Topics in International Trade

IR/GN 435, Spring 2012 Gordon H. Hanson (gohanson@ucsd.edu) Class Meetings: TuTh 2:00-3:20pm Office Hours: M 12:30-2:00pm

Synopsis

The goals of the course are to help students (a) develop and apply analytical skills used in the fields of international trade, international migration, and international investment, and (b) develop skills for a professional career, including evaluating research, making formal presentations, working collaboratively, and completing written projects.

Class meetings will be a combination of traditional lectures (9 class meetings), discussion-based sessions in which we evaluate a single research paper in depth (3 class meetings), lab-based exercises in which we develop tools for applied data analysis (4 class meetings), and student presentations of class projects (4 class meetings).

The course will be intensive in the use of data. Students will assemble, manage, and analyze data on international trade and international migration. I will assume that students have mastered the material in QM II (or the equivalent) and have taken or are taking concurrently QM III (or the equivalent). Knowledge of Stata is essential.

Part I of the course will examine the causes of international trade and how trade policies and transportation costs affect trade flows between countries. Students will be introduced to the gravity model of trade, which is the core analytical model for analyzing international trade flows between countries.

Part II of the course will examine the labor-market consequences of international migration on sending and receiving countries. It will introduce students to standard tools for empirical analysis in labor economics, including wage regressions.

Part III of the course will examine the strategies of multinational firms. It will introduce students to models of the export versus FDI decision, taxes and transfer pricing, and international differences in management performance.

<u>Requirements</u>

(1) In Class Stata Exercises. April 5, 12 and 26, May 3. (5% of grade)

After each lab-based class meeting, submit a Stata log file showing that you have performed the exercises that we complete collectively in class.

(2) Evaluation Memo. Due April 19. (15% of grade)

Write a two-page report (single-spaced), evaluating a research paper selected from the list below (no more than four students may select a given paper; papers will be assigned on a first-come-first-served basis). The report should (a) identify the question the research paper addresses and the gap in the knowledge the paper attempts to fill, (b) briefly summarize the paper's research methodology, data sources, key assumptions, and results, (c) critically evaluate the components listed in (b), and (d) make recommendations for how the paper could be improved.

Benassy-Quere, Anges, Maylis Coupet, and Thierry Mayer. 2007. "Institutional Determinants of Foreign Direct Investment." *World Economy*, 30(5): 764-782. http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9701.2007.01022.x/full

Disdier, Anne Celia, and Keith Head. 2008. "The Puzzling Persistence of the Distance Effect on Bilateral Trade." *Review of Economics and Statistics*, 90(1): 37-48. http://www.mitpressjournals.org/doi/abs/10.1162/rest.90.1.37

Eichengreen, Barry, Yeongseop Rhee, and Hui Tong. 2007. "China and the Exports of Other Asian Countries." *Review of World Economics*, 143(2): 201-226. http://www.springerlink.com/content/1204171166hnvw3j/

Greenaway, David, Aruneema Mahabir, and Chris Milner. 2008. "Has China Displaced Other Asian Countries' Exports?" *China Economic Review*, 19: 152-169. http://www.sciencedirect.com/science/article/pii/S1043951X07000624

Head, Keith, Thierry Mayer, and John Ries. 2009. "How Remote is the Offshoring Threat?" *European Economic Review*, 53: 429-444. http://strategy.sauder.ubc.ca/head/Papers/services.pdf

Jacks, David, Christopher Meissner, and Dennis Novy. 2008. "Trade Costs, 1870-2000." *American Economic Review*, 98(2): 529-534. http://www.jstor.org/stable/10.2307/29730076

Lewer, Joshua J., and Hendrik Van den Berg. 2008. "A Gravity Model of Immigration." *Economics Letters*, 99: 164-167. http://www.sciencedirect.com/science/article/pii/S0165176507002455

Rose, Andrew. 2000. "Currency Unions: Their Dramatic Effect on InternationalTrade."*EconomicPolicy*,15(30):7-46.http://onlinelibrary.wiley.com/doi/10.1111/1468-0327.00056/abstract

(3) Gravity Project. Due May 10. Presentations May 8 and 10. (30% of grade)

I will randomly assign students to groups of five or six. Each group will be responsible for preparing a 10-page paper (not including tables and figures) that estimates the gravity model of trade for a designated year using trade data that I make available. The report should (a) summarize the data used in the analysis, (b) select and estimate a specification of the gravity model well-suited for the application, (c) evaluate the econometric fit of the specification and address any econometric problems that are encountered, and (d) use the model to estimate the impact of regional trade agreements on trade flows in the designated year. Groups are free to select a specific trade agreement (e.g., NAFTA or the EU) or trade agreements as a whole. Each group will present its results in a 20-minute Powerpoint presentation in class.

(4) <u>Class Discussion and Participation</u>. April 19, May 17, May 31. (10% of grade)

During three class meetings, we will discuss and evaluate a specific research paper related to international trade (April 19), international migration (May 17), or multinational enterprises (May 31). For each meeting, there will be a preassigned set of questions that students are to be prepared to answer in class. Over the three sessions, each student will be cold-called at least twice. Students are also free to participate in class discussions voluntarily.

(5) <u>Immigration Project</u>. Due June 7. Presentations June 5 and 7. (40% of grade)

Write a 10 to 12-page research paper (not including tables and figures) in which you analyze the impact of immigration from a specific country on the United States using data that I provide. Students will select a specific country for analysis based on the following list:

Canada, Cuba, China, Dominican Republic, El Salvador, Honduras, India, Korea, Mexico, Philippines, Taiwan, Vietnam.

No more than three students may work on a given country; countries will be assigned on a first-come-first-served basis. The report should include (a) a visual presentation of the immigration trends for the country under analysis, (b) estimation of a "Borjas-style" wage regression, which we will discuss in class, (c) discussion of the assumptions made in estimating the model, (d) evaluation of the fit of the model and treatment of the econometric problems encountered in estimation, and (e) an application of the model's results to quantifying the impact of immigration from your assigned country on the wages of US workers. Students will present their results during the last week of class in a panel-style setting.

I. Comparative Advantage, Gravity and Global Trade (4/3)

- Hanson, Gordon. 2012. "The Rise of Middle Kingdoms: Emerging Economies in Global Trade." *Journal of Economic Perspectives*, forthcoming.
- Head, Keith. 2003. "Gravity for Beginners." University of British Columbia. https://www.nd.edu/~agervais/documents/Gravity.pdf

II. Lab Class: Using Data on International Trade (4/5)

- Issues:
 - Measuring trade flows: imports versus exports.
 - Product classifications.
 - Importing and merging trade data.
 - Levels versus logs.
 - Zero trade, missing trade, small countries.
- Tools:
 - o http://wits.worldbank.org/wits/
 - o http://comtrade.un.org/db/
 - o http://data.worldbank.org/data-catalog/world-development-indicators
 - o http://www.cepii.fr/anglaisgraph/bdd/bdd.htm

III. Explaining International Trade Using the Gravity Model (4/10)

- Anderson, James, and Eric van Wincoop. 2004. "Trade Costs." NBER Working Paper No. 10480, pp. 1-28. http://www2.bc.edu/james-anderson/TradeCosts.pdf
- Further Reading: Anderson, James. 2011. "The Gravity Model." NBER Working Paper No. 16576. <u>http://www2.bc.edu/james-anderson/GravityModel.pdf</u>

IV. Lab Class: Visualizing Trade Data (4/12)

- Issues:
 - Aggregating data by product and country.
 - Selecting time periods in the presence of business cycles.
 - Revealed comparative advantage.
 - Added variable plots, residual plots.

V. Estimating the Gravity Model (4/17)

- Rose, Andrew. 2004. "Do We Really Know That The WTO Increases Trade?" *American Economic Review*, 94(1): 98-114. http://www.aeaweb.org/articles.php?doi=10.1257/000282804322970724
- Further Reading: Baier, Scott, and Jeffrey Bergstrand. 2007. "Do Free Trade Agreements Actually Increase Members' Trade?" Journal of International Economics, 71: 72-95. http://www.sciencedirect.com/science/article/pii/S0022199606000596

VI. Discussion Session: International Trade (4/19)

- Blum, Bernardo, and Avi Goldfarb. 2006. "Does the Internet Defy the Law of Gravity?" *Journal of International Economics*, 70: 385-405. <u>http://www.rotman.utoronto.ca/bblum/personal/Does%20the%20Internet%20Def</u> y%20the%20Law%20of%20Gravity.pdf
- Questions:
 - How is trade measured in the paper?
 - What is the theoretical basis for the gravity model used in the paper?
 - What assumptions do the authors make in developing the model?
 - For what types of internet services is the model most relevant?
 - What are the costs to users from obtaining services via the internet?
 - What is the empirical specification of the gravity model that is estimated?
 - What independent variables are included? Which should be included?
 - How does one interpret the coefficient estimates?
 - Why is internet traffic correlated with distance?
 - Do the authors confront econometric problems in the estimation?
 - Do the authors deal with these problems adequately?
 - How could the paper be improved?

VII. International Migration: Economic Consequences (4/24)

- Hanson, Gordon. 2009. "The Economic Consequences of the International Migration of Labor." *Annual Review of Economics*, 1: 179-208. http://irps.ucsd.edu/assets/037/11125.pdf
- *Further Reading*: Goldin, Claudia, and Lawrence Katz. 2007. "Long-Run Changes in the US Wage Structure: Narrowing, Widening, Polarizing." NBER Working Paper No. 13568.

VIII. Lab Class: Using Data on Labor Markets (4/26)

- Issues:
 - Survey data from government sources.
 - Sample frames, sample weights.
 - Defining the immigrant population.
 - Difficult to measure populations.
 - Selecting variables for analysis.
 - o Dimensions of the data: age, gender, education, occupation, industry, etc.
 - Measuring income.
- Tools:
 - o <u>http://www.ipums.umn.edu/</u>
 - o http://www.pewhispanic.org/topics/unauthorized-immigration/
 - o <u>http://www.bls.gov/data/</u>

IX. International Migration: Economic Causes (5/1)

- Grogger, Jeffrey, and Gordon Hanson. 2011. "Income Maximization and the Selection and Sorting of International Migrants." *Journal of Development Economics*, 95(1): 42-57. <u>http://irps.ucsd.edu/assets/023/8853.pdf</u>
- Further Reading: Gibson, John, and David McKenzie. 2011. "The Microeconomic Determinants of Emigration and Return Migration of the Best and the Brightest: Evidence from the Pacific." Journal of Development Economics, 95: 18-29. http://www.sciencedirect.com/science/article/pii/S0304387809001163

X. Lab Class: Measuring Wages and Employment (5/3)

- Measuring income and employment:
 - Hourly wages, weekly wages, annual wages.
 - Workers, hours worked.
 - Full time workers, part time workers.
 - Mean wages in levels and logs.
 - Mean wages by skill group.
 - Visualizing labor market outcomes.

XI. Gravity Project Presentations (5/8, 5/10)

XII. The Labor Market Impact of Immigration (5/15)

 Aydemir, Abdurrahman, and George Borjas. 2007. "A Comparative Analysis of the Labor Market Impact of International Migration: Canada, Mexico, and the United States." *Journal of the European Economics Association*, <u>http://ksghome.harvard.edu/~GBorjas/Papers/JEEA2008.pdf</u>

XIII. Discussion Session: The Borjas versus Card Debate (5/17)

- Card, David. 2005. "Is the New Immigration Really So Bad?" *Economic Journal*, 115(507): 300–23. <u>http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0297.2005.01037.x/full</u>
- Questions:
 - How does Card's definition of the labor market differ from Borjas'?
 - With whom do immigrants compete in the US labor market?
 - What are the dominant regional patterns of immigration in the US?
 - What are the relevant skill categories for the US labor market?
 - How does Card's estimation approach differ from Borjas'?
 - What assumptions does Card make in estimating his main regressions?
 - What are the main estimation results?
 - How can immigration increase labor supply without affecting wages?
 - How does Card evaluate the assimilation of immigrants in the US?
 - Who's right, Borjas or Card?

XIV. Multinational Enterprises: Export vs. FDI (5/24)

 Head, Keith, and John Ries. 2004. "Exporting and FDI as Alternative Strategies." Oxford Review of Economic Policy, 20(3): 409-423. <u>http://oxrep.oxfordjournals.org/content/20/3/409.short</u>

XV. Multinational Enterprises: Management Practices (5/26)

- Bloom, Nicholas, and John Van Reenen. 2010. "Why Do Management Practices Differ across Firms and Countries?" *Journal of Economic Perspectives*, 24(1): 203-224. <u>http://www.aeaweb.org/articles.php?doi=10.1257/jep.24.1.203</u>
- Further Reading: Bloom, Nicholas, Rafaella Sadun, and John Van Reenan. 2012. "Americans Do IT Better: US Multinationals and the Productivity Miracle." American Economic Review, 102(1): 167-201. www.stanford.edu/~nbloom/ADIB.pdf

XVI. Multinational Enterprises: International Taxation (5/29)

- Head, Keith. 2007. "International Taxation." Ch. 12, *Elements of Multinational Strategy*, Springer.
- Hines, James, and Lawrence Summers. 2009. "How Globalization Affects Tax Design." NBER Working Paper No. 14664 and *Tax Policy and the Economy*, Volume 23. <u>http://www.nber.org/papers/w14664</u>

XVII. Discussion Session: Multinational Enterprises (5/31)

- Boom, N., Draca, and J. Van Reenen. 2011. "Trade Induced Technical Change? The Impact of Chinese Imports on Innovation, IT, and Productivity." NBER Working Paper No. 16717. <u>www.nber.org/papers/w16717.pdf</u>
- Questions:
 - How may competition from China affect firms in Europe?
 - What is technical change and how does one measure it?
 - What is the econometric specification that the authors estimate?
 - What econometric problems do the authors encounter in the estimation?
 - What assumptions do they make in estimating their main regression?
 - What is the estimated impact of China on technical change in EU firms?
 - In what industries would we expect the effects to be largest?
 - What are the implications of their results for EU wages and employment?
 - What are alternative explanations for their results?
 - How could the paper be improved?

XVIII. Immigration Project Presentations (6/5, 6/7)