uc3m Universidad Carlos III de Madrid

Financial risk management

Academic Year: (2018 / 2019) Review date: 24-04-2018

Department assigned to the subject: Business Administration Department

Coordinating teacher: RODRIGUEZ LOPEZ, ROSA

Type: Compulsory ECTS Credits: 6.0

Year: 3 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

FIXED INCOME AND DERIVATIVES ECONOMETRICS I

OBJECTIVES

This course is designed to train the participants in evaluating, hedging and measuring financial risks. In recent years the most widely used measure of risk is Value at Risk (VaR). The course introduce the VaR measure and discursses its strengths and weaknesses. VaR is calculated for market risk and also for credit risk.

DESCRIPTION OF CONTENTS: PROGRAMME

- 1 Introduction to Risk management
- Hedging Risks
- 3 The greeks and Portfolio Insurance
- 4 The management of Interest Rate Risk
- 5. Value at Risk (VaR).
- 6. Historical and Montecarlo Simulation of VaR
- 7. Back-Testing
- 8. VaR Limitations

LEARNING ACTIVITIES AND METHODOLOGY

- Class
- Group homeworks

ASSESSMENT SYSTEM

The goal of the final exam (50% of the final calification) is to verify the degree in which the competitions of knowledge have been acquired by the student. A MINIMUM GRADE OF 4.00 in this exam is needed to compute the weighted average. The 50% of the final calification that remains will correspond to 1 test examn (20%) and a presentation of an empirical case (in groups of 3 students).

% end-of-term-examination: 50 % of continuous assessment (assignments, laboratory, practicals...): 50

BASIC BIBLIOGRAPHY

- Hull, J Options Futures and Other Derivatives, Pearson, 2013
- J. Hull Risk Management and Financial Institutions, Willey, 2012
- Jorion Value at Risk: The New Benchmark for Managing financial Risk, McGRawhill, 2006

ADDITIONAL BIBLIOGRAPHY

- Rene M. Stulz Risk Management and Derivatives, Prentice Hall.