

Ministry of Higher Education and Scientific research



Department of Financial and Banking

College of Administration and Economic

University of Salahaddin-Erbil University

Subject: Econometrics and Finance

Course Book :(Year 3)

Lecturer's name: MSc. Saad T. Muhammed

Academic Year: 2022/2023

Course Book

1. Course name	Econometrics and Finance
2. Lecturer in charge	Saad Taha Muhammed
3. Department/ College	Financial and Banking/ Administration and Economic
4. Contact	e-mail: saad.muhammed@su.edu.krd Tel: +964(0)750 454 9598
5. Time (in hours) per week	Theory: 2 hours
6. Office hours	Tuesday : 9:00 - 12:00
7. Course code	
8. Teacher's academic profile	<p>15/11/2015 Instructor in college of Economics and Administration - Salahaddin University / Erbil</p> <p>17/11/2007 Assist Instructor in college of Economics and Administration - Salahaddin University / Erbil</p> <p>09/2004 To 9/2007 University of Salahaddin-Erbil - M.Sc degree in Economics</p> <p>9/1995 To 9/1999 College of Administration and Economics-University of Salahaddin-Erbil - BSc degree in Economic</p> <p>10/2007 To 10/2014 Director of Computer Unit in College of Administration and Economic Supervising 14 employers in Computer Unit, Computer teacher, Arrangement all computer lessons, supervising all computers and network in college.</p> <p>For more details, please visit the website: https://academics.su.edu.krd/saad.muhammed</p>
9. Keywords	Finance Model, Regression, Analysis, Estimation, Problem of Econometrics.
10. Course overview:	<p>Econometrics is a very significant branch of Economics. Scientists specializing in the Econometrics area deal with important economic issues such as statistics of the “glass ceiling” in government and private organizations and financial forecasts.</p> <p>For students studying Economics in a university, Econometrics provides a strong analytical background and prepares those for more advanced research activities, for future finance specialists a module in Econometrics provides specific and common skills useful in the finance area.</p>
11. Course objective:	Econometrics is interesting because it provides the tools to enable us to extract useful

information about important economic policy issues from the available data. Students who gain expertise in econometrics will also find that they enhance their job prospects.

Econometrics is the use of statistical techniques to understand economic issues and test theories. Without evidence, economic theories are abstract and might have no bearing on reality. Econometrics is a set of tools we can use to confront theory with real-world data.

12. Student's obligation

Students have the obligation to participate in course examinations and other assessed performances. Examination frauds and copying of assignments or material are not allowed. Students are anticipated to attend classes and to submit assignments on the due date, for late submissions they will be penalized. Students are also expected to participate in tutorials.

That the students are ready to conduct surprise examinations (Quizzes) that may be conducted by teaching to make sure that over the course of the follow-up article to the students in the time of need. Students should do to prepare summary reports whenever the need arises and can teaching that the dividing students into groups in each group to prepare various reports of the type, according to the vocabulary material and topics that will be covered during the anchored year or regard to article of sub-themes.

13. Forms of teaching

Several forms of teaching will be used to reach the objectives of the course: powerPoint presentation for the head titles and summary of conclusion with applications Program Eviews that could be used in different areas.

Furthermore, students will content homework. There will be classroom discussions and the lecture will give enough background to, solve, analyses, and evaluate problems sets.

14. Assessment scheme

The students are required to do two closed book exams during the academic year besides the assignments;

- **Mid- term Exam: 30%**
- **Quiz 5%**
- **Student Activity (participating) 5%**
- **Final Exam: 60%**

15. Student learning outcome:

Studying econometrics is important. It is required in various aspects of life and it is a very important skill set to have for anyone. Learning econometrics definitely gives a student an edge over other students who haven't studied econometrics. Firms want to hire professionals who are not only logically sound but who can also leverage the available data to test various theories and justify all their theories with data analysis.

16. Course Reading List and References:

- 1- Gujarati, D.N. (2010) Basic Econometrics. 16th Edition, McGraw-Hill Companies.
- 2- Riccardo (Jack) Lucretia (2021) Basic Econometrics. 10th Edition.
- 3- Christiaan Heij and Others, Oxford University Press is a department of the University of Oxford, First published 2004, Econometric Methods with Applications in Business and Economics
- 4- Magazines and review (internet)

17. The Topics:		
	Chapter One: Concepts of Multi Linear Regression Analysis in finance application	
Week 1	Lesson 1	Multi Linear Regression Model
	Lesson 2	Assumptions in multiple linear regression model
Week 2	Lesson 3	Estimation of parameters:
	Lesson 4	Standardized regression coefficients:
Week 3	Lesson 5	Test of significance of regression (Analysis of variance)
Week 4	Lesson 6	Test of hypothesis on individual regression coefficients
Week 5	Lesson 7	Coefficient of determination R^2 and adjusted R^2
	Lesson 8	Relationship of analysis of variance test and coefficient of determination
	Chapter Two : Multicollinearity Problem of Econometrics Model	
Week 6	Lesson 9	Multicollinearity Problem
	Lesson 10	Source of multicollinearity: Method of data collection: Model and population constraints. Existence of identities or definitional relationships: Imprecise formulation of model An over-determined model
Week 7	Lesson 11	Consequences of multicollinearity
	Lesson 12	Multicollinearity diagnostics
	Lesson 13	Variance inflation factors (VIF):
	Lesson 14	Remedies for multicollinearity: Obtain more data Drop some variables that are collinear: Use some relevant prior information:
Week 8	Lesson 15	Practice on EViews Software
	Chapter Three : Autocorrelation Problem of Econometrics Model	
Week 9	Lesson 16	The meaning of Autocorrelation.
	Lesson 17	The Reasons or Sources of Autocorrelation problem.
Week 10	Lesson 18	Consequences of Autocorrelation problem

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	Lesson 19	Methods for Detecting and Remedial Methods
Week 11	Lesson 20	Practice on EViews Software
Chapter Four: Heteroscedasticity Problem of Econometrics Model		
Week 12	Lesson 21	The meaning of Heteroscedasticity
	Lesson 22	The Reasons or Sources of Heteroscedasticity problem.
Week 13	Lesson 23	Consequences of Heteroscedasticity problem.
	Lesson 24	Methods for Detecting and Remedial Methods.
Week 14	Lesson 25	Practice on EViews Software