

Econometrics of Financial Markets				
Hours		Status	Term	Audience
Lectures	Tutorials			
36	15	Compulsory	7	M1 IES
Lecturer		Evaluation	Weight	ECTS
Ali Skalli		Exam + continuous	2	5

Abstract:

This course is an introduction to the econometrics of financial markets. It first addresses the issue of financial markets efficiency. Sharpe's and Black's versions of the Capital Asset Pricing Model are then discussed. In each case, the theoretical foundations are first discussed and only then are the appropriate statistical and econometric tools presented and applied. Special emphasis is put on the economic interpretation of the statistical results the methods used yield. The last part of the course is mostly empirical as it investigates modelling strategies that allow one to account for a number of specificities of financial series that linear time series analysis is unable to handle correctly.

Course description:

Chapter 1: Preliminaries: Compounding and simple modelling of financial returns

Chapter 2: The financial markets efficiency hypothesis: Theory and empirical testing

Chapter 3: Pricing models (CAPM and APT)

Chapter 4: GARCH-type models and stochastic volatility models

Teaching method:

- Lectures, tutorials, Illustrations using the SAS software

Prerequisites:

- Probability distributions, Linear time series. Knowledge of market finance and portfolio theory would be helpful.

References (Textbooks only):

- Campbell, J. Y., A. W. Lo et A. C. MacKinley (1997), *The Econometrics of Financial Markets*, Princeton University Press, Princeton, New Jersey.
- Bourbonnais, R. (2011), *Econométrie, Manuel et exercices corrigés*, Dunod, 8^{ème} édition.
- Jacquillat, B. et B. Solnik (2002), *Marchés Financiers : Gestion de portefeuille et des risques*, Dunod, 4^{ème} édition.
- Brooks, Ch. (2002), *Introductory Econometrics for Finance*, Cambridge University Press.