## Strategic Financial Management

Lecturer: Alexander I. Zaporozhsky

## Course description

Currently, the theory and practice of financial management offers a variety of metrics to measure corporate performance. However, most of companies use the system of the operational control based on the comparison of planned and actual results. However, application of this approach provides limited possibilities to estimate the success of long-term strategic tasks implementation.

This course is focused on the strategic aspects of the corporate management and methodological issues for development of value-based management systems. A special attention is devoted to measures and approaches of the corporate strategy effectiveness evaluation and strategy monitoring.

## Teaching objectives

- Understand the limitations of the traditional corporate performance metrics
- Get an overview of the Value-Based Management (VBM) concept
- Examine major approaches to the firm valuation and learn their practical applicability
- Examine the most widely used VBM measures and models, understand their advantages and limitations
- Examine the issues of VMB methods implementation in practice
- Get acquainted with the key principles of the financial modeling to assess the firm's value and make the strategic decisions.

## Teaching methods

The learning process is organized in the form of the seminars i.e. in the form of an interactive discussion. The course also envisages individual learning of some of the materials.

#### Assessment

The group case involves building financial model, valuation exercise and calculation of the major VBM metrics based on the real company data. It is assumed that the case will be solved by a small group of students (4–5 persons).

The final exam consists of 2–3 open questions in the format of an essay and 1–2 problems (similar to the problems discussed during the seminars). The maximum score is 20 (50% — for open questions, 50% — for the problems).

In case of talking/cheating suspicion during the exam — a student receives the penalty of –5 points for the first warning, exam results are cancelled after the second one.

#### Grade determination

The final score consists of the following components:

- 10% participation in the seminar discussions
- 25% homework
- 25% group case
- 40% final exam

## Main reading

- 1. Коупленд Т., Муррин Дж. Стоимость компании: оценка и управление. М.: Олимп-бизнес, 2007
- 2. Ameels A., Bruggeman W., Scheipers G. Value Based Management: An Integrated Approach to Value Creation. A Literature Review. 2002.
- 3. Madden B. CFROI Valuation Model. // Journal of Investing, 7 (Spring 1998) pp. 31–44.
- 4. Copeland T., Dolgoff A. EBM: Outperform Expectations with Expectations-Based Management $^{TM}$
- 5. Ottosson E., Weissenrieder F. CVA, Cash Value Added a new method for measuring financial performance // Gothenburg Studies in Financial Economics. 1996. Study 1996:1. 10 p.
- 6. Ивашковская И.В. Управление стоимость компании: вызовы российскому менеджменту. // Российский журнал менеджмента, №4 2004. с. 113–132.
- 7. Ивашковская И.В. Управляемая стоимость. // Журнал секрет фирмы, 4 (20)-2003.
- 8. Ивашковская И.В. Шпаргалка для собственника. // Журнал секрет фирмы, 5 (21)-2003.

9. Ивашковская И.В. Система стоимостных координат. // Журнал секрет фирмы, 6 (22) — 2003.

#### Course outline

# 1. Value-based Management (VBM) — A New Paradigm of the Financial Management

- 1. Corporate investment and financing decisions. Sources of financing: dept and equity capital. Financial intermediaries and financial market: opportunities and limitations for the companies. Corporate Finance and its role and function in the company.
- 2. Formal definition of VBM. Genesis of VBM. Transformation of company analytical model: accounting and financial models of the company. Financial and accounting approaches to profitability analysis. Book and market value.
- 3. Major components of VBM. Corporate value management cycle.
- 4. The VBM development factors.
  - (a) Influence of the intra-business processes. The phenomenon of the financialization.
  - (b) Escalation of the principal-agent conflict and emergence of the market for corporate control. Elements of the principal-agent conflict. Example of Management Buyout (MBO).
  - (c) Corporate dissatisfaction with existing performance measurement systems: problems with traditional accounting and cash flow measures.
  - (d) Activism of the consultancies in marketing VBM as a consulting product.
- 5. Value maximization as a corporate objective function: fundamental assumption of the VBM. Corporate objective function. Value maximization theory. Stakeholders theory. Definition of «stakeholder». Arguments for value maximization theory.

#### Required literature:

1. Коупленд Т., Муррин Дж. Стоимость компании: оценка и управление. М.: Олимп-бизнес, 2007

- 2. Jensen M. Value Maximization, Stakeholder Theory, and the Corporate Objective Function // Journal of Applied Corporate Finance Vol. 14 (3) Fall 2001 pp. 8–21.
- 3. Koller T. What is value-based management? // The McKinsey Quarterly -1994 (3) pp. 87-101

#### Recommended literature:

- 1. Ивашковская И.В. Управляемая стоимость. // Журнал секрет фирмы, 4 (20)-2003.
- 2. Ивашковская И.В. Управление стоимость компании: вызовы российскому менеджменту. // Российский журнал менеджмента, №4 2004. с. 113–132.
- 3. Ивашковская И.В. Шпаргалка для собственника. // Журнал секрет фирмы, 5~(21)-2003.
- 4. Ивашковская И.В. Система стоимостных координат. // Журнал секрет фирмы, 6 (22) 2003.
- 5. Теплова Т.В. Корпоративные финансы в России: перспективы и реальность. // Управление корпоративными финансами, 3 2004.
- 6. Martin J., Petty W. Value Based Management: The Corporate Response to the Shareholder Revolution. Oxford University Press 2000 249 p.
- 7. Froud J., Haslam C., Johal S., Williams K. Shareholder value and financialization: consultancy promises, management moves. // Economy and Society, 29 (1) February 2000. pp. 80–110.
- 8. Jensen M. The Efficiency of Takeovers. // The Corporate Board September/October, 1985 pp. 16–22.
- 9. Jensen M. The Agency Costs of Free Cash Flow: Corporate Finance and Takeovers. // American Economic review. Vol. 76 (2) May 1986. pp. 323–329.
- 10. Jensen M. The Takeovers Controversy: Analysis and Evidence. // The Midland Corporate Finance Journal Summer, 1986.
- 11. Jensen M., Ruback R. The Market for Corporate Control: the Scientific Evidence. // Journal of Financial Economics Vol. 11, Nos. 1–4 April, 1983.

- 12. Jensen M., Warner J. The Distribution of Power Among Corporate managers, Shareholders, and Directors. Harvard NOM Research Paper. December 2000. 30 p.
- 13. Jensen M. Chew D. US Corporate Governance: Lessons from the 1980's // Jensen M. A Theory of the Firm: Governance, Residual Claims And Organizational Forms. Harvard University Press Dec. 2000.
- 14. Freeman E., McVea J. A Stakeholder Approach to Strategic Management. // The Darden School, University of Virginia, Working Paper No. 01–02.
- 15. Howell R. Fixing financial reporting: Financial statement overhaul. // Financial Executive, Vol. 18 (2) March/April 2002 pp. 40–42.
- 16. Howell R. Tying free cash flows to market valuations. // Financial Executive, Vol. 18 (3) May 2002 pp. 17–19.
- 17. Stewart B. How To Fix Accounting—Measure And Report Economic Profit. // Journal of Applied Corporate Finance. Vol. 15 (3) Spring 2003. pp. 63–82.

#### 2. Value in Strategic Financial Management

- 1. What is company's value and how it can be measured? Importance of shareholder value creation. Technology of contemporary firm valuation. Major approaches to firm valuation: income, market and cost approaches.
- 2. Main valuation methods within market approach: transaction method, guideline company method. Advantages and limitations of market approach.
- 3. Wrap-up: PV and FV concepts. Time value of money. Nominal and real cash flows. Calculation of different types of level cash flows (annuities). Rules for discount rate selection. Sensitivity and scenario analysis. Monte Carlo simulations. Breakeven point analysis.
- 4. Main valuation methods within income approach. Discounted Cash Flow (DCF) model: algorithm of valuation. Dividend Discount model. Financial approach to cash flow analysis. Conventional discounted cash flow models: Free Cash Flow to Firm (FCFF), Free Cash Flow to Equity (FCFE). Discount rate calculation: CAPM, APT, build-up approach. Terminal value calculation. Gordon model. Exit Multiple model. Influence of economic growth drivers on firm's value. Advantages and limitations of income approach.

5. The link between corporate strategy and firm's value. Firm's value as a corporate strategy efficiency criterion. Financial assessment of the corporate strategy. What should be managed: intrinsic value or market capitalization?

#### Required literature:

- 1. Коупленд Т., Муррин Дж. Стоимость компании: оценка и управление. М.: Олимп-бизнес, 2007
- 2. Бригхем, Ю., Гапенски, Л. Финансовый менеджмент. Экономическая школа. 1999.
- 3. Брейли Р., Майерс С. Принципы корпоративных финансов. ЗАО «Олимп-Бизнес», М.: 2004. Главы 1-3.
- 4. Грязнова А.Г., Федотова М.А., Эскиндаров М.А., Тазихина Т.В., Иванова Е.Н., Щербакова О.Н. Оценка стоимости предприятия (бизнеса) // М.: ИНТЕРРЕКЛАМА. 2003. 544 с.

#### Recommended literature:

- 1. Brealey R., Myers S., Marcus A. Fundamentals of Corporate Finance. Third Edition. 2001. Sections 1, 3.
- 2. Теплова Т.В. Финансовый менеджмент: управление капиталом и инвестициями. ГУ-ВШЭ. 2000. Глава 4.

### 3. Corporate investment decisions and their performance analysis

- 1. Investment project: main characteristics and types. Free cash flows as a base for project efficiency analysis. The elements of free cash flow at different stages of investment project realization: initial investments, operating cash flows during the life of the project, terminal cash flows. Sunk costs and their treatment in investment analysis. Treatment of depreciation and amortization and other non-cash expenses. The role of investment in working capital. Interrelations of projects and cannibalization effect. The role of time factor in investment projects payback analysis.
- 2. Investment project criteria: Net Present Value (NPV) of the project, payback period, discounted payback period, internal rate of return (IRR), profitability index. Limitations and pitfalls of the investment criteria. Competing (mutually exclusive) projects and the IRR rule.
- 3. Investment criteria for competing recurrent projects (long- versus short-lived equipment): chain and equivalent annual cost methods.

#### Required literature:

1. Бригхем, Ю., Гапенски, Л. Финансовый менеджмент. Экономическая школа. 1999. Глава 7.

#### Recommended literature:

- 1. Brealey R., Myers S., Marcus A. Fundamentals of Corporate Finance. Third Edition. 2001. Section 4
- 2. Брейли Р., Майерс С. Принципы корпоративных финансов. ЗАО «Олимп-Бизнес», М.: 2004. Главы 5, 6.
- 3. Теплова Т.В. Финансовый менеджмент: управление капиталом и инвестициями ГУ-ВШЭ. 2000. Глава 7.

## 4. Corporate financing decisions. Debt and hybrid capital of the firm and its valuation

- 1. Type of debt capital: main characteristics. Nominal and real interest rate. Bank loan and credit facility (credit line). Effective interest rate. Floating and fixed interest rate. Secured and unsecured debt. Types of collateral.
- 2. Classification of bonds: coupon/zero-coupon, floating (inflation-indexed)/fixed rate bonds, Eurobonds, convertible/non-convertible bonds, callable/non-callable bonds. Face value (par value). Coupon and coupon rate.
- 3. Market valuation of the bonds using discounted cash flow model: zero-coupon bonds, bonds with annual/semiannual coupon payments. Market and fundamental (intrinsic) value of the debt.
- 4. Yield curve and its role in the analysis of corporate debt. Term structure of interest rates: Expectations Theory, Segmented Markets Theory, Liquidity Premium Theory, Preferred Habitat Theory. Risk-free rate. Interest risk. Default premium. Bond ratings.
- 5. Discounting cash flows on corporate bonds taking into consideration the term structure of interest rates. Current Yield and Yield to Maturity. Analysis of bond yield and its link to the yield curve. Promised and expected yield to maturity.
- 6. Hybrid capital: preferred shares. Market valuation of preferred shares.

#### Required literature:

1. Бригхем, Ю., Гапенски, Л. Финансовый менеджмент. Экономическая школа. 1999. Глава 4.

#### Recommended literature:

- 1. Brealey R., Myers S., Marcus A. Fundamentals of Corporate Finance. Third Edition. 2001. Section 3
- 2. Теплова Т.В. Финансовый менеджмент: управление капиталом и инвестициями. ГУ-ВШЭ. 2000. Глава 4.

#### 5. Financial Modeling: The Fundamentals and Practice

Major principles of financial modeling. Financial model structure. Using MS Excel as a tool for financial modeling. Scenario and sensitivity analysis in MS Excel.

# 6. Typology of VBM models. Change in shareholder wealth-based models: TSR, TBR, MVA, ER

- 1. Classification of VBM models. Change in shareholder wealth-based VBM models. Residual-income based VBM models. Cash flows based VBM models.
- 2. Total Shareholders Return (TSR) model. Description and calculation formula of TSR metric. Value creating/destroying criterion in TSR model. Area of applicability, advantages and limitations of TSR model.
- 3. Total Business Return (TBR) model. Description and calculation formula of TBR metric. Value creating/destroying criterion in TBR model. Area of applicability, advantages and limitations of TBR model.
- 4. Market Value Added (MVA) model. Description and calculation formula of MVA metric. Value creating/destroying criterion in MVA model. Area of applicability, advantages and limitations of MVA model.
- 5. Excess Return (ER) model. Description and calculation formula of ER metric. Value creating/destroying criterion in ER model. Area of applicability. Advantages and limitations of ER model.

#### Required literature:

- 1. Коупленд Т., Муррин Дж. Стоимость компании: оценка и управление. М.: Олимп-бизнес, 2007
- 2. Martin J., Petty W. Value Based Management: The Corporate Response to the Shareholder Revolution. Oxford University Press 2000-249 p.
- 3. Ameels A., Bruggeman W., Scheipers G. Value Based Management: An Integrated Approach to Value Creation. A Literature Review. 2002.

#### Recommended literature:

- 1. Birchard B. Mastering the New Metrics. // CFO October 1994 pp. 30–38.
- 2. Birchard B. Metrics for the Masses. // CFO Vol. 15 (5) May 1999 pp. 75–80.

#### 7. Residual-income based VBM models. EVA/EP

Economic Value Added (EVA) / Economic Profit (EP) model. Genesis of the model. Description and calculation formula of EVA metric. List and economic reasoning of major adjustments. Criteria for making adjustments. Value creating/destroying criterion in EVA model. Area of applicability, advantages and limitations of EVA model.

#### Required literature:

- 1. Коупленд Т., Муррин Дж. Стоимость компании: оценка и управление. М.: Олимп-бизнес, 2007
- 2. Martin J., Petty W. Value Based Management: The Corporate Response to the Shareholder Revolution. Oxford University Press 2000-249 p.
- 3. Ameels A., Bruggeman W., Scheipers G. Value Based Management: An Integrated Approach to Value Creation. A Literature Review. 2002.
- 4. Stewart B. EVA: Fact and Fantasy. // Journal of Applied Corporate Finance. Vol. 7 (2) Summer 1994.

#### Recommended literature:

- 1. Ehrbar A., Stewart B. The EVA Revolution. // Journal of Applied Corporate Finance. Vol. 12 (2). Summer 1999 pp. 18–31.
- 2. Ehrbar A. EVA: The Real Key to Creating Wealth. Wiley 1999.
- 3. Ehrbar A. Using EVA to Measure Performance and Assess Strategy. // Strategy & Leadership Vol. 27 (3) May/June 1999. pp. 20–24.
- 4. Fernandez P. Valuation Methods and Shareholder Value Creation. Academic Press. 2002. 640 p. Ch. 13, 14.
- 5. Fernandez P. EVA and Cash value added do NOT measure shareholder value creation. May 23, 2001.
- 6. Stewart B. The Quest for Value. NY: HarperCollins. 1991.

- 7. Stern J., Shiely J., Ross I. The EVA Challenge: Implementing Value-Added Change in an Organization. John Wiley. 2001.
- 8. Tully S. The EVA Advantage. // Fortune March 29, 1999 pp. 210.
- 9. Young D., O'Byrne S. EVA and Value-Based Management: A Practical Guide to Implementation. McGraw-Hill 2000. 494 p.
- 10. Ивашковская И.В. Управляемая стоимость. // Журнал секрет фирмы, 4~(20)-2003.
- 11. Ивашковская И.В. Управление стоимость компании: вызовы российскому менеджменту. // Российский журнал менеджмента, №4 2004. с. 113-132.
- 12. Ивашковская И.В. Шпаргалка для собственника. // Журнал секрет фирмы, 5~(21)-2003.
- 13. Ивашковская И.В. Система стоимостных координат. // Журнал секрет фирмы, 6 (22) 2003.

#### 8. CFROI model

CFROI model. Genesis of the model. Description and calculation formula of CFROI metric. List and economic reasoning for major adjustments. Value creating/destroying criterion in CFROI model. Area of applicability, advantages and limitations of CFROI model.

Required literature:

- 1. Madden B. CFROI Valuation Model. // Journal of Investing, 7 (Spring 1998) pp. 31–44.
- 2. Martin J., Petty W. Value Based Management: The Corporate Response to the Shareholder Revolution. Oxford University Press 2000 249 p.
- 3. Ameels A., Bruggeman W., Scheipers G. Value Based Management: An Integrated Approach to Value Creation. A Literature Review. 2002.

## 9. Cash Value Added (CVA) and Modified Cash Value Added (MCVA) models.

1. Specification of base CVA. Key input variable in CVA model. Strategic and Non- strategic investments: separation principle. Operating Cash Flow. Operating Cash Flow Demanded: calculation algorithm and economic reasoning. Strategic breakeven point. CVA metric. Value creating/destroying criterion. Relative metrics in CVA model: CVA Index,

- Cumulative CVA Index. Remaining Value metric. Comparison of CVA and EVA models. Equivalency of NPV of cash flows and NPV of CVA flows. Area of applicability of CVA model. Advantages and limitations of the model.
- 2. Modified Cash Value Added (MCVA) model. Key input variables in MCVA model. Modified algorithm for OCFD calculation. Economic reasoning for λ-coefficient. Key metrics in MCVA model: absolute and relative measures. Value creating/destroying criterion. Realized and non-realized value creation / destruction. Special cases and adjustments in MCVA model: serial investments, partial redemption of investments at the end of the project, existence of liabilities related to assets retirement, existence of externalities, infinite investment programs, negative expected operating cash flows. Value drivers in MCVA model. Area of applicability. Advantages and limitations of MCVA model.

#### Required literature:

- 1. Ottosson E., Weissenrieder F. CVA, Cash Value Added a new method for measuring financial performance // Gothenburg Studies in Financial Economics. 1996. Study 1996:1. 10 p.
- 2. Weissenrieder F. Value Based Management: Economic Value Added or Cash Value Added? // Gothenburg Studies in Financial Economics. 1997. Study 1997:3. 42 p.
- 3. Запорожский А.И. Использование модели модифицированной денежной добавленной стоимости (MCVA) в анализе сделок слияний и поглощений // Корпоративные финансы: перспективы и реальность. Финансовые механизмы трансформации компаний на растущих рынках капитала (слияния, поглощения, реструктуризация): сб. статей участников Второй межвуз. конф. молодых ученых / под науч. редакцией И. В. Ивашковской, Т. В. Тепловой; ГУ-ВШЭ. М.: Изд. дом ГУ ВШЭ, 2005.
- 4. Запорожский А.И., Ивашковская И.В. Оценка деятельности: новый взгляд // Журнал «Управление компанией» №3, 2006

### 10. Expectations-Based Management $^{TM}$ (EBM) model

- 1. EBM<sup>™</sup>: definition, calculation formula. Major characteristics of the model. Comparison of EVA® and EBM<sup>™</sup> models. Definition of TSR from EBM<sup>™</sup> perspective.
- 2. Influence of  $EBM^{TM}$  on firm's performance. Expectation management process. Impact of market noise on firm's value. Investment decision analysis within  $EBM^{TM}$  context.

3. Area of applicability. Advantages and limitations of  $EBM^{TM}$  model.

#### Required literature:

- 1. Copeland T., Dolgoff A. EBM: Outperform Expectations with Expectations–Based Management  $^{\top\!\!\!M}$
- 2. Copeland T. Value-Based Management A White Paper.

## Distribution of hours

#	Topic	Total	Contact hours		Self
		hours	Lectures	Seminars	study
1.	Value-based management $-$ a	10	4		6
	new paradigm of the financial				
2.	management Value in Strategic Financial	14	8		6
۷.	Management  Management	14	O		U
3.	Corporate investment decisions	12	4		8
	and their performance analysis				
4.	. Corporate financial decisions.	10	2		8
4.	Debt and hybrid capital and its	10	Δ		0
	valuation				
5.	Financial modeling: The fun-	12	4		8
C	damentals and practice.	1.0	0		0
6.	Typology of the VBM-models. Change in shareholder wealth-	10	2		8
	based models: TSR, TBR,				
	MVA, ER				
7.	Residual income-based VBM	10	2		8
	models. EVA/EP	10	2		
8.	CVA and MCVA models	10	2		8
9.	Expectations-based Manage-	10	2		8
10	ment <sup>™</sup> (EBM) model	1.0	0		0
10.	CFROI model	10	2		8
	Total:	108	32	0	76