

## 460-3: International Trade and Economic Growth

**Kiminori Matsuyama** (k-matsuyama@northwestern.edu)

**Marti Mestieri** (marti.mestieri@northwestern.edu)

**Classes:** 5 to 8 @ KGH3420 (to be discussed, guest lectures from 3:30 to 6:30), Office hours by appointment.

This course constitutes the second half of the sequence on International Trade and Economic Growth. The course is taught by Kiminori Matsuyama (KM), Marti Mestieri (MM) and guest lecturers. It covers selected current research topics mostly related to our own research interests.

Weeks of teaching: Sep 30 (MM), Oct 7 (Rodrigo A.), Oct 14 (KM), Oct 21 (MM), Oct 28 (KM), Nov. 4 (Jane OR+MM), Nov 11 (KM), Nov 18 (Jing Z), Nov 25 (Jonathan D), Dec. 2 (MM, Student Presentations)

### Guest lectures

This year, 460-3 will have guest lectures by Rodrigo Adao (trade effects on labor market outcomes), Jing Zhang (pattern of comparative advantage and structural change in open economies), and Jonathan Dingel (sorting and heterogeneity across space, empirics of the home-market effect). The class will also include a presentation from Jane Olmstead of her job market paper. We may be able to add a fourth speaker (Sara Moreira) if we can find a day that works for everyone. See the detailed syllabus below for the days of guest lectures.

October 7, **Rodrigo Adao**, 2 classes on trade effects on labor market outcomes.

November 4, **Jane Olmstead-Rumsey** “Market Concentration and Productivity Slowdown” (1 class)

November 18, **Jing Zhang**, 2 classes on the pattern of comparative advantage and structural change in open economies

November 25, **Jonathan Dingel**, 2 classes on sorting and heterogeneity across space, empirics of the home-market effect

### Evaluation

Class evaluation will be based on a written research project and its presentation (90%) plus class participation (10%).

### Research Proposal and Presentation

Research proposals are to be submitted by December 7. There will be in-class presentations of the proposals on December 2. You can develop an original idea or propose an incremental improvement of a topic/paper that we have discussed. You are encouraged to discuss with Kiminori, Marti and/or one of the guest lecturers before you embark on your proposal. The written research proposals cannot exceed 7

pages. In the proposal, you should state your research idea clearly at the beginning. If the paper is theoretical, you should (at least) sketch your theory and provide some preliminary results. If the paper is empirical, you should (at least) discuss the data sources you will use, which variables would you use and what econometric specifications you would test. If there are some preliminary results, even better. *Presentation:* Each student will do a presentation during the last week of class of her/his research proposal. Each presentation will be 25 min long (around 10 slides), followed by a 5 min discussion (these conditions may change depending on the number of students enrolled). Hopefully your final submission will incorporate the feedback from the presentation.

### **Preliminary Syballus (in parenthesis, when and who teaches)**

1. Non-homotheticities, Income Distribution and Structural Transformation (MM, September 30)
  - Acemoglu, “Introduction to Modern Economic Growth”, Chapter 20
  - Herrendorf, Rogerson, Valentinyi, “Growth and Structural Transformation”, Handbook of economic growth.
  - Matsuyama, Kiminori, "The Rise of Mass Consumption Societies," Journal of Political Economy, 110 (October 2002): 1035-1070.
  - Buera-Kaboski "Can Traditional Theories of Structural Change Fit The Data?," JEEA 2009, vol. 7(2-3), pages 469-477, 04-05.
  - Buera and Kaboski, “The Rise of Service Economy,” AER Oct 2012
  - Buera and Kaboski, “Scale and the Origins of Structural Change,” JET Mar 2012
  - Boppart, Timo (2014), “Structural Change and the Kaldor Facts in a Growth Model,” *Econometrica*
  - Comin, Mestieri and Lashkari, (2015) “Structural Transformation with long-run Income and Price effects,” WP
  - Comin, Mestieri and Lashkari, (2016) “Structural Transformation in Innovation,” WP
  - Buera, Kaboski, Mestieri and O’Connor, The Stable Transformation Path, WP
  - Buera, Kaboski, Mestieri and O’Connor, The Natural Rate of Structural Change, WP
  - Alder, Mueller, Boppart “A Theory of Structural Change that Can Fit the Facts”, WP
  - Herrendorf, Rogerson, Valentinyi, “Two Perspectives of Preferences and Structural Transformation”, AER 2013
  - Herrendorf, Rogerson, Valentinyi, “Structural Change in Investment and Consumption: A Unified Approach”, WP
  - Buera, Kaboski, Rogerson, Vizcaino “Skill-Biased Structural Change”, WP
  - Garcia-Santana, Pijoan-Mas, Villacorta, “Investment Demand and Structural Change”, WP
2. Labor Market Impacts of Trade, guest lectures by **Rodrigo Adao**, (October 7).
3. Nonhomotheticities, Income Distribution and Structural Transformation in Open Economies (KM, Oct. 14 )
  - Matsuyama, Kiminori, (2019) “Engel's Law in the Global Economy, ” *Econometrica*.
  - Matsuyama, Kiminori (2000), “A Ricardian Model with a Continuum of Goods under Nonhomothetic Preferences: Demand Complementarities, Income Distribution, and North-South Trade,” *JPE*, pp.1093-1120.
  - Matsuyama, Kiminori, "Agricultural Productivity, Comparative Advantage, and Economic Growth," *Journal of Economic Theory* 58 (December 1992): 317-334.

- Matsuyama, Kiminori, “Structural Change in an Interdependent World: A Global View of Manufacturing Decline”, *Journal of the European Economic Association*, 2009.
  - Cecilia Fieler, “Non-homotheticity and Bilateral Trade: Evidence and a Quantitative Explanation,” *Econometrica*
  - Caron-Fally-Markusen, “International Trade Puzzles: a solution linking production factors and demand,” *QJE* 2014
  - Khandelwal, A. Pablo Fajgelbaum, “Measuring the Unequal Gains from Trade,” *QJE* (2016).
4. Quality Ladders, Vertical Differentiation and Trade with a discussion for CES microfoundations (MM, Oct 21)
- Stokey, Nancy “The Volume and Composition of Trade Between Rich and Poor Countries,” *Review of Economic Studies*, 58 (January 1991), pp. 63-80.
  - H.Flam, E.Helpman, Vertical Product Differentiation and North-South Trade, *American Economic Review*, 77: 810-822, 1987
  - Jaimovich-Merella, “Quality Ladders in a Ricardian Model of Trade with Nonhomothetic Preferences” *JEEA* 2012
  - Jaimovich-Merella, “Love for Quality, Comparative Advantage, and Trade” *JIE* 2015
  - Fajgelbaum, Grossman and Helpman, "Income Distribution, Product Quality, and International Trade ", *Journal of Political Economy*, forthcoming.
  - Fajgelbaum, Grossman and Helpman, “A Linder Hypothesis for Foreign Direct Investment,” *Review of Economic Studies*, 2015.
  - Lashkari D. and Mestieri M., “How Substitutable are Products of Different Countries?,” 2018 WP.
  - Bianchi-Vimercati and Mestieri, “Micro-Assignment and Macro Elasticities”, WP.
  - Thisse and Ushchev, “When Can a Demand System Be Described by a Multinomial Logit With Income Effect?,” (2016) WP
  - Anderson, De Palma, Thisse “Discrete Choice Theory of Product Differentiation”
5. Firm Dynamics (KM, Oct 28)
- Luttmer, Erzo, “Models of Growth and Firm Heterogeneity”, *Annual Reviews of Economics*, 2010, Vol. 2, 547-576
  - Luttmer, Erzo, "On the Mechanics of Firm Growth," *The Review of Economic Studies*, 2011, Vol. 78, No. 3, 1042-1068
  - Luttmer, Erzo, "Selection, Growth, and the Size Distribution of Firms," *Quarterly Journal of Economics*, 2007, Vol. 122, No. 3, 1103-1144.
  - Sampson, Thomas, “Dynamic Selection: An Idea Flows Theory of Entry,” *Trade and Growth* [PDF] *Quarterly Journal of Economics*, 2016, 131 (1): 315-380.
  - Klette and Kortum, “Innovating Firms and Aggregate Innovation,” 2004, *JPE*.
6. Market Concentration and Productivity Slowdown, guest lecture by **Jane Olmstead-Rumsey** (Nov. 4)
7. Diffusion of Technology (MM, Nov. 4 time permitting)
- Diego Comin & Bart Hobijn, 2010. "An Exploration of Technology Diffusion," *American Economic Review*, *American Economic Association*, vol. 100(5), pages 2031-59, December.

- Comin and Mestieri, 2018, “If Technology has Arrived Everywhere why has Income Diverged?”, AEJ: Macro.
  - Wolfgang Keller, 2002. "Geographic Localization of International Technology Diffusion," American Economic Review, American Economic Association, vol. 92(1), pages 120-142, March.
  - Jonathan Eaton & Samuel Kortum, 2006. "Innovation, Diffusion, and Trade," NBER Working Papers 12385, National Bureau of Economic Research, Inc.
  - Berkes, Manysheva, Mestieri “World Innovation: Evidence from 100 of Patenting” mimeo
  - Berkes, Gaetani, Mestieri “Cities and Technology Cycles” mimeo.
  - Sampson, “Technology Gaps, Trade and Income”, WP
8. Diffusion of Knowledge (KM, Nov. 11)
- Buera and Lucas, (2018), “Idea Flows and Economic Growth” Annual Review of Economics.
  - Buera and Oberfield, “The Global Diffusion of Ideas”
  - Alvarez, Buera and Lucas, “Idea Flows, Economic Growth and Trade”
  - Robert E. Lucas, Jr. & Benjamin Moll, 2011. "Knowledge Growth and the Allocation of Time”
  - Jesse Perla and Christopher Tonetti, “Equilibrium Imitation and Growth”, JPE
  - Jovanovic, Boyan & Rob, Rafael, 1986. "The Diffusion and Growth of Knowledge," Restud
  - Chari, V V & Hopenhayn, Hugo, 1991. "Vintage Human Capital, Growth, and the Diffusion of New Technology," Journal of Political Economy, University of Chicago Press, vol. 99(6), pages 1142-65, December.
  - Perla, Tonetti and Waugh, “Equilibrium Technology Diffusion, Trade, and Growth” WP.
  - Sampson, “Dynamic Selection: An Idea Flows Theory of Entry, Trade and Growth”, QJE
9. Structural Change in Open Economies and the Evolution of Comparative Advantage, guest lectures by **Jing Zhang** (November 18)
10. Sorting in the Spatial Economy and Empirics of the Home Market Effect, guest lectures by **Jonathan Dingel** (November 25)
11. Presentations by students, (December 2).
12. Miscellaneous papers that are harder to classify, we may also discuss
- Aghion, Bergeraud, Boppart, Klenow, Li, “Falling Growth-Rising Rents”, WP
  - Boppart, Krussell “Declining Workin Hours”, JPE forthcoming
  - Dhingra, Morrow, “Monopolistic Competition and Optimal Product Diversity under Firm Heterogeneity,” JPE 2019
  - Grossman Helpman, “Trade, Growth, and Inequality,” Econometrica, 2018
  - Grossman, Helpman, Oberfield, Sampson, “Balanced Growth Beyond Uzawa”, AER 2017
  - Grossman, Helpman, Kircher, “Matching and Sorting and Distributional Effects of International Trade,” JPE 2017
  - Rodrik, “Premature De-Industrialization”, JOEG
  - Saint-Paul, “Secular Stagnation,” WP.