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International Trade, Ph.D. (Econ)

Econ 724, 2020-21 Term 1

Singapore Management University

SOE/SOSS Seminar Room 5.1, Tuesday 8:30 – 11:45am

Office Hours: Tuesday 12:00 – 1:00pm, or by appointment.

Teaching Assistant

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Consultation Hours: TBA, SOE/SOSS GSR x-x

Syllabus

Course Description

This course provides a graduate-level introduction to the field of international trade. It will cover the theories and empirics of international trade and policy. The first part introduces the positive theories of trade: including the classical models of trade (that focus on comparative advantage as the source of gains from trade), the new trade theories (that rely on imperfect competition and/or increasing returns to scale as the rationale for trade), and the new-new trade theories (that incorporate firm heterogeneity in predicting the trade structure). This is followed by a review of the theories of outsourcing and foreign direct investment that focus on the trade in intermediate goods and services. The second part introduces the normative theories of trade and evaluates the welfare properties of international trade policies. Topics discussed include the political economy of trade protection, the mechanism design of multilateral trade agreements (GATT/WTO), and the welfare effects of preferential trade agreements.

Pre-requisite

This course is targeted at second-year Ph.D. students in economics. Students are expected to have completed first-year Ph.D. courses in Microeconomics I and II, and preferably Econometrics I and II.

Assessment Methods:

Class Participation:	10%	
Problem sets:	20%	
Midterm Examination:	30%	(2020/10/13, Tues 8:30 – 11:30am, SOE/SOSS Seminar Room 5-1)
Final Examination:	40%	(2020/12/8, Tues 8:30 – 11:30am, SOE/SOSS Seminar Room 5-1)

Textbooks:

There are no required textbooks. The reading list refers to the following books, which are very much worth buying, but will be on reserve at the library:

- Feenstra, R. (2015), *Advanced International Trade: Theory and Evidence*, 2nd Edition, Princeton University Press.
- Helpman, E. and P. R. Krugman (1985), *Market Structure and Foreign Trade*, MIT Press.
- Jones, R. and P. Kenen (1984), *Handbook of International Economics*, Volume 1, North Holland.
- Grossman, G. and K. Rogoff (1995), *Handbook of International Economics*, Volume 3, North Holland.
- Gopinath, G., E. Helpman, and K. Rogoff (2014), *Handbook of International Economics*, Volume 4, Elsevier.
- Helpman, E. and P. R. Krugman (1989), *Trade Policy and Market Structure*, MIT Press.
- Grossman and Helpman, (2002), *Interest Groups and Trade Policy*, Princeton University Press.
- Bagwell, K. and R. W. Staiger (2002), *The Economics of the World Trading System*, MIT Press.

Reading List (subject to change)

1. Introduction: Gains from Trade and Law of Comparative Advantage

- Lecture Note 1

Textbook Treatment

- Helpman and Krugman (1985), p. 28-29.

Required Readings

- Deardorff, Alan V. (1980), "The General Validity of the Law of Comparative Advantage," *Journal of Political Economy*, 88:5, pp. 941-957.

Recommended Readings

- Bernhofen, Daniel and Charles C. Brown (2004), "A Direct Test of the Theory of Comparative Advantage: The Case of Japan," *Journal of Political Economy*, 112:1, pp. 48-67.

2. Classical Trade Theories

2.1. Technology and Trade: The Ricardian Model

- Lecture Note 2

Textbook Treatment

- Feenstra (2003), p. 1-4.

Required Readings

- Dornbusch, Rudiger, Stanley Fischer, and Paul A. Samuelson (1977), "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," *American Economic Review*, 67:5, pp. 823-839.
- Eaton, Jonathan and Samuel Kortum (2002), "Technology, Geography, and Trade," *Econometrica*, 70:5, pp. 1741-1779.

- McDougall, G.D.A. (1951), "British and American Exports: A Study Suggested by the Theory of Comparative Costs: Part I," *Economic Journal*, 61, pp. 697-724.
- Costinot, Arnaud, Dave Donaldson, and Ivana Komunjer (2012), "What Goods Do Countries Trade? A Quantitative Exploration of Ricardo's Ideas," *Review of Economic Studies*, 79, pp. 581-608.

Recommended Readings

- Matsuyama, K. (2000), "A Ricardian Model with a Continuum of Goods under Non-Homothetic Preferences: Demand Complementarities, Income Distribution and North-South Trade," *Journal of Political Economy*, 108, pp.1093-1120.

2.2. Factor Endowments and Trade: The Heckscher-Ohlin Model

- Lecture Note 3

Textbook Treatment

- Feenstra (2003), Chapters 1 and 2.
- Helpman and Krugman (1985), Chapter 1.

Required Readings

- Bowen, Harry P., Edward E. Leamer, and Leo Sveikauskas (1987), "Multicountry, Multifactor Tests of the Factor Abundance Theory," *American Economic Review*, 77, pp. 791-809.
- Trefler, D. (1993), "International Factor Price Differences: Leontief was Right!" *Journal of Political Economy*, 101:6, pp. 961-987.
- Trefler, D. (1995), "The Case of the Missing Trade and Other Mysteries," *American Economic Review*, 85:5, pp. 1029-1046.
- Davis, D. and D. Weinstein (2001), "An Account of Global Factor Trade," *American Economic Review*, 91:5, pp. 1423-1453.

Recommended Readings

- Romalis, J. (2004), "Factor Proportions and the Structure of Commodity Trade," *American Economic Review*, 94(1): 67-97.

3. New Trade Theories: The Krugman Model

- Lecture Note 4

Textbook Treatment

- Helpman and Krugman (1985), Chapters 6, 7, 8, and 9.

Required Readings

- Krugman, P. (1979), "Increasing Returns, Monopolistic Competition, and International Trade," *Journal of International Economics*, 9:4, pp. 469-479.
- Krugman, P. (1980), "Scale Economies, Product Differentiation, and the Pattern of Trade," *American Economic Review*, 70, pp.950-59.

- Antweiler, W. and D. Trefler (2002), "Increasing Returns and All That: A View from Trade," *American Economic Review*, 92:1, pp. 93-119.
- Broda, C., and D. Weinstein (2006), "Globalization and the Gains from Variety," *Quarterly Journal of Economics*, 121:2, pp. 541-585.

Recommended Readings

- Hummels, D. and J. Levinsohn (1995), "Monopolistic Competition and International Trade: Reconsidering the Evidence," *Quarterly Journal of Economics*, 110:3, pp. 799-836.

4. New-New Trade Theories:

4.1. The Melitz Model

- Lecture Notes 5 and 5A

Textbook Treatment

- Gopinath, Helpman, and Rogoff (2014), Chapter 1 (by Melitz and Redding).

Required Readings

- Melitz, M. (2003), "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71:6, pp. 1695-1725.
- Melitz, Marc and Gianmarco Ottaviano (2008), "Market Size, Trade, and Productivity," *Review of Economic Studies*, 75, pp. 295-316.
- Bernard A. and J. Jensen (2004), "Why Some Firms Export," *Review of Economics and Statistics*, 86: 2, pp. 504-507.
- Eaton, J., S. Kortum and F. Kramarz (2011), "An Anatomy of International Trade: Evidence from French Firms," *Econometrica*, 79:5, pp. 1453-1498.

Recommended Readings

- Mayer, Thierry, Marc J. Melitz and Gianmarco I. P. Ottaviano (2014), "Market Size, Competition, and the Product Mix of Exporters," *American Economic Review*, 104: 2, pp. 495-536.
- Bernard, Andrew B., Stephen Redding, Peter K. Schott (2007), "Comparative Advantage and Heterogeneous Firms," *Review of Economic Studies*, 74, pp. 31-66.
- Pavcnik, Nina (2002), "Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants," *Review of Economic Studies*, 69, pp. 245-76.

4.2. The Bernard-Eaton-Jensen-Kortum Model

- Lecture Note 6
- Bernard, A., J. Eaton, J. Jensen and S. Kortum (2003), "Plants and Productivity in International Trade," *American Economic Review*, 93:4, pp. 1268-1290.

5. Gravity Equations

- Lecture Note 7

Textbook Treatment

- Gopinath, Helpman, and Rogoff (2014), Chapter 3 (by Head and Mayer).

Required Readings

- Anderson, J. and E. van Wincoop (2003), "Gravity with Gravitas: A Solution to the Border Puzzle," *American Economic Review*, 93, pp. 170-92.
- Chaney, T. (2005), "Distorted Gravity: Heterogeneous Firms, Market Structure and the Geography of International Trade," *American Economic Review*, 98:4, pp. 1707-21.
- Helpman, E., M. Melitz and Y. Rubinstein (2008), "Estimating Trade Flows: Trading Partners and Trading Volumes," *Quarterly Journal of Economics*, 123, pp. 441-487.

Recommended Readings

- Anderson, J. and E. van Wincoop (2004), "Trade Costs," *Journal of Economic Literature*, 42:3, pp. 691-751.
- Evenett, S. and W. Keller (2002), "On the Theories Explaining the Success of the Gravity Equation," *Journal of Political Economy*, 110, pp. 281-316

6. Gains from Trade (Revisited)

- Lecture Note 7A

Required Readings

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

Recommended Readings

- Melitz, Marc J. and Stephen J. Redding (2015), "New Trade Models, New Welfare Implications," *American Economic Review*, 105:3, pp. 1105-1146.
- Arnaud Costinot, and Andrés Rodríguez-Clare (2014), "Trade Theory with Numbers: Quantifying the Consequences of Globalization," in *Handbook of International Economics*, Volume 4, Elsevier.

7. Theories of Foreign Direct Investment and Offshoring

7.1. On the determinants of FDI and Offshoring

- Lecture Note 8

Textbook Treatment

- Gopinath, Helpman, and Rogoff (2014), Chapter 2 (by Antràs and Yeaple).

Required Readings

- Helpman, E., M. Melitz and S. Yeaple (2004), "Export versus FDI with Heterogeneous Firms," *American Economic Review*, 94:1, pp. 300-316.
- Antràs, P. and E. Helpman (2004), "Global Sourcing," *Journal of Political Economy*, 112:3, pp. 552-580.

Recommended Readings

- Grossman, G. and E. Rossi-Hansberg (2008), "Trading Tasks: A Simple Theory of Offshoring," *American Economic Review*, 98:5, pp. 1978-1997.
- Antràs, P. (2005), "Incomplete Contracts and the Product Cycle," *American Economic Review*, 95:4, pp. 1054-1073.
- Yi, Kei-Mu (2003), "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy*, 111:1, pp. 52-102.
- Helpman, Elhanan (2006), "Trade, FDI and the Organization of Firms," *Journal of Economic Literature*, 44, pp. 589-630.
- Chang, Pao-Li and Chia-Hui Lu (2012), "Risk and the Technology Content of FDI: A Dynamic Model," *Journal of International Economics*, 86, pp. 306-317.

7.2. On Value-Added in Gross Exports

- Lecture Note 8A

Required Readings

- Koopman, Robert, Zhi Wang and Shang-Jin Wei (2014), "Tracing Value-Added and Double Counting in Gross Exports," *American Economic Review*, 104:2, pp. 459-94.

Recommended Readings

- Hummels, David, Jun Ishii, and Kei-Mu Yi (2001), "The Nature and Growth of Vertical Specialization in World Trade," *Journal of International Economics*, 54:1, pp. 75-96.
- Johnson, Robert C., and Guillermo Noguera (2012), "Accounting for Intermediates: Production Sharing and Trade in Value Added," *Journal of International Economics*, 86:2, pp.224-36.

8. Trade and Wage Inequality

- Lecture Note 9

Textbook Treatment

- Feenstra (2003), Chapter 4.

Required Readings

- Costinot, A. and J. Vogel (2010), "Matching and Inequality in the World Economy," *Journal of Political Economy*, 118, pp. 747-786.
- Feenstra, R. C. and G. H. Hanson (1995), "Foreign Investment, Outsourcing and Relative Wages," NBER Working Paper No. 5121.

Recommended Readings

- Berman, E., J. Bound, and S. Machin (1998), "Implications of Skill-Biased Technological Change: International Evidence," *Quarterly Journal of Economics*, 113, pp. 1245-1279.
- Bernard, A. B. and B. Jensen (1997), "Exporters, Skill Upgrading, and the Wage Gap," *Journal of International Economics*, 42, pp. 3-31.

9. Trade Policy

- Lecture Notes (from Econ 234)

Textbook Treatment

- Feenstra (2003), Chapters 7 and 8
- Helpman and Krugman (1989), Chapters 2, 5, and 7.

10. Political Economy of Trade Policy

- Lecture Note 10

Textbook Treatment

- Grossman and Helpman (2002), Chapter 6.

Required Readings

- Mayer, W. (1984), "Endogenous Tariff Formation," *American Economic Review*, 74:5, pp. 970-85.
- Grossman, G. and E. Helpman (1994), "Protection for Sale," *American Economic Review*, 84, pp. 833-50.
- Goldberg, P. and G. Maggi (1999), "Protection for Sale: An Empirical Investigation," *American Economic Review*, 89, pp. 1135-1155.
- Grossman, G. and E. Helpman (1995), "Trade Wars and Trade Talks," *Journal of Political Economy* 103, pp. 675-708.
- Ossa, Ralph (2014), "Trade Wars and Trade Talks with Data," *American Economic Review*, 104, pp. 4104-4146.

Recommended Readings

- Chang, Pao-Li (2005), "Protection for Sale under Monopolistic Competition," *Journal of International Economics*, 66: 509– 526.

11. International Trade Agreements

11.1. Multilateral

- Lecture Note 11

Textbook Treatment

- Bagwell, K. and R. Staiger (2002), Chapters 2, 4, 5, and 6.
- Gopinath, Helpman, and Rogoff (2014), Chapter 6 (by Maggi).

Required Readings

- Bagwell, K. and R. Staiger (1999), "An Economic Theory of GATT," *American Economic Review*, 89:1, pp. 215-48.
- Rose, A. (2004), "Do We Really Know that the WTO Increases Trade?" *American Economic Review*, 94:1, pp. 98–114.
- Tomz, M., J. Goldstein and D. Rivers (2007), "Do We Really Know that the WTO Increases Trade? Comment," *American Economic Review*, 97:5, pp. 2005–2018.

- Chang, Pao-Li and Myoung-Jae Lee (2011), "The WTO Trade Effect," *Journal of International Economics*, 85, pp. 53-71.

Recommended Readings

- Kyle Bagwell, Chad P. Bown, and Robert W. Staiger (2016), "Is the WTO Passé?" *Journal of Economic Literature*, 54(4), 1125-1231.
- Maggi, G. and A. Rodriguez-Clare (2007), "A Political Economy Theory of Trade Agreements," *American Economic Review*, 97, pp. 1374-1406.
- Maggi, G. and A. Rodriguez-Clare (1998), "The Value of Trade Agreements in the Presence of Political Pressures," *Journal of Political Economy*, 106:3, pp. 574-601.
- Maggi, G. (1999), "The Role of Multilateral Institutions in International Trade Cooperation," *American Economic Review*, 89:1, pp. 190-214.
- Horn, H., G. Maggi and R. Staiger (2010), "Trade Agreements as Endogenously Incomplete Contracts," *American Economic Review*, 100, pp. 394-419.
- Maggi, G. and R. Staiger (2011), "The Role of Dispute Settlement Procedures in International Trade Agreements," *Quarterly Journal of Economics*, 126, pp. 475-515.
- Subramanian, A. and S. J. Wei (2007), "The WTO Promotes Trade Strongly, but Unevenly," *Journal of International Economics*, 72, pp. 151-75.

11.2. Preferential

- Lecture Note 12

Textbook Treatment

- Bagwell, K. and R. Staiger, (2002), Chapter 7.

Required Readings

- Baier, S. and J. Bergstrand (2007), "Do Free Trade Agreements Actually Increase Members' International Trade?" *Journal of International Economics*, 71: 72-95.
- Estevadeordal, A., C. Freund and E. Ornelas (2008), "Does Regionalism Affect Trade Liberalization toward Nonmembers?" *Quarterly Journal of Economics*, 123(4): 1531-1575.
- Caliendo, Lorenzo and Fernando Parro (2015), "Estimates of the Trade and Welfare Effects of NAFTA," *Review of Economic Studies*, 82, pp. 1-44.
- Anderson, James E. and Yoto V. Yotov (2016), "Terms of Trade and Global Efficiency Effects of Free Trade Agreements, 1990-2002," *Journal of International Economics*, 99, pp. 279-298.

Recommended Readings

- Antràs, P. and Robert Staiger (2012), "Offshoring and the Role of Trade Agreements," *American Economic Review* 102, pp. 3140-3183.
- Hofmann, C., A. Osnago, and M. Ruta, 2017. Horizontal depth: A new database on the content of preferential trade agreements. *World Bank Policy Research Working Paper* 7981.

- Levy, Philip I. (1997), "A Political-Economic Analysis of Free-Trade Agreements," *American Economic Review*, 87:4, pp. 506-519.
- Krishna, P. (1998), "Regionalism and Multilateralism: A Political Economy Approach," *Quarterly Journal of Economics*, 113:1, pp. 227-51.
- Grossman, Gene M. and Elhanan Helpman (1995), "The Politics of Free Trade Agreements," *American Economic Review*, 85:4, pp. 667-690.
- Aghion, P., P. Antras and E. Helpman (2007), "Negotiating Free Trade," *Journal of International Economics*, 73: 1-30.
- Freund, C. (2000), "Multilateralism and the Endogenous Formation of Preferential Trade Agreements," *Journal of International Economics*, 52:2, pp. 359-76.
- Chang, Won and L. Winters (2002), "How Regional Blocs Affect Excluded Countries: The Price Effects of MERCOSUR," *American Economic Review*, 92(4): 889-904.
- Karacaovali, B. and N. Limão (2008), "The Clash of Liberalizations: Preferential vs. Multilateral Trade Liberalization in the European Union," *Journal of International Economics*, 74: 299-327.
- Romalis, John (2007), "NAFTA's and CUSFTA's Impact on International Trade," *Review of Economics and Statistics*, 89:3, pp. 416-435.

KIV

12. Other Topics in International Trade

12.1. Trade and Growth

- Note 10
- Feenstra (2003), Chapter 10
- Frankel, J. and D. Romer, (1999), "Does Trade Cause Growth?" *American Economic Review*, 89(3): 379-399.
- Rodríguez, F. and D. Rodrik, (2000), "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence," *NBER Macroeconomics Annual*, 15: 261-325.
- Alcalá, F. and A. Ciccone, (2004), "Trade and Productivity," *Quarterly Journal of Economics*, 119(2): 613-646.
- Keller, W., (2004), "International Technology Diffusion," *Journal of Economic Literature*, 42(3): 752-782.

12.2. Trade and Institution

- Note 11
- Grossman, G. and G. Maggi, (2000), "Diversity and Trade," *American Economic Review*, 90(5): 1255-1275.
- Costinot, A., (2009), "On the Origins of Comparative Advantage," *Journal of International Economics*, 77(2): 255-264.
- Do, Quy-Toan and A. Levchenko, (2009), "Trade, Inequality, and the Political Economy of Institutions," *Journal of Economic Theory*, 144(4): 1489-1520.
- Levchenko, A., (2007), "Institutional Quality and International Trade," *Review of Economic Studies*, 74(3): 791-819.

12.3. Trade and Network

- Note 11
- Rauch, J., (1999), "Networks versus Markets in International Trade," *Journal of International Economics*, 48: 7-35.
- Rauch, J., (2001), "Business and Social Networks in International Trade," *Journal of Economic Literature*, 39: 1177-1203.
- Rauch, J. and V. Trindade, (2002), "Ethnic Chinese Networks in International Trade", *Review of Economics and Statistics*, 84: 116-130.