



**Universitat
Pompeu Fabra
Barcelona**

Topics in Macroeconomics IV: International Trade and Economic Growth

**2023-2024 Academic Year
Master of Research in Economics, Finance and Management**

1. Description of the subject

- Topics in Macroeconomics IV
 - Total credits: 3 ECTS
 - Term: 2nd
 - Type of subject: Optative
 - Department of Economics and Business
 - Teaching Team: Paula Bustos and Marti Mestieri
- Code: 32083
Workload: 75 hours

Paula Bustos (paula.bustos@upf.edu)
Marti Mestieri (marti.mestieri@upf.edu)

Classes: 10:30 to 12:30 Tuesdays and Thursdays @ 20.051
Office hours by appointment.

2. Teaching guide

Introduction

This course is an advanced PhD class that introduces students to selected topics on International Trade and Economic Growth. The course covers the main theories of structural transformation and the associated empirical evidence. The course is taught by Paula Bustos (PB), and Martí Mestieri (MM).

Weeks of teaching: Jan 8 (MM), Jan 15 (PB), Jan 22 (MM), Jan 29 (PB), Feb 05 (PB & MM).

Contents

1. Structural transformation

1.1 Supply side: Theories with Exogenous Technology (2 lectures MM)

Differences in Productivity

*Ngai and Pissarides (2007), "Structural Change in a Multi-Sector Model of Growth", AER.

Differences in Capital Intensity

*Acemoglu and Guerrieri (2008), "Capital Deepening and Nonbalanced Economic Growth", JPE.

Alvarez-Cuadrado, Long and Poschke, (2017) "Capital-labor Substitution, Structural Change and Growth", TE.

Investment and Consumption

Herrendorf, Rogerson, Valentinyi, (2021) "Structural Change in Investment and Consumption: A Unified Approach", Review of Economic Studies.

Garcia-Santana, Pijoan-Mas, Villacorta, (2021) "Investment Demand and Structural Change", Econometrica.

Background readings:

Acemoglu, "Introduction to Modern Economic Growth", Chapter 20

Herrendorf, Rogerson, Valentinyi, "Growth and Structural Transformation", Handbook of economic growth.

Buera, Kaboski "Can Traditional Theories of Structural Change Fit The Data?," JEEA 2009, vol. 7(2-3), pages 469-477, 04-05.

Buera, Kaboski, Mestieri and O'Connor, "The Stable Transformation Path", CEPR WP 2019.

1.1.2 Empirical evidence (2 lectures PB)

* Bustos, P., B. Caprettini, and J. Ponticelli (2016). Agricultural Productivity and Structural Transformation: Evidence from Brazil. American Economic Review.

Heblich, S., Redding, S. J., & Voth, H. J. (2022). *Slavery and the British Industrial Revolution* (No. w30451). National Bureau of Economic Research.

Fajgelbaum, Pablo, and Stephen J. Redding. "Trade, Structural Transformation, and Development:

Evidence from Argentina 1869–1914." *Journal of Political Economy* 130.5 (2022): 1249-1318.

* Bustos, P., G. Garber, and J. Ponticelli (2020). Capital accumulation and structural transformation. *The Quarterly Journal of Economics* 135 (2), 1037–1094.

Colmer, J. (2021). Temperature, labor reallocation, and industrial production: Evidence from India. *American Economic Journal: Applied Economics* 13 (4), 101–24.

Background reading

* Corden and Neary, (1982) "Booming Sector and De-Industrialisation in a Small Open Economy", *Economic Journal*.

* 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.

Gollin, D., Jedwab, R. & Vollrath, D. Urbanization with and without industrialization. *J Econ Growth* **21**, 35–70 (2016).

1.2 Demand Side (2 Lectures MM)

Nonhomothetic Preferences

*Boppart, Timo (2014), "Structural Change and the Kaldor Facts in a Growth Model," *Econometrica*.

*Comin, Mestieri and Lashkari, (2021) "Structural Transformation with long-run Income and Price effects," *Econometrica*

Alder, Mueller, Boppart "A Theory of Structural Change that Can Fit the Facts", *AEJ: Macro*.

Bohr, Yavuz and Mestieri (2023), "Aggregation and Closed-Form Results for Nonhomothetic CES Preferences", *WP*

1.3 Spatial structural change (PB 1 Lecture)

Adao, Rodrigo, Costas Arkolakis, and Federico Esposito. "General Equilibrium Effects in Space: Theory and Measurement" (2022).

* Borusyak, Kirill, Rafael Dix-Carneiro, and Brian Kovak. "Understanding Migration Responses to Local Shocks." (2022).

* Albert, Christoph, Paula Bustos, and Jacopo Ponticelli. *The Effects of Climate Change on Labor and Capital Reallocation*. No. w28995. National Bureau of Economic Research, 2021.

Additional reading

Redding, Stephen, and Anthony J. Venables. "Economic geography and international inequality." *Journal of international Economics* 62.1 (2004): 53-82.

Redding, Stephen J., and Daniel M. Sturm. "The costs of remoteness: Evidence from German division and reunification." *American Economic Review* 98.5 (2008): 1766-97.

Donaldson, Dave, and Richard Hornbeck. "Railroads and American economic growth: A "market access"

approach." *The Quarterly Journal of Economics* 131.2 (2016): 799-858.

Borusyak, Kirill and Hull, Peter, Non-Random Exposure to Exogenous Shocks: Theory and Applications (January 29, 2020). University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2020-130.

Asher, Sam, and Paul Novosad. 2020. "Rural Roads and Local Economic Development." *American Economic Review*, 110 (3): 797-823.

Hjort, Jonas, and Jonas Poulsen. 2019. "The Arrival of Fast Internet and Employment in Africa." *American Economic Review*, 109 (3): 1032-79.

2. Trade and Growth

2.1 Trade Theory: Ricardian Trade and Intra-industry Trade (1 lecture MM)

R. Dornbusch, S. Fischer and P. A. Samuelson, "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," *The American Economic Review* Vol. 67, No. 5 (Dec., 1977)

Jonathan Eaton and Samuel Kortum, "Technology, Geography, and Trade" *Econometrica* Vol. 70, No. 5 (Sep., 2002),

Paul R. Krugman, "Intraindustry Specialization and the Gains from Trade," *Journal of Political Economy*, Vol. 89, No. 5 (Oct., 1981),

Elhanan Helpman and Paul R. Krugman, "Market structure and foreign trade: Increasing returns, imperfect competition and the international economy" MIT Press, Cambridge, MA, 1985

2.2 Endogenizing Technology and Comparative Advantage: Home Market Effects, Directed Technical Change and Non-homothetic Preferences (1 lecture MM)

*Krugman, Paul, (1980), Scale Economies, Product Differentiation, and the Pattern of Trade, *American Economic Review*, 70, issue 5, p. 950-59

*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.

*Bohr, Mestieri, and Robert-Nicoud (2023), "Heterothetic Cobb Douglas: Theory and Applications", working paper.

Foellmi, R. and Zweimüller, J. (2006), "Income Distribution and Demand-Induced Innovations", *Review of Economic Studies*, 73(4):941–960.^[1]_[SEP]

Foellmi, R. and Zweimüller, J. (2008), "Structural change, Engel's consumption cycles and Kaldor's facts of economic growth", *Journal of Monetary Economics*, 55(7):1317–1328.

Yi, Sposi and Zhang (2021), "Deindustrialization and Industry Polarization", Chicago Fed Working Paper.

Comin, Lashkari, Mestieri (2022), "Structural Change in Innovation", working paper.

Bohr, Mestieri and Yavuz (2022), "Engel's Treadmill: The Perpetual Pursuit of Cornucopia", working paper.

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).

2.2 Empirical Evidence (1 Lecture PB)

* Juhász, Réka. 2018. "Temporary Protection and Technology Adoption: Evidence from the Napoleonic Blockade." *American Economic Review*, 108 (11): 3339-76.

Hanlon, W. Walker. "Necessity is the mother of invention: Input supplies and Directed Technical Change." *Econometrica* 83.1 (2015): 67-100.

Bustos, P., Castro-Vincenzi, J. M., Monras, J., & Ponticelli, J. (2019). *Industrialization without innovation* (No. w25871). National Bureau of Economic Research.

Atkin, David, Arnaud Costinot, and Masao Fukui. *Globalization and the Ladder of Development: Pushed to the Top or Held at the Bottom?*. No. w29500. National Bureau of Economic Research, 2021.

Assessment and grading system

Evaluation

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

Research Proposal and Presentation

Research proposals are to be submitted by February 16th. 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 Paula and Martí 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.