BA 4514 - RISK MANAGEMENT

Term: Spring 2013
Lecturer: Buket İMİR
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Required Background: Students who wish to attend this course are required to have taken introductory statistics and finance courses. They should be familiar with financial markets and instruments.

Course Material: We will not use a specific textbook. Students should rely on the content provided during classes. However, I will recommend additional readings from time to time, some of which are listed below.

Recommended Reading:
“Investments”, Bodie, Kane and Marcus.

Course Description and Objectives:
This course makes an introduction into the theory and applications of risk management. The course will be focusing on the established financial risks, namely credit, market and liquidity risks. Operational risk will also be addressed, although not in detail. After introducing each risk type, the techniques commonly used in risk measurement will be discussed. These techniques will include some advanced quantitative methods like Value-at-Risk and scenario analysis as well as more traditional measurement techniques such as duration and gap analysis. The final part of the course will be dedicated to risk control. The topics will include asset liability management, capital allocation and risk-based performance measurement. During the course of the semester, we will also discuss the recent global financial crisis as it relates to the topics covered in this course.

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Course Outline:

1. Introduction to Risk Management
   a) Financial markets and instruments - recap
   b) Definition of risk
   c) Rise of risk management - lessons from financial disasters
   d) Different types of risks faced by financial institutions

2. Market Risk
   a) Definition of market risk
   b) Sources and types of market risk
   c) Foreign exchange risk
   d) Interest rate risk
   e) Other types of market risks
   f) Measuring market risk
      i. Duration
      ii. Gap analysis
      iii. Volatility
      iv. Value-at-Risk
      v. Scenario analysis and stress testing

3. Credit Risk
   a) Definition of credit risk
   b) Sources and types of credit risk
   c) Measuring credit risk
      i. Calculating risk exposure
      ii. External credit ratings
      iii. Default probabilities
      iv. CAMEL rating model
      v. Advanced methods - Credit VaR
   d) Credit derivatives and their role in the current financial turmoil

4. Liquidity Risk
   a) Definition of liquidity risk
   b) Sources of liquidity risk
   d) Measuring liquidity risk

5. Operational Risk

6. Risk Control
   a) Asset Liability Management
   b) Diversification - portfolio effect
   c) Hedging using derivatives
   d) Risk limits
   d) Capital allocation
   e) Risk adjusted performance measurement