

Правительство Российской Федерации

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

Факультет экономических наук
Департамент финансов

**Рабочая программа дисциплины
«Корпоративный риск-менеджмент»
(CORPORATE RISK MANAGEMENT)**

для образовательных программ:
направление 38.04.08.68 «Финансы и кредит» подготовки магистра
«Стратегическое управление финансами фирмы», 1 курс

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Утверждена «__»_____ 2015 г.
Руководитель департамента финансов
И.В. Ивашковская _____

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CORPORATE RISK MANAGEMENT

Syllabus

Sep, 2015

Faculty: Economics

Year: 2015/16

Course name: Corporate Risk Management

Level: Master, 1st year

Language of instruction: English

Period: Module 4

Credit: 3

Course Instructor and Contact Details:

Yury Dranev, dranioff@hotmail.com

COURSE DESCRIPTION

The course is designed for master students and represents an upper level course. This course discusses risk management from the perspective of non-financial corporations. The course examines various types of risks (market risks, credit risks and operational risks) and risk-management procedures in the context of the general framework of enterprise-wide risk management (ERM). The emphasis of the course is on theoretical approach of creating value with implementation of ERM rather than on the technical details of statistical measurement and pricing of derivatives. The course considers issues of risk measurement, risk aggregation, performance evaluation, capital allocation and strategic decision making. The course does not require extensive knowledge of mathematics and statistics. The course prerequisites are Corporate Finance 2 and Valuation.

COURSE OBJECTIVES

After the course student will know:

- main features of firm-wide risk management;
- key risk-management procedures applicable to market, operational and credit risks;
- how and when to use risk management procedures;

After the course student will be able to:

- Classify risks;
- Evaluate risk exposure;
- Describe the process of risk measurement, risk aggregation, performance evaluation, capital allocation and strategic decision making.

TEACHING METHODS

Lectures

Seminar sessions
Self-study
Group and individual work

GRADING

Your grade will be based on home assignments based on team work (case studies (80%)) and a written final exam (20%). You should work together in teams of 4-5 on your cases, and should hand in a joint solution with all of your names on it. There are 4 in-class case studies.

ASSESSMENT

Group projects (case studies)
Class participation
Final exam

COURSE OUTLINE

Topic 1. The Role of Risk Management.

The evolution of risk management. Creating value with risk management (reducing distress costs, funding disruptions, taxes, stakeholder costs, managerial incentives, large shareholders, planning costs). The firm wide risk management: the Enterprise Risk Management (ERM) approach. Risk monitoring versus managing risk. The building blocks of ERM. Identification of risk. Sources and types of risk (market, credit and operational). Risk mapping.

Topic 2. Measuring Market Risks.

Exposure measurement. Expected and unexpected loss. Value-at-Risk (VaR). Volatility and correlations. Delta-normal valuation. Riskmetrics™ approach. Historical simulation. Monte Carlo simulation methods. Implementation and model risk. Back testing of VaR. Derivatives and VaR. VaR and fat tails. Expected shortfall and other tail risk measures. VaR in the presence of liquidity risks. Applications of VaR and other risk measures to non-financial corporations. EaR and CFaR. Corporatometrics™. Stress testing and scenario analysis.

Topic 3. Managing Market Risks.

Managing currency risk. Measuring interest rate risks. Duration and convexity. Duration VaR. Managing commodity risk. Currency and interest rate derivatives. Swaps, caps and floors. Exotic structures and hybrid securities.

Topic 4. Measuring and Managing Credit Risk.

Probability of default, loss given default and recovery rates. Credit scoring. Credit spreads. Contingent claim approach (Merton's model) and the KMV Model. CreditMetrics™ and CreditRisk+. Default and default-time correlations. Risk mitigation techniques (including netting, rating triggers, and collateral). Credit derivatives, credit default swaps (CDS) and credit-linked notes.

Topic 5. Operational Risk Measurement. Financial risks besides market and credit risk. Risks due to deficiencies or mistakes from information systems and technologies, internal procedures, personnel, external events. Operational internal (incompetency /fraud, model/transaction risk, info systems, software, data bases) and external (environmental factors, change in political and regulatory regime). Specifics of operating risks. The top-down approach. The bottom-up approach. Key indicators. P&L volatility and distribution unexplained by market and credit risks. Measure losses using conditional probabilities. Management of operation risks. Internal control system (general policy by top management, assessment of risks, control procedures, current monitoring).

Topic 6. Firm-wide Risk Management Framework.

Cost of bearing and reducing risk across the firm (marginal and optimal). Definition of risk capital. Using a risk measure to set the optimal amount of capital. Risk aggregation. Estimating a firm-wide loss distribution. Correlations across market, credit, and operational risk. Allocation of risk capital across the firm. RAROC models. Applications of RAROC to evaluation of efficiency of work (backward-looking), optimal capital distribution (forward-looking), information for the stakeholders, managerial compensation. Risk measures and investment policy. Evaluating the performance of risk management systems. Risk measures and compensation. Strategic decisions. Evaluating strategic risks. Reallocating price risk to facilitate strategic acquisitions. Sources of value creation. Real options and their applications in corporate risk management. Failures in risk management. Future trends in corporate risk management.

MAIN TEXTBOOK.

James Lam Enterprise Risk Management: From Incentives to Controls, Second edition, Wiley Finance, 2014

INDICATIVE READING LIST.

1. Doherty N. Integrate Risk Management: Techniques and Strategies for Managing Corporate Risk. Englewood Cliffs, NJ: Prentice-Hall, 2000.
2. Meulbroek L. Integrate Risk management for the firm: A Senior Manager's Guide // Havard Business School. 2002.
3. Enterprise Risk Management – Integrated Framework (2004). The Committee of Sponsoring Organizations of the Treadway Commission.
4. Rene Stultz. Risk Management and Derivatives, 2002.
5. Alternative Risk Transfer: Integrated Risk Management through Insurance, Reinsurance, and the Capital Markets (The Wiley Finance Series). 2005.
6. Kevin Dowd. Measuring Market Risk.2-e. WILEY Finance. 2005.
7. Philippe Jorion. Value at Risk. McGraw Hill, 3e, 2007.

8. J. V. Rosenberg¹, T. Schuermann. A general approach to integrated risk management with skewed, fat-tailed risks. *Journal of Financial Economics* 79 (2006) 569–614.
9. John Hull (2006) *Options, Futures, and Other Derivatives*, Sixth Edition, Prentice-Hall.
10. Damodaran, Aswath. *Strategic Risk Taking: A Framework for Risk Management*. Pennsylvania: Wharton School Publishing. 2007
11. Dr. Andreas Müller, Munich. *Integrated risk-management*. Munich re group. 2002.
12. F. Fehlea, S. Tsyplakov. Dynamic risk management: Theory and evidence. *Journal of Financial Economics* 78 (2005) 3–47.
13. Jamie Rogers. *Strategy, value and risk – the real options approach*. 2004.
14. Kent D. Mille. Economic Exposure and Integrated Risk Management. *Strategic Management Journal*, Vol. 19, No. 5 (May, 1998), pp. 497-514
15. Michel Maisonneuve. *Integrated risk management* Deloitte & Touche LLP - Canada (English) May 27, 2006.
16. Shimpi, P.A. (2002), ‘Integrating risk management and capital management’, *Journal of Applied Corporate Finance*, Vol. 14, No. 2, Winter, pp. 27–40.
17. T.J. Andersen. *Risk Management, Capital Structure and Performance: A Real Options Perspective*. Copenhagen Business School, Denmark. 2005

DISTRIBUTION OF WORKLOAD

<i>Topics</i>	<i>Total hours</i>	<i>In-room classes</i>		<i>Self-study</i>
		Including		
		Lecture	Seminars	
The Role of Risk Management.	14	4	-	10
Measuring Market Risks.	18	4	4	10
Managing Market Risks.	18	4	4	10
Measuring and Managing Credit Risk.	18	4	4	10
Operational Risk Management Framework.	21	4	-	17
Firm-wide Risk Management Framework..	25	4	4	17
TOTAL:	114	24	16	74