Advanced International Economics

Description: The course introduces Master students to theoretical and quantitative analysis of international trade. The presentation of the workhorse models of Ricardo, Heckscher-Ohlin and monopolistic competition follow roughly the same order: The basic theory provides key economic insights; it is extended to allow for quantitative analysis, and various extensions and applications are presented. This is a foundational Ph.D. level course in international trade. It is intended to familiarize the students with the main analytical frameworks that have been developed over the last decade. We will also study some of the applications of these new tools.

Topics

1. Empirical Foundations
2. Gravity and Trade Volume
3. The Ricardian Model 1: Dornbusch, Fischer and Samuelson
4. The Ricardian Model 2: The Eaton and Kortum Model
5. Factor Proportion Theory: Heckscher – Ohlin Model and Modern Remakes
6. The Monopolistic Competition Modal 1: The Krugman Model
7. The Monopolistic Competition Modal 2: The Melitz Model
8. Trade Policy
9. Topics 1: Free Trade Zone
10. Topics 2: Diversification and Specialization Paradox

Textbooks

Choi, E. K. and J. Harrigan (Ed., 2003, CH henceforth), *Handbook of International Trade*, Blackwell Publishing Ltd., Malden, MA

Dixit, A. and V. Norman (1980, DN henceforth), *Theory of International Trade*, Cambridge University Press, Cambridge, UK

Eaton, J. and S. Kortum (2011), *Technology and the Global Economy: A Framework for Quantitative Analysis*, Princeton Universtiy Press, Princeton, NJ

Feenstra, R. (2004, Feenstra henceforth), *Advanced International Trade: Theory and Evidence*, Princeton University Press, Princeton, NJ

Grossman, G. and E. Helpman (1991), *Innovation and Growth in the Global Economy*, Massachusetts Institute of Technology, Cambridge, MA

Grossman, G. and K. Rogoff (Ed., 1995, GR henceforth), *Handbook of International Economics*, Vol. 3, Elsevier, Amsterdam, The Netherlands

Helpman, E. and P. Krugman (1985), *Market Structure and Foreign Trade*, Massachusetts Institute of Technology, Cambridge, MA

Krugman, Obstfeld and Melitz (2015), *International Economics: Theory and Policy*, Pearson.

The books are useful, but not required for purchase. Feenstra combines theory and evidence well. Eaton and Kortum is a unified account of their influential writings on technological innovation and international trade. Grossman and Helpman is a major reference for trade and growth to this day. Students may find helpful Dixit and Norman's exposition of the Heckscher-Ohlin model. Choi and Harrigan is a compendium of international trade, and Grossman and Helpman, of international economics. They are useful reads for graduate students searching for research topics.

Data

UNComtrade: bilateral trade and statistics

Feenstra's website: Same as UNComtrade for a longer time frame; US imports and exports at more disaggregated level than UNComtrade

World Bank Development Indicators: country-level statistics

Penn World Tables: National accounts data

OECD data: country-level statistics, particularly strong on science and technology indicators

GTAP: 90+ countries. Income levels, employment, input-output matrices and factor endowments.

Semi-proprietary firm-level data: Chile, Colombia (1977-1991), Mexico (1984-1990)

Gordon Hanson's website:

> Apprehensions and enforcement at the US-Mexico border by the U.S. Border Patrol, 1963-2004
>
> Foreign outsourcing by US manufacturing industries, 1979-1990

WTO- Trade and Tariff Data
https://www.wto.org/english/res_e/statis_e/statis_e.htm

International Trade Administration- US Trade Data
http://www.trade.gov/mas/ian/tradestatistics/

World Bank- Trade Data
http://data.worldbank.org/topic/trade

International Trade Center- Interactive Trade Map
http://www.trademap.org/Index.aspx

UN- Comtrade Database
http://comtrade.un.org/

Census Bureau- US International Trade Statistics
http://www.census.gov/foreign-trade/data/index.html

Organization for Economic Co-operation and Development- Interactive Data
https://data.oecd.org/economy.htm

US Bureau of Economic Analysis- Trade Report
http://www.bea.gov/newsreleases/international/trade/2015/pdf/trad1214.pdf

UN- Conference on Trade and Development
http://unctad.org/en/Pages/Statistics.aspx

US- Arab Trade Data
http://www.nusacc.org/content/english-pid=112.php.html

World Export Data- 1948-1983
http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/09116

ITC- Market Analysis Tools
http://www.intracen.org/itc/market-info-tools/market-analysis-tools/

UN- International Merchandise Trade Statistics
http://unstats.un.org/unsd/trade/imts/imts_default.htm

Federation of International Trade Associations- International Trade Statistics
http://www.fita.org/webindex/browse.cgi/International_Trade_Statistics

Princeton- World Trade Statistics
http://www.princeton.edu/~dixitak/Teaching/InternationalTrade/Slides/ECO352_02.pdf

International Update (covers recent developments in foreign public and private pensions)
http://www.ssa.gov/policy/docs/progdesc/intl_update/

Course Outline

1. **Empirical Foundations – Lecture 1**

2. **Gravity and Trade Volume – Lecture 2**

   Anderson, J. and E. van Wincoop (2003), "Gravity and Gravitas: A Solution to the Border Puzzle," *American Economic Review*, 93, 170-192.

   Arkolakis, Costas, Arnaud Costinot, and Andrés Rodríguez-Clare (2012), "New Trade Models, Same Old Gains?" *American Economic Review*, 102(1): 94-130.

   Helpman, E., M. Melitz, Y. Rubinstein (2008), "Estimating Trade Flows: Trading Partners and Trading Volumes," *Quarterly Journal of Economics*, 123, 441-487.

3. **The Ricardian Model 1: The Theory of Comparative Advantage. Country Differences in Technologies: Dornbusch, Fischer and Samuelson – Lecture 3**

   Dornbusch, R., S. Fischer, P. Samuelson (1977), "Comparative Advantage, Trade, and Payments with a Continuum of Goods," *American Economic Review*, 67, 823-839.

   Eaton J. and S. Kortum (2002), "Technology, Geography, and Trade" *Econometrica*, 70, 1741-1779.

   Alvarez, F. and R. Lucas (2007), "General Equilibrium Analysis of the Eaton-Kortum Model of International Trade," *Journal of Monetary Economics*, 54, 1726-1768.

   Spiegel, U. and Y. Shachmurove (2013), "Sustainable Effects of Technological Progress and Trade Liberalization," *Economic Modelling*, Volume 33, pp. 956–964.

   Spiegel, U. and Y. Shachmurove (2010), "The Welfare of Nations in a Globalized Economy," *International Trade Journal*, (Lead Article), Volume 24, Number 3, July-September, pp. 230-260.

   Spiegel, U. and Y. Shachmurove (1995), "On Nations' Size and Transportation Costs," *Review of International Economics*, Volume 3, Issue 2, June, pp. 235 -243.

4. **The Ricardian Model 2: Some Extension to the Eaton and Kortum Model - Lecture 4**

   Costinot, A., D. Donaldson and I. Komunjer, (2012), "What Goods do Countries trade? A Quantitative Exploration of Ricardo's Ideas," *Review of Economic Studies*, s (2012) 79, 581–608.

   Fieler, A.C. (2011), "Non-homotheticity and Bilateral Trade: Evidence and a Quantitative Explanation," *Econometrica*, 79(4), 1069-1101.

   Ahlfeldt,G.M., Redding, S., D. Sturm and Niko Wolf (2013), "The Economics of Density: Evidence from the Berlin Wall", mimeo, Princeton University.

   Dekle, Eaton and Kortum (2008) "Global Rebalancing with Gravity: Measuring the Burden of Adjustment," *IMF Staff Papers*, 55, 511-540.

   Ramondo, N. and Rodriguez-Clare (2013), "Trade, Multinational Production, and the Gains from Openness," *Journal of Political Economy*, 121(2).

   Ana Cecília Fieler, Marcela Eslava and Daniel Yi Xu (2018, forthcoming), "Trade, Quality Upgrading, and Input Linkages: Theory and Evidence from Colombia," American Economic Review, forthcoming.

5. **Factor Proportion Theory: The Theory of Comparative Advantage. The Relative Abundances of Labor and Capital. Heckscher – Ohlin Model and Modern Remakes - Lecture 5**

   Feenstra Chapters 1-3.

   Costinot, A. and J. Vogel (2010), "Matching and Inequality in the World Economy," *Journal of Political Economy*, 118(4), 747-785.

6. **The Monopolistic Competition Modal 1: Imperfect Competitions, Increasing Returns to Scale, The Krugman Model – Lecture 6**

   Krugman, P. (1980), "Scale Economies, Product Differentiation, and the Pattern of Trade," *American Economic Review*, 70(5), 950-959.

   Ethier, W. (1982), "National and International Returns to Scale in Modern Theory of International Trade," *American Economic Review* Vol. 72, No. 3 (Jun., 1982), pp. 389-405.

   Ethier, W. (1982), "National and International Returns to Scale in Modern Theory of International Trade," *American Economic Review*, 72(3), 389-405.

Grossman, G. and E. Rossi-Hansberg (2010), "External Economies and the International Trade Redux" *The Quarterly Journal of Economics*, 125(2), 829-858.

7. The Monopolistic Competition Modal 2: Imperfect Competitions, The Melitz Model and Some Extensions - Lecture 7

Melitz, M. (2003), "The Impact of Trade on Intra-industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71(6), 1695-1725.

Helpman, E., M. Melitz, S. Yeaple (2004), "Exports Versus FDI with Heterogeneous Firms," *American Economic Review*, 94(1).

Bernard, A., S. Redding and P. Schott (2011), "Multi-product Firms and Trade Liberalization," *Quarterly Journal of Economics*, 126(3), 1271-1318.

Bernard, A., S. Redding and P. Schott (2011), "Comparative Advantage and Heterogeneous Firms," *Review of Economic Studies*, 74, 31-66.

Bustos, P. (2011), "Trade Liberalization, Exports and Technology Upgrading: Evidence on the Impact of MERCOSUR on Argentinian Firms," *American Economic Review*, 101, 304-340.

Lileeva, A. and D. Trefler (2010), "Improved Access to Foreign Markets Raises Plant-Level Productivity…for some Plants," *Quarterly Journal of Economics*, 1051-1099.

Eaton, J., S. Kortum, F. Kramarz (2011), "An Anatomy of International Trade: Evidence from French Firms," *Econometrica*, 79(5), 1453-1498.

Grossman G. and Helpman, E. "Growth, Trade, and Inequality," Harvard, February 2015

Spiegel, U. and Y. Shachmurove (2005), "A Monopoly Reason Why Autarky Might be Best for a Large Country," *The Manchester School*, (Lead Article), Volume 73, Number 3, June, pp. 269 - 280.

8. Trade Policy under Competitive and Non-competitive Markets. The Role of Tariffs, Quotas and Other Trade Impediments - Lecture 8

Feenstra, Chapters 7-8.

Krugman, Obstfeld and Melitz (2015, Chapters 9) *International economics: Theory and Policy*, Pearson.

Douglas Irwin, Tariff Incidence: Evidence from U.S. Sugar Duties, 1890-1930, NBER Working Paper No. 20635, 2014.

9. Risk Aversion and International Portfolio Diversification – Lectures 9 - 10

Krugman, Obstfeld and Melitz (2015, Chapter 22), *International Economics: Theory and Policy*, Pearson.

Y. Shachmurove (handout)

10. Topics: Lectures 11 and 12

Free Trade Zone - Lecture 11

Spiegel, U. and Y. Shachmurove (handout)

Diversification and Specialization Paradox - Lecture 12

Kellman M. and Y. Shachmurove (2011), "Diversification and Specialization Paradox in Developing Country Trade," *Review of Development Economics*, Volume 15, Number 2, May, pp. 212-222.

11. Forthcoming New Papers in Advanced International Economics

Lecture 13

Paulo Bastos, Joana Silva and Eric Verhoogen (forthcoming, 2018), "Export Destinations and Input Prices," *American Economic Review*, forthcoming.

Fabrizio Perri and Vincenzo Quadrini, (forthcoming, 2018), "International Recessions," *American Economic Review*, forthcoming.

Costas Arkolakis, Natalia Ramondo, Andrés Rodríguez-Clare and Stephen Yeaple, (forthcoming, 2018), "Innovation and Production in the Global Economy," *American Economic Review*, forthcoming.

Final Grade Components

Grades are on a Pass / Fail System. Students are required to prepare one PowerPoint Presentation (PPP) of a journal article and to take a final examination. The final examination will be a mix of Multiple-Choice and open-end questions. Attendance is required, each class session is awarded by five (5) percent of your grade. Thus, if we meet 7 times, the weights of the PPP and the exam will be, 35 and 30 percent, respectively.