

# **ECON0122: Advanced Topics in International Economics**

*Term 2, 2020/21*

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*Live sessions: Mondays, 2-3pm (duration may vary a bit from week to week)*

Globalization and its consequences have interested economists and the public since Adam Smith and David Ricardo. However, the nature of the global economy, and specifically international trade, has changed dramatically over time. Paraphrasing Ricardo's famous example, "it's not wine for cloth anymore."<sup>1</sup> The new reality spurred development of new tools to analyze trade and trade policy and led to new answers to the traditional questions, such as: Why do countries trade? Which countries trade more? Who benefits and loses from trade? How does trade policy affect welfare of countries overall and particular groups of people?

In this module, we will first introduce a modern view on international trade, paying particular attention to firms as vehicles of trade. We will study key theoretical models of New Trade Theory and discuss empirical evidence that became available in recent decades and motivated the development of those models. We will explore the implications of those models for both observable trade flows and unobserved, yet crucial for policy making, welfare.

We will then apply those tools to evaluate the consequences of specific trade policies, using a range of examples from the recent past (e.g., signing the NAFTA agreement and China's entry to the WTO). We will be concerned with both aggregate impacts (more trade is typically good, but the magnitudes and mechanisms require careful analysis) and distributional consequences (trade can generate losers, and we would like to know who they are). Some approaches to answer those questions rely heavily on economic theory, while others are more data-driven, and in this module we will see examples of both types to get a balanced view.

This module is complementary to ECON0023 *International Trade*. While ECON0023 covers foundational ideas in the field of international trade, here we will focus on recent theoretical developments as well as the econometric techniques used to evaluate the effects of trade.

The course will include weekly synchronous and asynchronous recorded lectures and several tutorials. Tutorials led by a TA will (i) go over some of the lecture material (e.g. the more technically demanding theoretical models) more slowly and in more detail and (ii) discuss the research article assigned for the practice critical review, providing students with the opportunity to offer their view on the pros and cons of the approach taken in the article.

The module aims to explain (i) how to formulate and use new theories to analyse the economic impacts of globalization and (ii) which prevailing approaches exist for empirical evaluation of globalization. On successfully completing the course, students should be able to:

- Explain the key facts about globalization today and in the past

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<sup>1</sup> This quote is from the title of a paper by Gene Grossman and Esteban Rossi-Hansberg about offshoring that we may cover towards the end of the course.

- Formulate standard theoretical models used to study the aggregate and distributional effects of international trade in general equilibrium and characterize solutions of those models
- Evaluate the pros and cons of prevailing approaches to empirical evaluation of international trade policies
- Critically analyse research of others relating to the course topics.

### **Covered topics:**

We will aim to cover the following topics:

#### **Part A: New Trade Theory and the role of firms in international trade**

1. The importance of intra-industry trade. The Armington model
2. Increasing returns and the gains from product variety. The Krugman model
3. Firms in international trade: empirical facts and the Melitz model

#### **Part B: Evaluating the aggregate effects of trade policies: techniques and applications**

4. The sufficient statistic approach: using the gravity equation to connect trade flows and welfare
5. Quantitative structural models and applications to trade policies
6. Reduced-form econometric approaches, their advantages and limitations

#### **Part C: Evaluating the distributional effects of trade policies**

7. New tests for the traditional sectoral view on the role of globalization for inequality
8. Recent approaches to trade and wage inequality: the roles of offshoring and firm heterogeneity
9. Trade and inequality in the costs of living

### **Pre-requisites:**

**Required:** ECON0013 *Microeconomics* and ECON0019 *Quantitative Economics and Econometrics* or equivalent. ECON0019 can be taken in parallel. It is important that you are comfortable in using microeconomics concepts and tools as utility and profit maximization, market equilibrium, and imperfect competition. You should also be familiar with the following econometrics concepts: the difference between causation and correlation, OLS regression, instrumental variables, omitted variable bias.

### **Recommended:**

This module is complementary to ECON0023 *International Trade* course, which focuses on the fundamental ideas about international trade, such as comparative advantage and factor-based trade. If you have not taken that course, you are strongly advised to familiarize yourself with some of these ideas. Electronic resources will be provided.

### **Assessment:**

#### **Summative assessment:**

- **10%: online MCQ quizzes:** four quizzes during the term, best 75% answers counted
- **60%: final online exam,** open-book, 20 MCQ for 60 minutes, online via Moodle in a timed period during last week of term (exact timing TBA)
- **30%: a critical review of a recent research paper** evaluating an actual or hypothetical (counterfactual) trade policy. The review should be around 1200 words and is due on

the first day of Term 3. A list of suggested papers will be provided but students are welcome to choose outside of the list subject to approval from the lecturer.

### **Formative assessment:**

- Students are advised to do the key readings for each lecture, which include recent theoretical and empirical journal articles and literature reviews. Many of the readings will be non-technical and accessible to undergraduate students. Some will be more technical; in those cases a broad understanding of the question, methodological approach, and results will suffice. Summative assessments will **not** require the parts of the readings not covered in lectures. However, our lecture time is limited, and familiarity with the readings will help you understand the material better. It will also help you develop the skills of critically evaluating research papers.
- Students are asked to read and critically analyse one research article as preparation for the critical review assignment. Students should not submit anything but should prepare a list of advantages and disadvantages of the paper's approach and some suggestions how to improve it. The article will then be discussed in one of the tutorials, where students will be given a chance to offer their views and discuss them with peers and the TA.
- There will be several short online practice tests with MCQ and questions with short verbal or numeric answers, aimed to prepare students for summative MCQ quizzes and the final exam.
- I will occasionally post theoretical problems that will help students walk through the models we are studying. Those should not be submitted but solutions will be provided (with a lag) and discussed in tutorials.

### **Readings:**

In this module we will mostly read research articles and published literature reviews (in the Journal of Economic Literature and similar outlets). You do not have to buy any textbooks but the following texts will be used:

- Elhanan Helpman, "Understanding Global Trade", 2011, Harvard University Press (available online at [https://www.researchgate.net/publication/265039256\\_Understanding\\_Global\\_Trade](https://www.researchgate.net/publication/265039256_Understanding_Global_Trade)).
- Elhanan Helpman, "Globalization and Inequality", 2018, Harvard University Press (available online via UCL library)

### **Bibliography:**

\* Starred items are optional and useful for students who want to build deeper understanding than required

\*\* Double-starred items cover material that was part of Econ0023 and will not be covered in this class. However, you are expected to know it. If you have not taken Econ0023 or would like to refresh it in your memory, please read before class.

#### 1. The importance of intra-industry trade. The Armington model

- \*\* Elhanan Helpman, "Understanding Global Trade", 2011, Harvard University Press, **Chapter 2 (refresher on Ricardo and Heckscher-Ohlin models)**
- \*\* Any basic reading on the gravity equation in trade, e.g. Krugman-Obstfeld-Melitz "International Economics: Theory and Policy" textbook, part of Chapter 2
- Theoretical notes posted on Moodle

## 2. Increasing returns and the gains from product variety. The Krugman model

- Elhanan Helpman, “Understanding Global Trade”, 2011, Harvard University Press, **Chapter 4**
- Paul Krugman, “Scale Economies, Product Differentiation, and the Pattern of Trade,” 1980, The American Economic Review, 70(5), pp. 950-959

## 3. Firms in international trade: empirical facts and the Melitz model

- A. Bernard, J. Jensen, S. Redding, and P. Schott. “Firms in International Trade.” The Journal of Economic Perspectives, Vol. 21, No. 3 (Summer, 2007), pp. 105-130
- Elhanan Helpman, “Understanding Global Trade”, 2011, Harvard University Press, **Chapter 5.1; Optional: Chapter 5.2**
- M. Melitz and D. Trefler. “Gains from Trade when Firms Matter.” The Journal of Economic Perspectives, Vol. 26, No. 2 (Spring 2012), pp. 91-118.
- \* D. Hummels and P. Klenow. “The Variety and Quality of a Nation’s Trade.” American Economic Review, vol. 9, no. 3 (2005), p.704-723
- \* D. Atkin, A. Khandelwal, and A. Osman. “Exporting and Firm Performance: Evidence from a Randomized Experiment.” Quarterly Journal of Economics, Vol. 132, Issue 2, pp. 551-615
- \* T. Chaney “Distorted Gravity: The Intensive and Extensive Margins of International Trade,” American Economic Review, vol. 98, no. 4, 1707-1721, **Introduction**

## 4. The sufficient statistic approach: using the gravity equation to connect trade flows and welfare

- A. Costinot and A. Rodriguez-Clare. “Trade Theory with Numbers: Quantifying the Consequences of Globalization.” Handbook of International Economics, 2014, vol. 4, pp. 197-261, **Sections 1 and 2 (except subsection “Macroeconomic variables”) required; Sections 3.1-3.2 optional**

## 5. Quantitative structural models and applications to recent trade policies

- A. Costinot and A. Rodriguez-Clare. “Trade Theory with Numbers: Quantifying the Consequences of Globalization.” Handbook of International Economics, 2014, vol. 4, pp. 197-261, **Sections 2 (subsection “Macroeconomic variables”) and 4**
- Thierry Mayer, Vincent Vicar, and Soledad Zignago, “The Costs of Non-Europe, Revisited”, Economic Policy, 98 (2019), 145-199.

## 6. Reduced-form econometric approaches, their advantages and limitations

- A.B. Bernard, J.B. Jensen, P.K. Schott, “Survival of the Best Fit: Exposure to Low-Wage Countries and the (Uneven) Growth of U.S. Manufacturing Plants,” Journal of International Economics, 68 (2006), pp.219-237
- D. Autor, D. Dorn, G. Hanson, “The China Syndrome: Local Labor Market Effects of Import Competition in the United States,” American Economic Review, 103(6), 2016, pp.2121-2168
- M. Amiti, S. Redding, D. Weinstein, “The Impact of the 2018 Trade War on U.S. Prices and Welfare,” 2019, Journal of Economic Perspectives.

- \* Daniel Trefler, “The Long and Short of the Canada-U.S. Free Trade Agreement”, 2004, American Economic Review, 94(4), pp. 870-895

#### 7. New tests for the traditional sectoral view on the role of globalization for inequality

- Elhanan Helpman, “Globalization and Inequality”, 2018, Harvard University Press, **Chapter 1**
- \*\* Same, **Chapters 2-4 (refresher on the traditional view on trade and inequality)**
- Kirill Borusyak and Xavier Jaravel, “The Distributional Effects of Trade: Theory and Evidence from the United States”, 2018, Working Paper, **Section 6.1-6.2; optionally: Section 2**
- Autor, David H., David Dorn, Gordon H. Hanson, and Jae Song, “Trade Adjustment: Worker Level Evidence,” 2014, Quarterly Journal of Economics 129(4): 1799-1860

#### 8. Recent approaches to trade and wage inequality: the roles offshoring and firm heterogeneity

- Elhanan Helpman, “Globalization and Inequality”, 2018, Harvard University Press, **Chapters 5, 6 (pp.69-77 only), 8 (pp.123-128 only), 10**
- \* Hummels, David, Rasmus Jørgensen, Jakob Munch, and Chong Xiang, “The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data”, 2014, American Economic Review 104 (6): 1597–1629
- \* Gene Grossman and Esteban Rossi-Hansberg, “The Rise of Offshoring: It’s Not Wine for Cloth Anymore” The New Economic Geography: Effects and Policy Implications, Federal Reserve Bank of Kansas City, 2006

#### 9. Trade and inequality in the costs of living

- Kirill Borusyak and Xavier Jaravel, “The Distributional Effects of Trade: Theory and Evidence from the United States”, 2018, Working Paper, Sections 1 and 3-5
- Holger Breinlich, Elsa Leromain, Dennis Novy, and Thomas Sampson, “The Brexit Vote and Inflation”, 2017, Working paper
- Peter Levell, Martin O’Connell, and Kate Smith, “The exposure of households’ food spending to tariff changes and exchange rate movements”, 2017, IFS Briefing Note BN213
- \* Arthur Gales, Tamara Gurevich, Serge Shikher, and Marinos Tsigas, “Gender and Income Inequality in United States Tariff Burden”, 2018, Working paper