UNIVERSITY OF ILLINOIS

Department of Economics

Course: ECON 503 (MSPE), Spring 2023 January 17, 2023

Instructor: Anil K. Bera 225E DKH

Office Hours: 12:30-1:30 pm TR

Class Hours: 9:30-10:45 am TR

11:00-12:15 pm TR

(No breaks) Class Room: 317 DKH

TA: Lovepreet Singh & Cihang Wang

TA Discussion Hours: 9:30-10:50 am F (M1)

11:00-12:20 am F (M2)

Office Hours: 2-3 pm M-R; 10-11 am M-R



This is an introductory course in Econometrics. *I will be assuming that you have a good Statistics and Matrix Algebra background.* We will start with some real economic problems, forexample, in consumption analysis, production economics, education-wage relationship and stock market behavior, and then we will look for some econometric techniques to solve them.

The emphasis of the course will be on the *econometric methodologies* that we can apply. We will cover the following topics:

- 1. Introduction: Art of Econometric Modeling
- 2. Simple Regression Analysis
- 3. Ordinary Least Squares (OLS) and Maximum Likelihood (ML) Estimation Methods
- 4. Hypothesis Testing with the Simple Regression Model
- 5. Forecasting with the Simple Regression Model
- 6. Matrix Algebra
- 7. Multiple Regression Analysis
- 8. Hypothesis Testing with the Multiple Regression Model
- 9. Nonnormal Disturbances
- 10. Heteroskedasticity
- 11. Autocorrelation and Time Series Analysis
- 12. Spatial Data Analysis

Textbook:

Introduction to Econometrics, by James H. Stock and Mark W. Watson, 2nd Edition, 2007, Pearson Addison Wesley.

I will not, however, follow this book closely. All the Lecture Notes along with past years' Questions & Answers will be uploaded on UIUC Canvas. As you will notice, the subject matter is somewhat dry and mechanical. We will try to make things livelier by analyzing some interesting data sets and contemporary real-world problems.

The evaluation of the course will be based on two exams: a midterm (25%) and a final (25%), and an Applied Project (50%): 15% for the proposal [due on **March 20th, 2023**] and 35% for the term paper [due on the last day of the class].

About me: Anil K. Bera

My family name stands for:

Business Economics Research Advisor (BERA).

However, my family history goes back to Biblical times: (Genesis 14:2) "That these made war with Bera king of Sodom, and with Birsha king of Gomorrah..." Naturally, I am not at all proud of this.

My first name Anil is from Enlil, the ancient Mesopotamian god associated with wind, air, earth, and storms. Here we are talking about 3,000BC. The word Enlil came from ancient Sumerian EN, meaning "lord" and LL meaning "wind". In my mother tongue Bengali, Anil means simply wind.

I also have solid business experience - "run" an Internet Kafe in Turkey (Figure 1). I wanted to have my email address as @nil@uiuc.edu, but unfortunately, the university didn't allow it. There is a Bera coffee house in Germany (Figure 2).

I also run a chain of 5-star hotels across Turkey, plus a fine dining CASA DEL BERA in Denizli, Turkey (Figure 3). More recently, I have started some business in my native place, India (Figure 4).

What about AB? These are first two English letters. Also think of first two alphabets in Arabic: alif and ba There is a . (dot) below ba, which embodies the entire universe:

ب

Finally the lines below is from Bera's Bible:

(Matthew 19:26): "But Jesus beheld them, and said unto them, With professors this is impossible, but with Students all things are possible."



Figure 1:

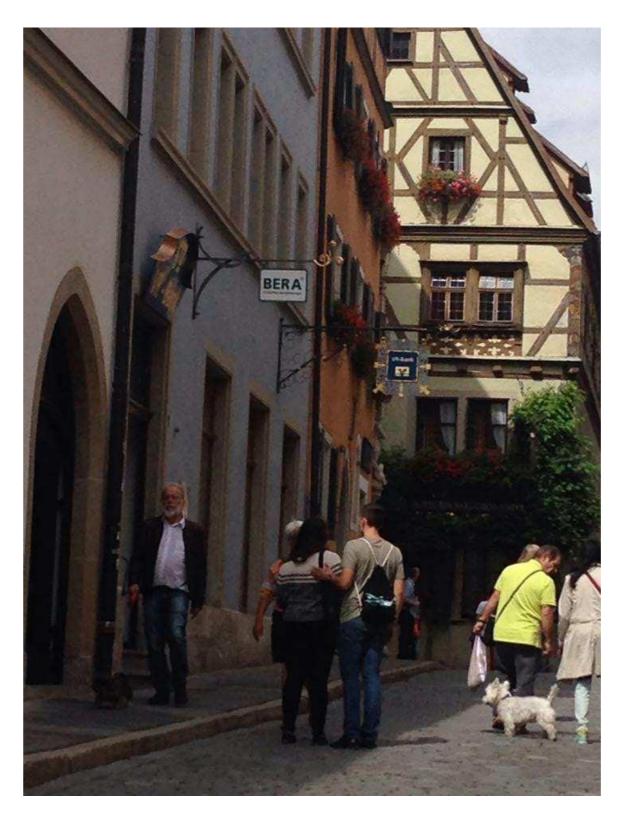


Figure 2:



Figure 3:



Figure 4: