uc3m Universidad Carlos III de Madrid

Business and Finance III: Risk Management in non-Banking Entities

Academic Year: (2019 / 2020) Review date: 28-04-2020

Department assigned to the subject: Business Administration Department

Coordinating teacher: SERRANO JIMENEZ, PEDRO JOSE

Type: Compulsory ECTS Credits: 6.0

Year: 2 Semester: 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

- Business and Finance I
- Business and Finance II

OBJECTIVES

Upon completion of this course the students are expected to:

- -Understand the risk management process;
- -Understand the value generating mechanisms of risk management;
- -Understand diversification effects, natural hedging and hedging with financial derivatives;
- -Understand the differences, benefits and drawbacks of using over the counter and exchange traded financial derivatives;
- -Perform simple hedging strategies such as:
- o Natural hedging strategies for currency risk;
- o Hedging strategies for interest rate risk with forwards and swaps;
- o Hedging strategies for commodities risk with financial futures;
- Hedging strategies for financial assets with financial options;
- o Hedging strategies for written options.
- -Understand the differences between Market risk and Credit risk
- -Understand the standard measures for assessing Market and Credit risks

DESCRIPTION OF CONTENTS: PROGRAMME

The course is divided into the following seven chapters:

Chapter 1. Risk management and firm value: this chapter analyses the concept of risk, the process of risk management, the mechanisms of value creation and diversification effects.

Chapter 2. Risk management with Forwards and Swaps: this chapter analyses hedging strategies for currency and interest rate risk using natural hedging and financial hedging with forwards and swaps.

Chapter 3. Risk management with Futures and Options: this chapter analyses hedging strategies for commodities and financial assets risk using financial futures and options.

Chapter 4. Hedging options the Greeks: this chapter analyses simple and complex hedging strategies for written options.

Chapter 5. Market risk. Main features. How to measure the market risk of a stock portfolio. The Value-at-Risk as proxy of market risk.

Chapter 6. Credit risk measurement: this chapter presents the main approaches for assessing credit risk. It also presents the standard modeling proposals in the credit literature.

Chapter 7. Credit derivatives: this chapter introduces the main features of derivatives designed for hedging against default risk.

LEARNING ACTIVITIES AND METHODOLOGY

The time in class will be divided between:

- -Presentation of theory (usually at the beginning of classes);
- -Solving and analyzing hedging examples;
- -Working out examples in class (usually in the second part of the class);
- -Making class presentations of case solutions.

By working in class it is possible to address and clarify many of the doubts students may have, however the lectures also provide additional and individual office hours.

ASSESSMENT SYSTEM

25% Individual homework sets.

25% Midterm

25% Cases in groups.

25% Final exam.

% end-of-term-examination: 25

% of continuous assessment (assignments, laboratory, practicals...): 75

BASIC BIBLIOGRAPHY

- Grinblatt, M., & S. Titman Financial Market and Corporate Strategy, Irwin/McGraw-Hill, (2003)
- John C. Hull Options Futures and Other derivatives, Prentice Hall, (1997)
- Smithson, C. W. Managing Financial Risk. 3rd edition, McGraw-Hill, (1998)

ADDITIONAL BIBLIOGRAPHY

- Hull, John Risk management & financial institutions, Wiley Finance, 2012
- Jorion, P. Financial Risk Manager, Wiley, 2003