost of equity as your discount rate/benchmark?
- In general, when would you use the cost of capital as your benchmark?
- Assume, for economies of scale, that this project is going to be financed entirely with debt. What would you use as your cost of capital for evaluating this project?

Tools for final assessment

Describe the following issues covered in the course:

- Approaches to the valuation of the company.
- Valuation of equity.
- Estimate the value of the company based on the present value of free cash flows.
- Estimation of firm value on the basis of the resulted dividend payments.
- Valuation of the company by the comparative method.
- Research market risk premium and their results.
- Research the specific risks of growing capital markets. Country Risk Premiums
- Capital structure models.
- Studies on the signal effects of investor payout policies.
- Capital structure in firms in emerging capital markets.
- Payout policies in firms in emerging capital markets.

V. RESOURCES

5.1 Main literature

- Brealey, R. A. Principles of Corporate Finance / R. A. Brealey, S. C. Myers, F. Allen. - 11th global ed. - Berkshire : McGraw Hill Education, 2014. - XXVIII, 889 p., AP 1-10, GI 1-18, I 1-25.

5.2 Further readings

1. Danthine, J.-P. Intermediate Financial Theory / Danthine, J.-P., J. Donaldson. - 2nd ed. - Amsterdam : ELSEVIER Academic Press, 2005. - 377 p.
2. Damodaran A. Applied Corporate Finance, Forth Edition, 2014 [Электронный ресурс]
Режим доступа: <http://people.stern.nyu.edu/adamodar/pdfiles/acf4E/acf4Ebook.pdf>

5.1 Software

№	Name	Access
1.	Microsoft Windows 7 Professional RUS Microsoft Windows 10 Microsoft Windows 8.1 Professional RUS	<i>Из внутренней сети университета (договор)</i>
2.	Microsoft Office Professional Plus 2010	<i>Из внутренней сети университета (договор)</i>

5.2 Professional database, enquiry systems, internet sources (electronic educational resources)

№ п/п	Name	Access
<i>Professional database, enquiry systems</i>		
1.	Консультант Плюс	<i>Из внутренней сети университета (договор)</i>
2.	Электронно-библиотечная система Юрайт	URL: https://biblio-online.ru/

5.3 Course support

Lecture rooms for the course classes are equipped with the necessary tools for the course visual aids demonstration:

- computer with access to the internet (operational system, office software packages, antivirus software);
- multimedia projector with remote control.