

**Capital Markets**

Code: 102327  
ECTS Credits: 6

Degree	Type	Year	Semester
2501572 Business Administration and Management	OT	4	0
2501573 Economics	OT	4	0

**Contact**

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**Use of languages**

Principal working language: catalan (cat)  
Some groups entirely in English: Yes  
Some groups entirely in Catalan: Yes  
Some groups entirely in Spanish: No

**Other comments on languages**

les mateixes que en cursos anteriors

**Teachers**

Joan Montllor Serrats

**Prerequisites**

Students taking this subject are supposed to have followed Finance I (102329) previously.

**Objectives and Contextualisation**

This subject studies the properties of financial markets and financial strategies. More specifically, it analyses financial transactions of four different natures: investment, speculation, hedging and arbitrage, undertaken in markets of primitive assets (stocks and fixed income securities) and in derivatives markets (options, futures and swaps). The course is centred on the role of risk in financial markets.

Main goals of the course are the design of financial strategies and risk management in the short and the long terms, both from the firms' viewpoint and the investors' viewpoint.

**Skills**

**Business Administration and Management**

- Apply the basic statistics for improving capacity for work in situations of risk, understanding their origins and developing possible strategies for reducing or mitigating their effects.
- Apply theoretical knowledge of finances to improve relations with sources of financing, identifying the different forms of financing and the advantages and disadvantages for the company and the providers.

- Capacity for adapting to changing environments.
- Capacity for independent learning in the future, gaining more profound knowledge of previous areas or learning new topics.
- Capacity for oral and written communication in Catalan, Spanish and English, which enables synthesis and oral and written presentation of the work carried out.
- Demonstrate initiative and work individually when the situation requires it.
- Manage conflicts of interest and in particular conflicts involving proposals for the fair distribution of value generated.
- Organise the work in terms of good time management, organisation and planning.
- Select and generate the information necessary for each problem, analyse it and take decisions based on that information.
- Take decisions in situations of uncertainty, demonstrating an entrepreneurial and innovative attitude.
- Value ethical commitment in professional practice.
- Work well in a team, being able to argue proposals and validate or reject the arguments of others in a reasoned manner.

### **Economics**

- Apply the basic statistics for improving capacity for work in situations of risk, understanding their origins and developing possible strategies for reducing or mitigating their effects.
- Apply theoretical knowledge of finances to improve relations with sources of financing, identifying the different forms of financing and the advantages and disadvantages for the company and the providers.
- Capacity for adapting to changing environments.
- Capacity for independent learning in the future, gaining more profound knowledge of previous areas or learning new topics.
- Demonstrate initiative and work individually when the situation requires it.
- Manage conflicts of interest and in particular conflicts involving proposals for the fair distribution of value generated.
- Organise the work in terms of good time management, organisation and planning.
- Select and generate the information necessary for each problem, analyse it and take decisions based on that information.
- Take decisions in situations of uncertainty, demonstrating an entrepreneurial and innovative attitude.
- Value ethical commitment in professional practice.
- Work well in a team, being able to argue proposals and validate or reject the arguments of others in a reasoned manner.

## **Learning outcomes**

1. A capacity of oral and written communication in Catalan, Spanish and English, which allows them to summarise and present the work conducted both orally and in writing.
2. Apply the main principles of risk management.
3. Apply the methodology of financial economy reasoning and differentiate it from its equivalent in real economy.
4. Assess ethical commitment in professional activity.
5. Assess investment opportunities from a strategic perspective.
6. Assess investment plans.
7. Assess the creation of value in finance markets.
8. Assess the formation of prices and risk premiums in finance markets.
9. Assess the formation of value of the assets of companies.
10. Capacity to adapt to changing environments.
11. Capacity to continue future learning independently, acquiring further knowledge and exploring new areas of knowledge.
12. Define the characteristics of different sources of finance.
13. Demonstrate initiative and work independently when required.
14. Demonstrate knowledge of the variables determining the formation of value.
15. Describe the characteristics and objectives of financial regulation from the perspective of market efficiency.
16. Formulate indebtedness and dividend policies.
17. Make decisions in situations of uncertainty and show an enterprising and innovative spirit.

18. Master the assessment principles of assets, basics and derivatives.
19. Organise work, in terms of good time management and organisation and planning.
20. Select and generate the information needed for each problem, analyse it and make decisions based on this information.
21. Select and interpret the financial information of markets and companies.
22. Understand the formation of value from the perspective of shareholders.
23. Work as part of a team and be able to argue own proposals and validate or refuse the arguments of others in a reasonable manner.

## **Content**

### **1. Multifactor models in capital markets: CAPM and APT**

- 1.1. Macroeconomic factors in the APT model
- 1.2. Systematic factors in the BARRA model
- 1.3 The risk premium
- 1.4 Factor portfolios

### **2. Financial strategies with equity portfolios**

- 2.1 Active versus passive strategies
- 2.2 Financial strategies and market efficiency
- 2.3 Active strategies of microeconomic basis
- 2.4 Active strategies of macroeconomic basis

### **3. Performance evaluation of equity portfolios**

- 3.1 The return-risk approach
- 3.2 Performance indices by Sharpe, Jensen and Treynor
- 3.3 Performance allocation

### **4. Fixed-income markets and securities**

- 4.1 Bond pricing
- 4.2 Different types of risk affecting bond management
- 4.3 Duration and convexity
- 4.4 Fixed-income strategies

### **5. Futures markets: Pricing and strategies**

- 5.1 Forward and futures contracts. Contracts on commodities, currencies, financial assets and weather
- 5.2 Mechanics and functions of futures markets
- 5.3 Pricing futures contracts
- 5.4 Hedging strategies using futures

### **6. Swaps: Types and strategies**

6.1 Definition of swap

6.2 Currency swaps

6.3. Interest rate swaps

6.4 Hedging strategies using swaps

## 7. Trading strategies using options

7.1 Option characteristics and option pricing: A review

7.2 Spreads

7.3 Combinations

7.4 Introduction to exotic options

## Methodology

50% of credits are theoretical and 50% practical. Theory will be taught through lectures. Lecturers will introduce the topics encouraging students' participation through questions and observations. In each topic presentation of contents will be accompanied by analysis and reasoning of the methods applied.

The practical part will consist of problem solving (with and without software), analysis of corporate and financial market information, and selected readings. Students are expected to participate actively by solving exercises and analysing published information, especially financial websites of stock exchanges, fixed-income markets, derivatives markets, corporations and investment funds. Problem solving in the classroom will insist on the usage of specific software (especially spreadsheets).

## Activities

Title	Hours	ECTS	Learning outcomes
<b>Type: Directed</b>			
Case studies and exercises	30	1.2	2, 3, 7, 8, 14, 15, 18, 20, 21, 4, 5
Master classes	15	0.6	2, 3, 7, 8, 1, 22, 14, 15, 18, 17, 20, 21, 4, 5
<b>Type: Supervised</b>			
Tutorials	22.5	0.9	2, 3, 7, 8, 1, 18, 19, 20, 21, 4, 5
<b>Type: Autonomous</b>			
Searching documents and references	10.5	0.42	8, 11, 19, 20, 21
Solving exercises and case studies	45	1.8	2, 7, 10, 1, 11, 22, 13, 15, 18, 19, 17, 20, 21, 23, 9, 5
Studying	19.5	0.78	2, 3, 8, 10, 1, 11, 13, 14, 15, 18, 19, 17, 20, 21, 23, 4, 5

## Evaluation

The evaluation of Capital Markets consists of two components:

a) Continuous evaluation (40% of the grade)

b) Final exam (60% of the grade).

The continuous evaluation consists of two written exams according to the regulation of the Faculty of Economics and Business. Lecturers can also ask for additional exercises to be delivered.

The final grade is calculated as the weighted average of the mark on the continuous evaluation (40%) and the mark on the final exam (60%). To pass the subject students need an average grade higher than or equal to 5 (over 10).

Re-evaluation of the subject consists of a retake exam on the whole contents of the subject and is subject to the following rules of the Faculty of Economics and Business of the UAB.

#### **Rules of the Faculty of Economics and Business concerning «Re-evaluation»**

Those students whose final grade is below 4 will have to retake the course. Those who achieve a final grade between 4.0 and 4.9 have the right to «re-evaluation». Teachers decide the format of this re-evaluation. The date of re-evaluation is scheduled in the examination calendar of the Faculty of Economics and Business. Re-evaluation is assessed on a «Pass / No pass» basis. The final grade for those students with «pass» is 5.0. If the student receives a «no pass» qualification, then s/he will have to retake the course and the final grade will be equal to the grade obtained before re-evaluation.

#### **Rules of the Universitat Autònoma de Barcelona concerning the grade «Unassessable / No avaluable»**

A student receives the grade «Non-assessable / No avaluable» when there is insufficient evidence of his/her participation in the evaluation of the subject. This will be the case if the student has participated in less than 30% of the evaluation activities.

### **Evaluation activities**

Title	Weighting	Hours	ECTS	Learning outcomes
Final exam	60%	3.5	0.14	2, 3, 7, 8, 10, 1, 11, 22, 12, 13, 14, 15, 18, 16, 19, 17, 20, 21, 23, 4, 9, 5, 6
First continuous evaluation test	20%	2	0.08	3, 7, 8, 1, 11, 14, 16, 17, 20, 21, 4, 5
Second continuous evaluation test	20%	2	0.08	2, 3, 7, 8, 1, 11, 22, 14, 15, 16, 20, 21, 4, 5

### **Bibliography**

- BODIE, Z.; A. KANE i A. J. MARCUS. Investments. 10th edition. New York: McGraw-Hill, 2014.
- HULL, J. Fundamentals of Futures and Options Markets. 8th edition. Upper Saddle River: Pearson, 2013.