International Economics

Semester: Spring semester - FS 2024

Root Number: 474670

ECTS: 7

Lecturers: Joseph Francois and Octavio Fernandez-Amador

Dates: Wednesdays at 9:00 -12:00 and Wednesdays and Fridays at 10:00 -12:00.

Please see detail curriculum for the specific dates.

Exams: April 17 2024, 09:00 – 12:00 (Trade) and May 22 2024, 10:00-12:00 (Econometrics)

Audience:

- Master of Advanced Studies of International Law and Economics (MILE) Students – Compulsory

- Joint LL.M. / Diploma of Advanced Studies Trade and Investment Law (TRAIL+) Students - World Trade Institute / Faculty of Law, Unibe - Compulsory

CONTENTS

COURSE DESCRIPTION

This course builds on and extends the course "Foundations in Economics" (fall semester 2023). It comprises two introductory courses in economics: International Trade and the basics of applied econometrics in combination with the use of the statistical software STATA.

The goal of the lectures in international trade is to gain basic understanding of the fundamental theories of international trade, basic concepts to assess welfare implications of trade policies, and to become familiar with the stylized facts on international trade. Students should acquire enough knowledge to be able to formulate a well-founded opinion about specific topics in the international trade literature such as the arguments for and against protection in the era of global value chains and the position of developing countries in international trade.

The objective of the econometrics part of the course is two-fold: First, enabling students to interpret output tables from econometric analysis in academic research papers and to work with their own datasets. The lessons learned from the econometrics module can be used in subsequent economics courses in the MILE program and by students when working on take-home essays or their specific thesis projects. Second, beyond the confines of the MILE program, students will acquire skills in using the statistical software STATA, which is in high demand among employers both in the private and public sector. Throughout the course, emphasis will be placed on the intuition behind econometric analysis. The main goal will be to communicate to the students the merits of using a certain model as well as the main procedures through which results are obtained.

DETAILED DESCRIPTION BY SUBJECT

International Trade

The goal of the course is to gain a basic understanding of the most important economic theories on international trade and to become familiar with the stylized facts on international trade. After the course students should be able to explain the main concepts and theories discussed in the economic literature on international trade. Students should also acquire the knowledge to be able to formulate a well-founded opinion about specific topics in the international trade literature such as the arguments for and against protection in the era of global value chains and the position of developing countries in international trade.

This module includes six lectures of 3 hours (18 hours in total) plus 3 hours for the final exam. The first three lectures will make the students familiar with the trade models based on competitive markets, i.e. Ricardo's model of international trade, the specific factors model, the Heckscher-Ohlin model and the standard trade model. The following two lectures will be devoted to "new Trade" theories based on markets with imperfect competition. Specifically we will discuss the role of external economies of scale in international trade and take a closer look at the firm in the global economy. In the last lecture also the most important instruments of trade policy will be discussed.

The compulsory reading for this module is the textbook of Krugman, Obstfeld and Melitz on international trade theory. In class we will discuss intensively the chapters indicated in this syllabus and the students are required to read those chapters before class. The students are required to prepare for the current class. The level of preparation of the students in class will add to the final grade in the course.

Econometrics

The objective of the econometrics part of the course is two-fold: First, enabling students to interpret output tables from econometric analysis in academic research papers and to work with their own datasets. The lessons learned from the econometrics module can be used in subsequent economics courses in the MILE program and by students when working on take-home essays or their specific thesis projects. Second, beyond the confines of the MILE program, students will acquire skills in using the statistical software STATA, which is in high demand among employers both in the private and public sector. These considerations resonate well with the feedback from former MILE cohorts: The students who enrolled in the previous econometrics modules

indicated that they see quantitative approaches to international trade as a stepping stone for their thesis projects or potential future employment. Throughout the course, emphasis will be placed on the intuition behind econometric analysis. The main goal will be to communicate to the students the merits of using a certain model as well as the main procedures through which results are obtained.

The course comprises seven lectures of 2 hours each (14 hours in total) plus a final examination. The module is structured as follows: The first session will be devoted to the basics of data analysis. Students will learn how to feed data into the statistical software STATA, to calculate descriptive statistics and to plot graphics of interest. Students are required to practice the use of the learned commands and apply them in practical exercises. The introductory lecture will be followed by lectures on the most simple linear regression models and the procedure of statistical inference. Throughout the course, emphasis will be placed on the intuition behind econometric analysis. The course is intensive and students are required to revise the material at home.

Note: Due to the strong focus on hands-on learning, students must make sure that STATA is properly installed in their laptops before the beginning of Econometrics classes. The software will be provided by the WTI.

LECTURERS

Octavio Fernández-Amador

Octavio Fernández-Amador is a senior researcher at World Trade Institute. He holds a PhD in Economics from the University of Innsbruck (Austria) and a degree in Economics from University of Sevilla (Spain). He has previously worked as a Postdoc Assistant Professor at Johannes Kepler University Linz (Austria). Octavio has collaborated in projects with different institutions. His field of research is applied econometrics and macroeconometrics. He has worked on international macroeconomics, monetary economics, applied econometrics, time series analysis, and the quantitative analysis of climate change. Octavio has published in various international scientific journals.

Joseph Francois

Joseph Francois is Managing Director and professor of economics at the World Trade Institute. He served as deputy director of the NCCR Trade Regulation from 2015 to 2017. Previously he was professor of economics (with a chair in economic theory) at the Johannes Kepler Universität Linz. He is a fellow of the Centre for Economic Policy Research(London), director of the European Trade Study Group and the Institute for International and Development Economics, senior research fellow with the Vienna Institute for International Economic Studies, and a board member of the Global Trade Analysis Project. He serves on the editorial board of the Review of Development Economics, and the World Trade Review. Past professional incarnations have included professor of economics at Erasmus University Rotterdam, research economist for the World Trade Organization, and chief of research and acting director of economics for the U.S. International Trade Commission. Joe studied economics at the University of Maryland and economics and history at the University of Virginia. His current research interests include: cross-border production chains and employment; globalisation and inequality; trade in services; open economy competition policy and the regulation of firm behaviour; financial market integration; open economy growth and development; economic integration broadly defined; the multilateral trading system; trade and investment policy under imperfect competition (including the location of industry); the role of the service sector (finance, margin and intermediate services, etc.) in trade and development; competition policy in open markets; computational partial and general equilibrium modelling; and estimation and inference within large nonlinear systems (like large scale, multi-sector general equilibrium econometric models).

LEARNING OBJECTIVE

International trade

- Understand the basic concepts of international trade, including how trade flows arise and develop, trade theories, market structures, global value chains and FDI, links to labor and capital markets, and geographical economics;

- Be able to work with the apprehended theories and link them to every-day economic situations and developments;

- Learn how to present theories and apply them and defend opinions in public and in class.

Econometrics

- Understand the basics of econometrics in combination with the STATA software.

- To be able to understand and utilize the empirical (econometric) approaches to the study of international trade.

RECOMMENDED LITERATURE

- Krugman, P.R., Obstfeld, M. & Melitz M. J. (2018): International Economics. Theory and policy. 11th edition, Harlow, Essex: Pearson Education. (10th edition -2014 also works)

- Wooldridge, J. (2016): Introductory Econometrics: A Modern Approach. 6th Edition. Cengage.

Note: We will deliver additional readings to help understand basic concepts related to the lectures and to supplement the compulsory readings either during the class or for the exercises proposed.

Complementary economic references [Optional and supplementary information for students]

Books and online handbooks

1. Van Marrewijk, C. (2017): *International Economics*, Oxford: Oxford University Press.

Grading: Important: A positive evaluation of each of the two sub-modules of Foundations in Economics II is necessary to complete the whole module with a positive grade!

International Trade

- 10% of the grade in International Trade will be based on participation; the remaining 90% of the grade will be based on the final exam. Overall, the grade on International trade counts for 55 % of the final course grade.

Econometrics

- 10% of the grade will be based on participation, , 45% on a final exam, and 45% on the course project (replication exercise as explained in class)
- The grade on Econometrics counts for 45% of the final course grade.

Course Overview

Lesson	Date	Weekday	Subject	Hours	Time	Lecturer	Topic	Reading
1.T1	21.02.24	Wed	Trade	3	9:00 - 12:00	Joseph Francois	Overview and Ricardo's model	KOM, Ch. 1-3
2.T2	28.02.24	Wed	Trade	3	9:00 - 12:00	Joseph Francois	Ricardo cnt' and specific factors model	KOM, Ch. 3+4
3.T3	06.03.24	Wed	Trade	3	9:00 - 12:00	Joseph Francois	Heckscher-Ohlin	KOM, Ch. 5
4.T4	13.03.24	Wed	Trade	3	9:00 - 12:00	Joseph Francois	Standard trade model and external economies and location of production	KOM, Ch. 6 + 7
5.T5	20.03.24	Wed	Trade	3	9:00 - 12:00	Joseph Francois	Firms in the global Economy I	KOM, Ch. 8
6.T6	27.03.24	Wed	Trade	3	9:00 - 12:00	Joseph Francois	Instruments of trade policy	KOM, Ch. 9
9.Eco 1	24.04.24	Wed	Econometrics	2	10:00 - 12:00	O. Fernández	The STATA environment	Rodriguez, G. STATA Tutorial
10.Eco 2	26.04.24	Fri	Econometrics	2	10:00 - 12:00	O. Fernández	Simple linear regression model	Wooldridge Ch1 & 2
11.Eco 3	01.05.24	Wed	Econometrics	2	10:00 - 12:00	O. Fernández	Multiple linear regression model	Wooldridge Ch 3
12.Eco 4	03.05.24	Fri	Econometrics	2	10:00 - 12:00	O. Fernández	Statical Inference	Wooldridge Ch 4
13.Eco 5	06.05.24	Mon	Econometrics	2	10:00 - 12:00	O. Fernández	Non-Linearities & Interaction Effect	Wooldridge Ch 6
14.Eco 5	08.05.24	Wed	Econometrics	2	10:00 - 12:00	O. Fernández	Heteroscedasticity & Panel data	Wooldridge Ch 8 & 13
15.Eco 6	10.05.24	Fri	Econometrics	2	10:00 - 12:00	O. Fernández	Panel data and endogeneity	Wooldridge Ch 14 & 15
exam	17.04.24	wed	Exam trade	3	9h a 12h0	Joseph Francois		

Exam	22.05.24	Wed	Econometrics Exam	2	10:00 - 12:00	O. Fernández	
Exam	07.06.24	Fri	Take home Exam			O. Fernández	Home assignment (project) deadline to be specified

Lesson 1.T1

February 21
International Trade
Joseph Francois

Topics:

- Part I: Overview over the lecture content
- Part II: The Ricardian model
  - The concept of comparative advantage
  - Comparative advantage and the pattern of trade (one-factor economy)
  - Gains from trade
  - Misconceptions about comparative advantage

Compulsory Reading Materials:

- Krugman et al. (2018): Ch. 1 – 2 and Ch. 3 (until "Misconceptions about Comparative Advantage")

Further Comments: The students are expected to be especially familiar with the topics discussed in Krugman et al. (2018), chapters 1 and 2. Due to time constraints these chapters are only briefly discussed in the lecture.

LESSON 2.T2

February 28
International Trade
Joseph Francois

Topics:

- Part I: The Ricardian model 2

    o Comparative advantage with many goods

    o Empirical evidence on the Ricardian model

- Part II: Specific factors and income distribution

    o The specific factors model

    o International trade in the specific factors model

    o Income distribution and gains from trade

    o The political economy of trade: a preliminary view

Compulsory Reading Materials:

- Krugman et al. (2018): Ch. 3
- Krugman et al. (2018): Ch. 4 (excluding "International Labor Mobility")

u^b

UNIVERSITÄT
BERN

March 6
Internatonal Trade
Joseph Francois

Topics:

- Resources and trade: The Heckscher-Ohlin model
  - Modelling a two-factor economy
  - Effects of international trade between two-factor economies
  - Empirical Evidence on the Heckscher-Ohlin model

Compulsory Reading Materials:

Krugman et al. (2018): Ch. 5

LESSON 4.T4
March 13
International Trade
Joseph Francois

Topics:

- Part I: The Standard trade model

    o A Standard model of a trading economy

    o Tariffs and export subsidies

- Part II: External economies of scale and the international location of production

    o Economies of scale and market structure

    o The theory of external economies

    o Specialized suppliers

    o Labor market pooling

    o Knowledge spillovers

    o Interregional trade and economic geography

Compulsory Reading Materials:

- Krugman et al. (2018): Ch. 6 (except "International Borrowing and Lending"), Ch. 7

LESSON 5.T5
March 20
International Trade
Joseph Francois

Topics:

- Firms in the global economy

    o The theory of imperfect competition

    o Monopolistic competition and trade

    o The theory of imperfect competition

    o Monopolistic competition and trade

    o Firm responses to trade: winners, losers, and industry performance

    o Trade costs and export decisions

    o Dumping

    o Multinational and outsourcing

    o Foreign direct investment

Compulsory Reading Materials:

- Krugman et al. (2018): Ch. 8

LESSON 6.T6
March 27
International Trade
Joseph Francois

Topics:

- The instruments of trade policy
    - Basic tariff analysis
    - Costs and benefits of a tariff
    - Other instruments of trade policy

Compulsory Reading Materials:

- Krugman et al. (2018): Ch. 9

LESSON 9.E1
April 24
Econometrics
O. Fernández-Amador

Topics:

- The STATA Environment

    o   User surface and basic navigation

    o   Dataset structures (cross-section, panel, bilateral data, time series)

    o   Data import

    o   Command syntax (saving commands, data manipulation, …)

    o   Graphs

Suggested Reading Materials:

- Rodriguez, G. STATA Tutorial, available at: http://data.princeton.edu/stata/

u^b

UNIVERSITÄT

Lesson 10.E2
April 26
Econometrics
O. Fernández-Amador

Topics:

Simple Linear Regression Model

- o   Intuition

- o   Mechanism of estimation (OLS)

- o   Output interpretation

- o   Model quality (R2)

Compulsory Reading Material:

Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA. Chapters 1 and 2.

u^b

LESSON 11.E3
May 01
Econometrics
O. Fernández-Amador

Topics:

- Multiple Linear Regression Model

    o Intuition

    o Mechanism of estimation (OLS)

    o Output interpretation

    o Model quality (R2 and adjusted R2)

    o Omitted variable bias

    o Multicollinearity

Compulsory Reading Material:

- Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA. Chapter 3

May 03
Econometrics
O. Fernández-Amador

Topics:

- Statistical Inference

    o Rationale for hypothesis testing

    o Mechanism of hypothesis testing

Compulsory Reading Material:

- Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA. Chapter 4.

LESSON 13.E5
May 06
Econometrics
O. Fernández-Amador

Topics:

- Non-Linearities & Interaction Effects

    o Functional form

    o Scaling and beta coefficients

    o Dummy variables

    o Interaction effects: One and two regressors

Compulsory Reading Material:

- Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA. Chapter 6.

LESSON 14.E6
May 08
Econometrics
O. Fernández-Amador

Topics:

- Recap and short introduction to further concepts

  (Note: depending on time, one or more of the following topics may be discussed)

    o Heteroscedasticity

    o Fixed effects

Reading Material:

- Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA.

    o Heteroscedasticity: Chapter 8

    o Fixed effects: Chapter 13

u^b

UNIVERSITÄT
BERN

LESSON 15.E7
May 10
Econometrics
O. Fernández-Amador

Topics:

- Recap and short introduction to further concepts

  (Note: depending on time, one or more of the following topics may be discussed)

  -
  - Fixed effects
  - Endogeneity

Reading Material:

- Wooldridge, J.M. (2015), Introductory Econometrics: A Modern Approach (6th edition), Cengage Learning, Boston, USA.

  -
  - Fixed effects: Chapter 14
  - Endogeneity: Chapter 15