



Guidelines for Econometrics and Application. Emphasis on Tourism and Financial Economics

Table of Contents

From the Author

PART I Introductory and Advanced Econometrics

Chapter 1 Introduction in Econometrics	page 7
What is econometrics?	
Models, economic models, and econometric models	
Goals of econometrics	
Methodology of econometric research	
The structure of economic data	
Chapter 2. Regression Model	page 14
Linear Regression model	
Hypothesis testing	
Residual diagnostics	
Nonlinear regression	
Chapter 3. Univariate Time Series: Linear Models	page 21
Stationarity and autocorrelations	
ARMA processes	
Chapter 4. Stationarity and Unit Roots Tests	page 28
Unit Roots tests	
Stationarity tests	
Chapter 5. Univariate Time Series: Volatility Models	page 34
ARCH Model. Simulating an ARCH(p) model in EViews	
GARCH Model. Model estimation.	
GARCH Model extensions: EGARCH, TGARCH, PGARCH	
Prediction	
Chapter 6. Multivariate Time Series Analysis	page 45
Vector Autoregression model	
Cointegration	
Chapter 7. Multivariate GARCH Models	page 56
Models	
Statistical properties	

Editorial Board

PhD [Laura Nicola-Gavrilă](#)
Publisher Manager

PhD [Daniela Dănciulescu](#)
Book Series Coordinator

Copyright © 2023
RITHA PUBLISHING, business
unit of SCIRES WEB Ltd





© RITHA PUBLISHING

Guidelines for Econometrics and Application. Emphasis on Tourism and Financial Economics

Table of Contents

Scientific Board of RITHA Publishing

PhD [John K. CHRISTIANSEN](#)
Copenhagen Business School, DK

PhD [Giacommo DI FOGGIA](#)
University of Milano-Bicocca, IT

PhD [Manuel Fernandez GRELA](#)
University of Santiago de
Compostela, SP

PhD [Luca GRILLI](#)
University of Foggia, IT

PhD [Sebastian KOT](#)
Czestochowa University of
Technology, Faculty of
Management, PL

PhD [Piotr MISZTAL](#)
Jan Kochanowski University in
Kielce, PL

PhD [Michal MROZEK](#)
University of Szczecin, PL

PhD [Marco NOVARESE](#)
University of Piemonte Orientale,
IT

PhD [Ainura OMAROVA](#)
Karaganda Economic University,
Faculty of Economics, KZ

PhD [Antonio PACIFICO](#)
University of Macerata, IT

PhD [Ramona PÎRVU](#)
University of Craiova, RO

PhD [Claudiu Ionut POPÎRLAN](#)
University of Craiova, RO

PhD [Emanuela
TVARONAVIČIENĖ](#)
Vilnius Gediminas Technical
University, LT

PART II Econometrics Tools Application for Cases Studies of Tourism and Financial Economics

Chapter 8 Tourist Demand Using VECM and Cointegration	page 71
8.1. Background Research and Main Concepts, Econometric Tools for Tourism Demand	
8.2. Multivariate Analysis to Investigate Dependence and Interaction Among Variables in a Multi-Values Process	
Chapter 9. Modelling the Growth Rate and Volatility in International Tourist Arrivals	page 86
9.1. Issues Concerning International Tourism Arrivals in Thailand	
9.1.1. Related literature review for volatility analysis	
9.1.2. Research methodology for analysis of international tourist arrival growth rates	
9.2. Models of Volatility in Tourism Arrivals	
9.3. Empirical Research on Volatility Co-movements and Spillovers: for International Tourist Arrivals in the Case of Thailand	
9.3.1. Background research	
9.3.2. Research methodology to predict dependences of the growth rates for international tourist arrivals	
9.3.3. Analyze the international tourist arrivals volatility co- movements and spillovers among major tourists	
Chapter 10. Volatility transmission, Comovements, and Spillovers Models with applications to Financial Economics	page 115
10.1. Volatility Transmission in Oil Futures Markets and Carbon Emissions Futures	
10.2. The Precious Metals Volatility Comovements, and Spillovers, Hedging Strategies in COMEX Market	
10.3. Hedging Petroleum Futures with Multivariate GARCH Models	
Appendix 1	page 183
Appendix 2	page 189
References	page 193
List of Tables	page 204
List of Figures	page 206
List of Abbreviations	page 208
List of Key Concepts	page 210