UNIVERSITÀ DI PAVIA

Anno Accademico 2018/2019

FINANCIAL ECONOMETRICS

Anno immatricolazione	2017/2018
Anno offerta	2018/2019
Normativa	DM270
SSD	SECS-P/05 (ECONOMETRIA)
Dipartimento	DIPARTIMENTO DI SCIENZE ECONOMICHE E AZIENDALI
Corso di studio	ECONOMICS, FINANCE AND INTERNATIONAL INTEGRATION - ECONOMIA, FINANZA E INTEGRAZIONE INTERNAZIONALE
Curriculum	Finance
Anno di corso	2°
Periodo didattico	Primo Semestre (24/09/2018 - 21/12/2018)
Crediti	9
Ore	66 ore di attività frontale
Lingua insegnamento	English
Tipo esame	SCRITTO
Docente	ROSSI EDUARDO (titolare) - 7 CFU SANTUCCI DE MAGISTRIS PAOLO - 2 CFU
Prerequisiti	The course is meant to deepen the technical knowledge of the econometric mehods used in the analysis of financial markets. Neccessary prerequisites are Econometrics and Statistics
Obiettivi formativi	The objective of this course is to provide a comprehensive and systematic account of financial econometric models and their applications to modeling and prediction of financial time series data, focusing on asset returns and volatilities. The students will learn the analytical tools needed for the specification and estimation of econometric models with financial data. Students at the end of the course will have a working knowledge of financial time series data and gain expertise in the software to conduct the analyses.
Programma e contenuti	Introduction to MATLAB

	1.Finite difference equations. Solutions and stability. Stationarity and ergodicity 2. ARMA models: Stationarity, invertibility, forecasting 3. Maximum likelihood estimation of ARMA models 4. VAR: representation and estimation 5. Stochastic trends and deterministic trends Test per radici unitarie 6. Kalman filter 7. Cointegration 8. The instrumental variables estimator 9. Generalized method of moments (GMM) Empirical asset pricing models 2. Volatility of financial returns: models, estimation, forecasting (a) Introduction (b) Univariate GARCH models (T, 8,9,10) (c) Multivariate GARCH models (d) Stochastic volatility models (e) Nonparametric estimation of volatility with high-frequency data
Metodi didattici	=Frontal lessons
Testi di riferimento	Hamilton J. (1994), Time Series Analysis, Princenton University Press. Taylor S.J. (2005) Asset Prices Dynamics, volatility, and prediction, Princenton University Press. Singleton K. (2006) Empirical Dynamic Asset Pricing, Princenton University Press.
Modalità verifica apprendimento	=written exam
Altre informazioni	=written exam
Obiettivi Agenda 2030 per lo sviluppo sostenibile	$lbl_legenda_sviluppo_sostenibile