8403 International Trade Spring 2022 M 9.15-10.55am, Tu 1.30-3.10

# International Trade

Course Outline: This is a second-year graduate class for Econ PhD students, the sequel to 8401 and 8402. The focus is on international trade. Relative to Tim's class (8401), there is some thematic overlap, but we cover different papers, and it will be run more like a reading group. Classes are structured around a single paper which is at the frontier of what is being done in the field. The goal of the class is threefold: to build skills in reading and evaluating papers, to give you experience in presenting, and to help get you started on your own research by exposing you to work at th frontier of international trade.

Textbook: None.

**Reading:** The list of assigned readings for each class is provided below. The Background Reading section does what it says on the tin.

Assessment: There are four parts to the assessment. (I) You will be broken up into 3 groups, and each group will be assigned to 3 of the papers we will cover. Starting in the second class, the assigned group will prepare and present slides on the reading. Slides should be e-mailed to me before class on the day of the presentation. Your participation in class discussions of the papers (even when you are not presenting) will form part of your grade. (II) Starting in the second class, you are required to prepare a half-page summary of the reading for each class, due by e-mail before class. This is an individual, not a group assignment, and must be done for every class, whether or not your group is presenting the paper. (III) Each group will present a job market paper in trade from last year. As with the other papers, slides for your presentation should be e-mailed to me. Summaries are not required for the JMPs. (IV) Finally, each student will write a referee report on their assigned job market paper. These reports are an individual assignment, and should be emailed to me by a date we will agree on in class.

Office Hours: If you would like to meet, send me an email (personal gmail above, not UMN or Fed email), and we can arrange a time to meet on Zoom.

### Schedule and Assigned Reading

Stars indicate classes where students are/will be assigned to present.

- 1. Tuesday 18th January. Gravity. Integrating trade and macro. **Reading:** Fitzgerald (2012).
- 2. \*Monday 24th January. Ricardian differences. Reading: Caliendo and Parro (2015).
- 3. \*Tuesday 25th January. Factor differences. Reading: Lee (2020).
- 4. \*Monday 31st January. Increasing returns. Reading: Bai, Jin and Lu (2021).
- 5. \*Tuesday 1st February. Trade and consumer welfare. **Reading:** Fajgelbaum and Khandelwal (2016).
- 6. \*Monday 7th February. Economic geography. Reading: Gaubert (2018).
- 7. \*Tuesday 8th February. Trade, innovation & growth. **Reading:** Perla, Tonetti and Waugh (2021).
- 8. \*Monday 14th February. Services trade: **Reading:** Hsieh and Rossi-Hansberg (2021).
- 9. \*Tuesday 15th February. Immigration and trade. **Reading:** Burstein, Hanson, Tian and Vogel (2020).
- 10. \*Tuesday 22nd February. Dynamic gains from trade. Ravikumar, Santacreu & Sposi (2019)
- 11. \*Monday 28th February. In-class presentation of job market papers.
- 12. \*Tuesday 1st March. In-class presentation of job market papers.
- 13. \*Monday 14th March. In-class presentation of job market papers.

# Job market papers

Note: This list is a work in progress.

- 1. Trang Hoang, "The Dynamics of Global Sourcing."
- 2. Swapnika Rachapalli, "Learning Between Buyers and Sellers Along the Global Value Chain."
- 3. Lucas Zavala, "Unfair Trade? Market Power in Agricultural Value Chains."

# Background Reading

# 1 Gravity and the gains from trade

- Arkolakis, Costinot and Rodriguez Clare (2012), "New Trade Models, Same Old Gains," AER.
- 2. Ossa, R. (2015), "Why Trade Matters After All," JIE forthcoming.
- 3. Simonovska, I. and M. Waugh (2014), "Trade Models, Trade Elasticities and the Gains from Trade," NBER Working Paper 20495.
- 4. Anderson and van Wincoop (2003), "Gravity with Gravitas: A Solution to the Border Puzzle," AER
- 5. Head, K. and T. Mayer (2014), "Gravity Equations: Workhorse, Toolkit and Cookbook," Handbook of International Economics, Volume 4, (eds Elhanan Helpman, Gita Gopinath and Kenneth Rogoff), Elsevier: North Holland, Chapter 3, 131-195.
- 6. \*Fitzgerald, D. (2012) "Trade Costs, Asset Market Frictions and Risk Sharing," AER

# 2 Ricardian differences

- 1. Alvarez and Lucas (2007), "General Equilibrium Analysis of the Eaton-Kortum Model of International Trade," JME.
- 2. Antras, P. and A. de Gortari (2020), "On the Geography of Global Value Chains," Econometrica.
- 3. Bernard, A., J. Eaton, B. Jensen and S. Kortum (2003), "Plants and Productivity in International Trade," AER .
- 4. \*Caliendo, L. and F. Parro (2015), "Estimates of the Trade and Welfare Effects of NAFTA," REStud.
- 5. Costinot, A., D. Donaldson and I. Komunjer (2012), "What Goods Do Countries Trade? A Quantitative Exploration of Ricardo's Ideas," REStud.
- 6. Eaton and Kortum (2002), "Technology, Geography and Trade," ECMA.
- 7. Levchenko, A. and J. Zhang (2014), "Ricardian Productivity Differences and the Gains from Trade," EER.
- 8. Lind, N. and N. Ramondo (2019), "Trade With Correlation."

9. Ramondo, N. and A. Rodriguez-Clare (2013), "Trade, Multinational Production, and the Gains from Openness," JPE.

#### 3 Different endowments

- 1. Adao, R., A. Costinot and D. Donaldson (2015), "Nonparametric Counterfactual Predictions in Neoclassical Models of International Trade," mimeo.
- 2. Bernard, Redding, and Schott (2007), "Comparative Advantage and Heterogeneous Firms," Review of Economic Studies, 31-66
- 3. Burstein, Hanson, Tian and Vogel (2020), "Tradability and the Labor-Market Impact of Immigration: Theory and Evidence from the U.S.," Econometrica
- 4. Burstein, A., E. Morales and J. Vogel (2018), "Changes in Between-Group Inequality: Computers, Occupations and International Trade," AEJ-Macro.
- 5. Burstein, A. and J. Vogel (2017), "International Trade, Technology, and the Skill Premium," JPE.
- 6. Costinot, A. and J. Vogel (2010), "Matching and Inequality in the World Economy," JPE 118 (4) 747-786.
- 7. Davis, D. and D. Weinstein (2002), "The Factor Content of Trade," *Handbook of International Trade*, E. Choi and J. Harrigan eds.
- 8. Galle, S., A. Rodriguez-Clare and M. Yi (2021), "Slicing the Pie: Quantifying the Aggregate and Distributional Effects of Trade," REStud forthcoming.
- 9. \*Lee, E. (2020), "Trade, Inequality, and the Endogenous Sorting of Heterogeneous Workers," JIE 125
- 10. Romalis, J., "Factor Proportions and the Structure of Commodity Trade," AER 94 (1), 67-97.

### 4 Increasing returns

- 1. Arkolakis, C. (2010), "Market Penetration Costs and the New Consumers Margin in International Trade," JPE.
- 2. Atkeson and Burstein (2008), "Pricing-to-Market, Trade Costs, and International Relative Prices" AER.

- 3. \*Bai, Y., K. Jin and D. Lu (2020), "Misallocation under Trade Liberalization."
- 4. Baldwin, R. and J. Harrigan (2011), "Zeros, Quality and Space: Trade Theory and Trade Evidence," AEJ-Micro.
- 5. Chaney (2008), "Distorted Gravity: Heterogeneous Firms, Market Structure and the Geography of International Trade," AER.
- 6. Eaton, J., S. Kortum and F. Kramarz (2011), "An Anatomy of International Trade: Evidence from French Firms," ECMA.
- 7. Midrigan, Edmond, and Xu (2015), "Competition, Markups, and the Gains from International Trade," AER.
- 8. Head, K., T. Mayer and M. Thoenig (2014), "Welfare and Trade Without Pareto," AER P&P.
- 9. Helpman, E., M. Melitz and Y. Rubinstein (2008), "Estimating Trade Flows: Trading Partners and Trading Volumes," QJE 123, 441-487.
- 10. Krugman (1979), "Increasing Returns, Monopolistic Competition, and International Trade," JIE.
- 11. Krugman (1980), "Scale Economies, Product Differentiation, and the Pattern of Trade," AER.
- 12. Melitz (2003), "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," Econometrica.
- 13. Melitz and Ottaviano (2008), "Market Size, Trade, and Productivity." REStud.
- 14. Melitz, M. and S. Redding (2014), "Heterogeneous Firms and Trade," Handbook of International Economics, Volume 4, (eds Elhanan Helpman, Gita Gopinath and Kenneth Rogoff), Elsevier: North Holland, Chapter 1, 1-54.
- 15. Melitz, M. and S. Redding (2015), "New Trade Models, New Welfare Implications," AER.

#### 5 Trade and consumer welfare

- 1. Atkin, D., B. Faber and M. Gonzalez-Navarro (2018), "Retail Globalization and Household Welfare: Evidence from Mexico," JPE.
- 2. Borusyak, K., and X. Jaravel (2018), "The Distributional Effects of Trade: Theory and Evidence from the United States."

- 3. Broda, C. and D. Weinstein (2006), "Globalization and the Gains from Variety," QJE.
- 4. \*Fajgelbaum and Khandelwal (2016), "Measuring the Unequal Gains From Trade," QJE.

### 6 Economic geography

- 1. Ahlfeldt, G. M., Redding, S. J., Sturm, D. M., & Wolf, N. (2015). The Economics of Density: Evidence from the Berlin Wall. ECMA.
- 2. Allen, T. and C. Arkolakis (2014), "Trade and the Topography of the Spatial Economy," QJE.
- 3. Brancaccio, G., M. Kalouptsidi and T. Papageorgiou (2018), "Geography, Search Frictions and Endogenous Trade Costs," ECMA.
- 4. Donaldson, D. and R. Hornbeck (2016), "Railroads and American Economic Growth: A "Market Access" Approach," QJE
- 5. Davis, D. (1998), "The Home Market, Trade and Industrial Structure," AER.
- 6. Fajgelbaum, P., E. Morales, J.-C. Suarez Serrato and O. Zidar (2018), "State Taxes and Spatial Misallocation," REStud.
- 7. \*Gaubert, C. (2018), "Firm Sorting and Agglomeration," AER.
- 8. Krugman (1991), "Increasing Returns and Economic Geography," JPE
- 9. Krugman and Venables (1995), "Globalization and the Inequality of Nations," QJE.
- 10. Nagy, D. (2018), "Trade and Urbanization: Evidence from Hungary."
- 11. Redding, S. (2011), "Economic Geography: a Review of the Theoretical and Empirical Literature," Chapter 16 in The Palgrave Handbook of International Trade.
- 12. Redding, S. and D. Sturm (2008), "The Costs of Remoteness: Evidence from German Division and Reunification," AER.
- 13. Redding, S. and E. Rossi-Hansberg (2017), "Quantitative Spatial Economics," ARE.

### 7 Trade, innovation, and growth

1. Akcigit, U., S. Ates and G. Impullitti (2018), "Innovation and Trade Policy in a Globalized World."

- 2. Alvarez, F., F. Buera and R. Lucas (2013), "Idea Flows, Economic Growth, and Trade."
- 3. Atkeson, A. and A. Burstein (2010), "Innovation, Firm Dynamics, and International Trade," JPE.
- 4. Baldwin, R. and F. Robert-Nicoud (2008), "Trade and Growth with Heterogeneous Firms," JIE.
- 5. Buera, F. and E. Oberfield (2019), "The Global Diffusion of Ideas," ECMA.
- 6. Eaton, J. and S. Kortum (2001), "Technology, Trade, and Growth: A Unified Framework," EER.
- 7. Grossman, G. and E. Helpman (1991), Innovation and Growth in the Global Economy, MIT Press.
- 8. Hsieh, C.-T., P. Klenow and I. Nath (2020), "A Global View of Creative Destruction."
- 9. \*Perla, J., C. Tonetti and M. Waugh (2021), "Equilibrium Technology Diffusion, Trade, and Growth," AER
- 10. Rivera-Batiz, L. and P. Romer (1991), "Economic Integration and Endogenous Growth," QJE.
- 11. Sampson, T. (2016), "Dynamic Selection: An Idea Flows Theory of Entry, Trade, and Growth," QJE.

#### 8 Services trade

- 1. Ding, X., T. Fort, S. Redding and P. Schott (2019), "Structural Change Within Versus Across Firms: Evidence from the United States."
- 2. Eaton, J. and S. Kortum (2019), "Trade in Goods and Trade in Services."
- 3. Eckert, F. (2019), "Growing Apart: Tradable Services and the Fragmentation of the U.S. Economy."
- 4. Eckert, F., S. Ganapati and C. Walsh (2020), "Skilled Scalable Services: The New Urban Bias in Economic Growth."
- 5. Gervais, A. and J. B. Jensen (2019), "The Tradability of Services: Geographic Concentration and Trade Costs," JIE.
- 6. \*Hsieh, C.-T. and E. Rossi-Hansberg (2021), "The Industrial Revolution in Services."

## 9 Trade, immigration and labor markets

- 1. \*Burstein, A., G. Hanson, L. Tian and J. Vogel (2020), "Tradability and the Labor-Market Impact of Immigration: Theory and Evidence from the U.S.," ECMA.
- 2. Colas, M. (2018), "Dynamic Responses to Immigration."
- 3. Caliendo, L., M. Dvorkin and F. Parro (2018), "Trade and Labor Market Dynamics: General Equilibrium Analysis of the China Trade Shock," ECMA.
- 4. Caliendo, C., L. Opromolla, F. Parro and A. Sforza (2018), "Goods and Factor Market Integration: A Quantitative Assessment of the EU Enlargement."
- 5. Dix-Carneiro, R. (2014), "Trade Liberalization and Labor Market Dynamics," ECMA.
- 6. Dix-Carneiro, R. and B. Kovak (2017), "Trade Liberalization and Regional Dynamics," AER.
- 7. Monras, J. (2019), "Immigration and Wage Dynamics: Evidence from the Mexican Peso Crisis." JPE.
- 8. Traiberman, S. (2019), "Occupations and Import Competition: Evidence from Denmark," AER.

# 10 Dynamic gains from trade

- 1. Alessandria and Choi (2021), "The Dynamics of the U.S. Trade Balance and Real Exchange Rate: The J Curve and Trade Costs?" JIE.
- 2. Eaton, Kortum, Neiman and Romalis (2016), "Trade and the Global Recession," AER.
- 3. \*Ravikumar, Santacreu and Sposi (2019), "Capital Accumulation and Dynamic Gains from Trade," JIE.
- 4. Reyes-Heroles, R. (2016), "The Role of Trade Costs in the Surge of Trade Imbalances."

### 11 China shock

- 1. Autor, Dorn and Hanson (2013), "The China Syndrome: Local Labor Market Effects of Import Competition in the United States," AER.
- 2. Caliendo, L., M. Dvorkin and F. Parro (2018), "Trade and Labor Market Dynamics: General Equilibrium Analysis of the China Trade Shock," ECMA.

- 3. Ferriere, A., G. Navarro and R. Reyes-Heroles (2020), "Escaping the Losses from Trade: The Impact of Heterogeneity on Skill Acquisition."
- 4. Fort, T., J. Pierce and P. Schott (2018), "New Perspectives on the Decline of U.S. Manufacturing Employment," JEP.
- 5. Jaravel, X. and E. Sager (2019), "What are the Price Effects of Trade? Evidence from the U.S. and Implications for Quantitative Trade Models."
- 6. Lyon, S. and M. Waugh (2019), "Quantifying the Losses from International Trade."
- 7. Pierce, J. and P. Schott (2016), "The Surprisingly Swift Decline of U.S. Manufacturing Employment," AER.

# 12 Trump trade war

- 1. Amiti, M., S. Redding and D. Weinstein (2019), "The Impact of the 2018 Trade War on U.S. Prices and Welfare," JEP.
- 2. Amiti, M., S. Redding and D. Weinstein (2019), "Who's Paying for the U.S. Tariffs? A Longer Term Perspective."
- 3. Cavallo, A., G. Gopinath, B. Neiman and J. Tang (2019), "Tariff Passthrough at the Border and at the Store: Evidence from U.S. Trade Policy."
- 4. Fajgelbaum, P., P. Goldberg, P. Kennedy and A. Khandelwal (2020), "The Return to Protectionism," QJE.
- 5. Flaaen, A., A. Hortacsu and F. Tintelnot (2020), "The Production Relocation and Price Effects of U.S. Trade Policy: The Case of Washing Machines."