### **Economics 612100 Topics in International Economics**

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Class Meets: Thursdays 1:20 to 4:20pm	Location: TSMC 121
Course Website: 國立清華大學 eLearn 平台 (eLearn)	

### **Course Description**

This course covers topics in international trade and foreign direct investment. The discussion begins with implications of the new trade theory, the role of firm heterogeneity in international trade, and the influence of geography and information in international trade. We will also study foreign direct investment and the behavior of multinational firms. Finally, we will look into offshoring and global supply chains.

#### **Course Objectives**

The objective of this course is to introduce research topics and methods in empirical international trade and investment. Students are expected to learn about development in research topics in this field and get familiar with empirical methods that are related to these topics. At the end of the course, the students are expected to present their understanding of these topics and methods in oral and written form.

### Evaluation

The course grade is based on four elements:

- 15% Participation
- 30% Two Assignments
- 25% Class Presentation
- 30% Term Paper
- a. **Participation**: At the end of lecture, I will announce the readings for the next lecture. Students should read the articles that will be discussed in class and participate in class discussion. Class discussion can be either in Mandarin or in English.
- b. Assignments: The assignments are literature reviews or empirical exercises related to the topics. You have 7 to 10 days to finish the assignments. Empirical exercises will require the use of Stata software.
- c. Class Presentation and Term Paper: Each student will choose a topic related to international trade and investment, complete a term paper and present the term paper in class. The topic can be a further study of a topic that we discuss in class or a topic that we do not cover. The term paper can be a review of papers or a data exercise. Proposal of the term paper is due on November 24. Tentatively, the presentation will take place on May 30 and June 6, 2024. Every student has 15-20 minutes to present and 10 minutes for

questions and discussion. The term paper is due on June 21, 2024.

Regarding students' use of AI for the course work: Conditionally open; please specify how generative AI will be used in course output.

## **Topics:**

The tentative reading list is from 2020, will be updated soon. (Note: \* denotes required readings.)

## **Topic 1: Trade Costs and Gravity Model**

# A. Introduction

- \*Head, C.K. and T. Mayer (2014). "Gravity Equations: Workhorse, Toolkit, and Cookbook." in E. Helpman, K. Rogoff and G. Gopinath (eds) *Handbook of International Economics*, 4th ed, 131-195. Elsevier.
- B. Theoretical Models:
  - \*Anderson, J. E. and E. van Wincoop (2003). "Gravity with Gravitas: A Solution to the Border Puzzle." *American Economic Review* 93(1): 170-192.
  - Eaton, J. and S. Kortum (2002). "Technology, Geography, and Trade" Econometrica 70(5) 1741-1779.
  - Helpman, E., M. Melitz, and Y. Rubinstein. (2008). "Estimating Trade Flows: Trading Partners and Trading Volumes." *Quarterly Journal of Economics* 123(2): 441-487.
  - Chaney, Thomas. (2008) "Distorted Gravity: The Intensive and Extensive Margins of International Trade." *American Economic Review* 98 (4): 1707-1721.
- C. Empirical Issues:
  - Santos Silva, J. M. C. and S. Tenreyro (2006). "The Log of Gravity." *Review of Economics and Statistics* 88(4): 641-658.
  - Fally, T. (2015). "Structural Gravity and Fixed Effects," Journal of International Economics 97 (1), 76-85.
- D. Empirical Evidence

 $\underline{\text{Border Effect}}$ 

- \*McCallum, J. (1995). "National Borders Matter: Canada-U.S. Regional Trade Patterns", American Economic Review 85 (3), 615-623.
- \*Redding, S. and A. J. Venables (2004). "Economic Geography and International Inequality." *Journal of International Economics* 62(1): 53-82.
- \*Redding, S. and D. Sturm. (2008) "The Costs of Remoteness: Evidence from German Division and Reunification." *American Economic Review* 98(5): 1766-1797.

Information and International Trade

- Gould, David M. (1994). "Immigrant Links to the Home Country: Empirical Implications for U.S. Bilateral Trade Flows," *Review of Economics and Statistics* 76:302-316.
- \*Rauch, J. E. (1999) "Networks Versus Markets in International Trade," *Journal of International Economics* 48:7-35.
- Rauch, J. E. and V. Trindade (2003) "Information, International Substitutability, and Globalization," *American Economic Review* 93(3):775-791.
- Rauch, J. E. and V. Trindade (2002). "Ethnic Chinese Networks in International Trade." *Review of Economics and Statistics* 84(1): 116-130.

• Chaney, T. (2014). "The Network Structure of International Trade." American Economic Review, 104(11): 3600-3634.

Effects of FTA/Currency Union

- \*Anderson, J. E. and Yotov, Y. V. (2016) "Terms of Trade and Global Efficiency Effects of Free Trade Agreements, 1990-2002." *Journal of International Economics* 99 (C): 279-298.
- Larch, M., J. Wanner, Y. V. Yotov, and T. Zylkin (2019). "Currency Unions and Trade: A PPML Re-assessment with High-Dimensional Fixed Effects," Oxford Bulletin of Economics and Statistics 81(3): 487-510.

# **Topic 2:** Firms in International Trade

A. Introduction:

- \*Bernard, A. B., J. B. Jensen, S. J. Redding and P. K. Schott (2007). "Firms in International Trade." *Journal of Economic Perspectives* 21(3): 105-130.
- Bernard, A. B., J. B. Jensen, S. J. Redding and P. K. Schott (2018). "Global Firms" Journal of Economic Literature, 56(2), 565–619

B. Theoretical Models:

- \*Krugman, P. R. (1979). "Increasing Returns, Monopolistic Competition, and International Trade," *Journal of International Economics* 9, 469-479.
- Melitz, M. J. (2003). "The Impact of Trade on Intra-industry Reallocations and Aggregate Industry Productivity." *Econometrica*, 71(6): 1695-1725.
- \*Melitz, M.J. and S. J. Redding (2014). "Heterogeneous Firms and Trade." In E. Helpman, K. Rogoff and G. Gopinath (eds) *Handbook of International Economics*, 4th ed, 1-54. Elsevier.
- Bernard, A. B., J. Eaton, J. B. Jensen and S. Kortum (2003). "Plants and Productivity in International Trade." *American Economic Review* 93(4): 1268-1290.
- Melitz, M. J. and G. I. P. Ottaviano (2008). "Market Size, Trade, and Productivity." *Review of Economic Studies*, 75, 295-316.
- C. Empirical Evidence

Export Decision

- Eaton, J., S. Kortum and F. Kramarz (2011). "An Anatomy of International Trade: Evidence from French Firms" *Econometrica* 79(5): 1453-1498.
- \*Roberts, M. J. and J. Tybout (1997). "The Decision to Export in Columbia: An Empirical Model of Entry with Sunk Entry Cost." *American Economic Review* 87(4): 545-564.

Effects of Trade Liberalization

- Pavcnik, N. (2002). "Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants." *Review of Economic Studies* 69(1): 245-76.
- \*Trefler, D. (2004). "The Long and Short of the Canada-US Free Trade Agreement." American Economic Review, 94(4): 870-895
- Lileeva, A. and D. Trefler (2010). "Improved Access to Foreign Markets Raises Plant-Level Productivity... for Some Plants." *Quarterly Journal of Economics* 125(3): 1051-1099.

Effects of Exchange Rate Movements

- \*Campa, J. and L. Goldberg (1995), "Investment in Manufacturing, Exchange Rates, and External Exposure," *Journal of International Economics* 38 (3-4) 297-320.
- \*Baggs, J., E. Beaulieu and L. Fung (2009) "Firm Survival, Performance and the Exchange Rate," *Canadian Journal of Economics* 42(2): 393-421.
- Campbell, J. and B. Lapham (2004) 'Real Exchange Rate Fluctuations and the Dynamics of Retail Trade Industries on the U.S.-Canada Border,' *American Economic Review* 94(4), 1194-1206.
- Ekholm, K., A. Moxnes, K. H. Ulltveit-Moe (2012). "Manufacturing Restructuring and the Role of Real Exchange Rate Shocks." *Journal of International Economics* 86: 101–117.
- \*Berman, N., P. Martin and T. Mayer (2012), "How do Different Exporters React to Exchange Rate Changes? Theory, Empirics and Aggregate Implications", *Quarterly Journal of Economics*, 127, 437-492.

### **Topic 2A: Multiproduct Firms**

- A. Theoretical Models:
  - Mayer, T., M. J. Melitz, and G. I. P. Ottaviano. (2014). "Market Size, Competition, and the Product Mix of Exporters." *American Economic Review*, 104(2): 495-536.
  - Mayer, T., M. J. Melitz, and G. I. P. Ottaviano. (2020). "Product Mix and Firm Productivity Responses to Trade Competition." *Review of Economics and Statistics*, forthcoming.
- B. Empirical Evidence:
  - Bernard, A.B., S.J. Redding and P. K. Schott (2010) "Multiple-Product Firms and Product Switching" *American Economic Review* 100(1): 70-97.
  - Bernard, A.B., S.J. Redding and P. K. Schott (2011). "Multi-Product Firms and Trade Liberalization" *Quarterly Journal of Economics*, 126(3): 1271-1318.
  - Chatterjee, A., R. Dix-Carneiro and J. Vichyanond (2013), "Multi-Product Firms and Exchange Rate Fluctuations", *American Economic Journal: Economic Policy*, 5(2), 77-110.
  - \*Liu, R. (2010). "Import Competition and Firm Refocusing." Canadian Journal of Economics 43(2): 440-466.

#### **Topic 3: Foreign Direct Investment and Multinationals**

- A. Theoretical Models:
  - \*Helpman, E., M. J. Melitz, and S. R. Yeaple. (2004) "Export versus FDI", American Economic Review 94(1): 300-316.
  - \*Aw, B. Y. and Y. Lee (2008). "Firm Heterogeneity and Location Choice of Taiwanese Multinationals." *Journal of International Economics* 75(1): 167-179.
- B. Empirical Evidence: Multinationals, Agglomeration and Economic Geography
  - \*Head, K. and T. Mayer (2004). "Market Potential and the Location of Japanese Investment in the European Union," *Review of Economics and Statistics* 86(4): 959-972.
  - \*Amiti, M. and L. Cameron (2007). "Economic Geography and Wages," *Review of Economics and Statistics* 89(1): 15-29.

- Davis, D. R. and D. E. Weinstein (1999). "Economic Geography and Regional Production Structure: An Empirical Investigation," *European Economic Review* 43(2):379-407.
- Davis, D. R. and D. E. Weinstein (2003). "Bones, Bombs, and Break Points: The Geography of Economic Activity," *American Economic Review* 92(5):1269-1289.
- Davis, D. R. and D. E. Weinstein (2003) "Market Access, Economic Geography and Comparative Advantage: an Empirical Test." *Journal of International Economics* 59(1):1-23.

### **Topic 4: Offshoring and Global Value Chains**

A. Theoretical Models

- \*Yi, K-M. (2003) "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy* 111(1):52-102.
- Antras, P., and E. Helpman. (2004). "Global Sourcing." *Journal of Political Economy* 112(3): 552-58
- \*Baldwin, R. and A. J. Venables (2013). "Spiders and snakes: Offshoring and agglomeration in the global economy," *Journal of International Economics*, 90(2): 245-254.
- Antras, P. and D. Chor (2013). "Organizing the Global Value Chains." *Econometrica* 81 (6): 2127–2204.
- Antras, P., T.C. Fort and F. Tintelnot (2017). "The Margins of Global Sourcing: Theory and Evidence from US Firms" *American Economic Review* 2017, 107(9): 2514–2564.
- B. Trade Statistics and Estimation
  - \*Hummels, D., J. Ishii and K-M. Yi (2001). "The Nature and Growth of Vertical Specialization in World Trade," *Journal of International Economics*, 54(1):75-96.
  - \*Xing, Y., and N. Detert (2010). "How the iPhone Widens the United States Trade Deficit with the People's Republic of China." Asian Development Bank Institute Working Paper 257.
  - Koopman, R., Z. Wang, and S.-J. Wei (2014). "Tracing Value-Added and Double Counting in Gross Exports." *American Economic Review*, 104(2): 459-94.
  - Timmer, M. P., A. A. Erumban, B. Los, R. Stehrer, G. J. de Vries (2014). "Slicing Up Global Value Chains." *Journal of Economic Perspectives* 28(2): 99-118.
  - Robert C. Johnson (2014). "Five Facts about Value-Added Exports and Implications for Macroeconomics and Trade Research". *Journal of Economic Perspectives* 28(2): 119-142.
  - \*Kee, H. L. and H. Tang (2016) "Domestic Value Added in Exports: Theory and Firm Evidence from China." *American Economic Review*, 106(6): 1402–1436.
- C. Impact of Offshoring on Labor Market
  - \*Grossman, G. M. and E. Rossi-Hansberg. (2008) "Trading Tasks: A Simple Theory of Offshoring." *American Economic Review* 98(5): 1978-1997.
  - Ebenstein, A., A. Harrison, M. McMillan, S. Phillips (2014), "Estimating the Impact of Trade and Offshoring on American Workers using the Current Population Surveys," *Review of Economics and Statistics*, 96 (3), 581 - 595.
  - Hummels, D., J. R. Munch, and C. Xiang. (2018). "Offshoring and Labor Markets." *Journal of Economic Literature*, 56 (3): 981-1028.