University of Florida - Spring 2024

ECO 7707: International Economic Relations

Syllabus

Instructor: Gunnar Heins
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Office Hours: Thursdays, 10-12 in MAT 320
Class Meeting Times: Tuesdays & Thursdays, 7th/8th period (1:55 - 3:50)
Room: MAT 107

Course Description

This course is an introduction to empirical international trade on the graduate level. The course will introduce students to empirical facts and data related to trade, international prices, and firms. We will cover models and techniques that allow researchers to bring trade theory to the data and to evaluate trade policies quantitatively. The final goal is to become familiar with the recent literature in the field.

Course Requirements, Homework, and Grading

The main requirements are a midterm (30 %) and a final exam (35 %) as well as homeworks and presentations (35 %). The homeworks are especially important and will ask you to apply the models and techniques covered in class to trade data in a hands-on fashion. This serves the purpose of enhancing the understanding of the theory and learn how to actually do research in international trade and in general. It will also refresh and improve your coding skills.

In the last twi lectures of the course, to give you an additional sense of the frontier in the field, I ask each of you choose and to present a paper related to international trade that has been published in a top 5 journal (American Economic Review, Quarterly Journal of Economics, Journal of Political Economy, Econometrica, Review of Economic Studies) since 2013. The presentations should be about 40-45 minutes long and give an in-depth description of the paper as well as point out its contribution. It cannot be a paper that we covered (in detail) in class.

Finally, an important requirement of the course is to find an empirical research question and turn it into a small research project by the end of the course. This involves writing a 3-page research proposal justifying why this is an interesting and relevant question and how you are going to answer it (data, method, etc.). Also here there are several restrictions:

1. It cannot be your previous work (Master's thesis, etc.)
2. It must have an empirical component
3. You have to include at least one motivational figure

Your project will realistically not be a done and polished paper by the end of the course. I rather want you to come up with an interesting question, hypothesis, or empirical relationship along with suggestive evidence that this could turn into a good paper. If you have time, you can also use e.g. summary statistics, graphs, or regressions to make that point and I will do my best to help you along the way.

Topics

Part 1: Course Introduction, Data, and the Gravity Equation

Lectures 1-2 (Jan 9, 11)

- Course Introduction
- Data Sources in international trade and collecting data with R
- The Gravity Equation

Part 2: New Trade Models, Firms and International Trade

Lectures 3-6 (Jan 16, 18, 23, 25)

- Technology and International Trade: The Eaton, Kortum model
- Productivity and Imperfect Competition: The Melitz Model
- Introduction to estimating structural trade models
- Facts on Firms that trade

Readings:

1. Eaton, Kortum (2002)
2. Melitz (2003)
3. Caliendo and Parro (2015)
4. Bernard, Jensen, Schott (2009)

Homework 1: Data Collection and the Gravity Equation (due Jan 25)

Part 3: Trade, Offshoring, and Labor Markets

Lectures 7 - 8 (Jan 30, Feb 1)

- Trade and Inequality in the U.S.
- Import Competition and the Labor Market: Autor, Dorn, and Hanson (2013)
- Offshoring: Hummels, Jorgensen, Munch, and Xiang (2014)
- Routine Occupations: Autor, Levy, and Murnane (2003)

Readings:

1. Autor, Dorn, and Hanson (2013)
2. Hummels, Jorgensen, Munch, and Xiang (2014)
3. Autor, Levy, and Murnane (2003)

Homework 2 - Simulation in Trade Models: Eaton-Kortum (due Feb 6)

Part 4: Trade Costs

Lectures 9 - 10 (Feb 6, 8)

- How important is transportation infrastructure?
- Endogenous trade costs

Readings:

1. Donaldson (2018)
2. Brancaccio, Kalouptsidi, Papageorgiou (2018)

Part 5: Trade, Competition and Markups

Lectures 11 - 13 (Feb 13, 15, 20)

- An Introduction to GMM
- Market Power and Markups
- Trade with endogenous markups: Melitz and Ottaviano
- Measuring Markups and structural production function estimation

Readings:

1. Melitz, Ottaviano (2008)
2. De Loecker and Warzynski (2012)

Homework 3 - Simulation in Trade Models: The Melitz-Model (due Feb 20)

Midterm: Lecture 14 (Feb 22)

Part 6: The Trade Elasticity and the Gains from Trade

Lectures 15 - 16 (Feb 27, Feb 29)

- How big are the gains from trade?
- Measuring the gains from trade and variety

Readings:

1. Arkolakis, Costinot, Rodriguez-Clare (2012)
2. Feenstra (1994)
3. Broda and Weinstein (2006)
4. Adao, Costinot, Donaldson (2017) - Nonparametric Counterfactual Predictions in Neoclassical Models of International Trade

Part 7: Vertical and Horizontal Differentiation

Lectures 17 - 18 (Mar 5, 7)

- Cross-country differences in quality

- Product differentiation, strategy and trade
- Estimating product quality in the data

Readings:

1. Verhoogen (2008)
2. Khandelwal (2010)

Homework 4 - Structural Estimation: Feenstra Method and Gains from Trade (due March 21)

Part 8: Entry, Entry Games, and Selection in Trade

Lectures 19 - 20 (March 19, 21)

- How do firms enter?
- Sequential Entry
- Structural Estimation of Entry Games

Readings:

1. Jia (2008)
2. Antras, Fort, and Tintelnot (2017)
3. Morales, Sheu, Zahler (2017)

Part 9: Tariffs and the political consequences of international trade

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Lectures 21 - 23 (March 26, 28, Apr 2)

- Insights from the 2018-19 Trade War
- Trade and political polarization

Readings:

1. Fajgelbaum, Goldberg, Kennedy, and Khandelwal (2019)
2. Autor, Dorn, Hanson, and Majlesi (2017)

March 30: Research Proposal Discussion

Homework 5 - Structural Estimation of Entry Games (due April 2)

Part 10: Other Topics

Lectures 24 - 26 (Apr 4, 9, 11)

- Trade and Climate Change/Environmental Economics

Readings:

1. Shapiro, Walker (2018) - Why Is Pollution from US Manufacturing Declining, The Roles

of Environmental Regulation, Productivity and Trade

2. Shapiro (2021) - The Environmental Bias of Trade Policy

3. Costinot, Donaldson, and Smith (2016)

Homework 6: Estimating Product Quality and Competition (due Apr 18)

Part 11: Student Presentations

Lectures 27-28 (Apr 16, 18)

Final Exam: Lecture 29 (April 23)

April 23: Research Proposal due

References

[1] Anderson, James and Eric van Wincoop (2003): "Gravity with Gravitas: A Solution to the Border Puzzle"; American Economic Review 93 (1), March 2003, pp. 170-192.

[2] Antras, Pol, Teresa Fort, and Felix Tintelnot: "The Margins of Global Sourcing: Theory and Evidence from U.S. Firms"; Working Paper.

[3] Arkolakis, Costas, Arnaud Costinot, and Andres Rodriguez-Clare (2012): "New Trade Models, Same Old Gains"; American Economic Review 102 (1), February 2012, pp. 94-130.

[4] Autor, David, David Dorn and Gordon Hanson (2013): "The China Syndrome: Local Labor Market Effects of Import Competition in the United States"; American Economic Review 103 (6), October 2013, pp. 2121-2168.

[5] Autor, David, David Dorn, Gordon Hanson, and Kaveh Majlesi (2017): "Importing Political Polarization? The Electoral Consequences of rising trade exposure"; NBER Working Paper 22637.

[6] Autor, David, David Dorn, Gordon Hanson and Jae Song (2014): "Trade Adjustment: Worker-Level Evidence"; Quarterly Journal of Economics 129 (4), pp. 1799-1860.

[7] Autor, David, Frank Levy, and Richard Murnane (2003): The Skill Content of Recent Technological Change, an empirical Exploration"; The Quarterly Journal of Economics 118 (4), pp. 1279–1333.

[8] Andrew Bernard, J. Bradford Jensen, and Peter Schott (2009): "Importers, Exporters and Multinationals: A Portrait of Firms in the U.S. that Trade Goods"; In: Producer Dynamics: New Evidence from Micro Data, University of Chicago Press.

[9] Brancaccio, Giulia, Myrto Kalouptsidi, and Theodore Papageorgiou (2018): "Geography, Search Frictions, and Endogenous Trade Costs"; NBER Working Paper 23581.

[10] Broda, Christian, and David Weinstein (2006): "Globalization and the Gains from Variety"; Quarterly Journal of Economics, 121, 541-585.

[11] Costinot, Arnaud, Dave Donaldson, and Cory Smith (2016): "Evolving Comparative Advantage and the Impact of Climate Change in Agricultural Markets: Evidence from 1.7 Million Fields around the World"; Journal of Political Economy 124 (1), pp. 205-248.

[12] De Loecker, Jan, Pinelopi Goldberg, Amit Khandelwal, and Nina Pavcnik (2016): "Prices, Markups, and Trade Reform"; Econometrica, Vol. 84 (2), March 2016, 445–510.

[13] De Loecker, Jan, and Frederic Warzynski (2012): "Markups and Firm-Level Export Status," American Economic Review 102 (6), October 2012, 2437–2471.

[14] Donaldson, Dave (2010): "Railroads of the Raj: Estimating the Impact of Transportation Infrastructure" NBER Working Paper 16487.

[15] Eaton, Jonathan and Samuel Kortum (2002): "Technology, Geography and Trade"; Econometrica 70 (5) (September 2005), 1741-1779.

[16] Eaton, Jonathan, Samuel Kortum and Francis Kramarz (2011): "An Anatomy of International Trade: Evidence from French Firms"; Econometrica 79 (5), September 2011, 1453-1498.

[17] Fajgelbaum, Pablo, Pinelopi Goldberg, Patrick Kennedy, and Amit Khandelwal (2019): "The Return to Protectionism"; mimeo.

[18] Feenstra, Robert (1994): "New Product Varieties and the Measurement of International Prices"; American Economic Review 88 (1), March 1994, 157–177.

[19] Hummels, David, Rasmus Jørgensen, Jakob Munch, and Chong Xiang (2014): "The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data"; American Economic Review 104 (6), pp. 1597–1629.

[20] Jia, Panle (2008): What happens when Wal-Mart comes to town: An empirical analysis of the discount retailing industry; Econometrica 76 (6), pp. 1263–1316.

[21] Khandelwal, Amit (2010): "The Long and Short (of) Quality Ladders"; Review of Economic Studies, 77, pp. 1450-1476.

[22] Lim, Kevin (2015): "Firm-to-firm Trade in Sticky Production Networks"; Working Paper.

[23] McCallum, John (1995): "National Borders Matter: Canada-U.S. Regional Trade Patterns"; American Economic Review 85 (3), June 1995, pp. 615-623.

[24] Melitz, Marc (2003): "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity"; Econometrica 71, pp. 1695-1725.

[25] Melitz, Marc and Gianmarco Ottaviano (2008): "Market Size, Trade, and Productivity"; Review of Economic Studies, 75, pp. 295-316.

[26] Morales, Eduardo, Gloria Sheu and Andres Zahler (2017): "Gravity and extended Gravity: Using Moment Inequalities to estimate a Model of Export Entry"; NBER Working Paper 19916

[27] Peri, Giovanni, Kevin Shih, and Chad Sparber (2015): "STEM Workers, H-1B Visas, and Productivity in US Cities"; Journal of Labor Economics 33 (3), pt. 2, pp. S225-S255.

[28] Tintelnot, Felix (2017): "Global Production with Export Platforms"; The Quarterly Journal of Economics (2017), pp. 157–209.

[29] Verhoogen, Eric (2008): "Trade, Quality Upgrading, and Wage Inequality in the Mexican Manufacturing Sector"; Quarterly Journal of Economics 123 (2), May 2008, pp 489–530.