# ECON5040 Macroeconomic Theory II

# 2021-2022 Term 2

## Part 2: Macro and Trade

#### **Class time and location**

Time: ELB 207, Monday 8:30-11 am, 2/21, 2/28, 3/7, 3/14, 3/21, 3/28

#### Instructor

Dan Lu ELB 911 Email: danlyu@cuhk.edu.hk

## Course requirements and grading

Your final grade will be based on:Referee reports and in class discussion15%Homework15%Presentation20%

Referee reports: For a paper that we will cover at length in each class (\*\* in the reading list), you should pick one and send me a brief report by email the day before the class. The report should be 2 paragraphs at most describing the idea and contribution of the paper: in the first part of the report, for theoretical papers, you should have a verbal summary of the model, describing the reasoning. For empirical ones, you should describe the method, the data used and the robustness of the results. In the second part, you should think about how the paper contributes to the literature or relates to other papers we may have studied. Papers with \* in the reading list will be discussed in class.

Presentation: 30 minutes presentation in class at the end of the semester (one presenter and one discussant for each paper)

## Readings

Most of the readings are journal articles and working papers. For books on Trade, I recommend: Elhanan Helpman and Paul R. Krugman. *Market Structure and Foreign Trade*. Cambridge: MIT Press, 1985. Jonathan Eaton and Sam Kortum. *Technology in the Global Economy: A Framework for* 

Jonathan Eaton and Sam Kortum. Technology in the Global Economy: A Framework for Quantitative Analysis.

## **Tentative Schedule**

- 1. Quantitative trade analysis: an introduction to modeling
- (\*)Dornbusch, Fisher, and Samuelson, "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," American Economic Review, 1977: 823-839.

- (\*\*) Eaton, J. and S. Kortum, "Technology, Geography and Trade," Econometrica, September 2002, Vol. 70, No. 5, 1741-1780.
- (\*)Alvarez, Fernando and Robert E. Lucas, "General Equilibrium Analysis of the Eaton-Kortum Model of International Trade," Journal of Monetary Economics, 2007.
- (\*\*)Dekle, Eaton, and Kortum, "New Approaches to International Trade, Unbalanced Trade," AER Papers and Proceedings, 2007.

## Economic geography, trade and migration

- AHLFELDT, G. M., S. J. REDDING, D. M. STURM, AND N. WOLF (2012): "The Economics of Density: Evidence from the Berlin Wall."
- (\*)REDDING, S. J. (2014): "Goods Trade, Factor Mobility and Welfare."
- Allen, T., and C. Arkolakis (2014): "Trade and the topography of the spatial economy," Quarterly Journal of Economics.
- Allen, T., C. Arkolakis, and Y. Takahashi (2014): "Universal gravity."
- (\*)Lorenzo Caliendo, Max Dvorkin, and Fernando Parro, "Trade and Labor Market Dynamics: General Equilibrium Analysis of the China Trade Shock"

## 2. Trade and growth: dynamic models, technology accumulation

- KORTUM, S. (1997): "Research, Patenting, and Technological Change," Econometrica, 65(6), 1389–1419. 4, 4.3.1
- (\*\*)Eaton, Jonathan & Kortum, Samuel, "Technology, trade, and growth: A unified framework," European Economic Review, Elsevier, vol. 45(4-6), (2001) pages 742-755, May.
- Grossman, Gene M., and Elhanan Helpman, *Innovation and Growth in the Global Economy*. Cambridge, MA: MIT Press. 1991.
- Robert E. Lucas, "Trade and the Diffusion of the Industrial Revolution," American Economic Journal: Macroeconomics, American Economic Association, vol. 1(1), 2009, pages 1-25, January.
- Eaton and Kortum, "International Technology Diffusion: Theory and Measurement," International Economic Review, 1999: 537-570.
- Jesse Perla, Christopher Tonetti and Michael E. Waugh, "Equilibrium Technology Diffusion, Trade, and Growth," 2013.
- Natalia Ramondo & Andrés Rodríguez-Clare, "Growth, Size, and Openness: A Quantitative Approach," American Economic Review, Papers and Proceedings, 2010, Volume 100, Issue 2, pp. 62-67. Data.
- Natalia Ramondo & Andrés Rodríguez-Clare, "Trade, Multinational Production, and the Gains from Openness," JPE, 2012.

## 3. Firm level model of trade (firm heterogeneity in the krugman model)

- KRUGMAN, P. (1979): "Increasing Returns Monopolistic Competition and International Trade," Journal of International Economics, 9(4), 469–479. 8.4.1
- (\*)Krugman, P., "Scale Economies, Product Differentiation and the Pattern of Trade," American Economic Review, 1980.

- (\*)Anderson, J. and E. van Wincoop, "Gravity with Gravitas: A Solution to the Border Puzzle," American Economic Review, 2003.
  - (\*\*)Melitz, Marc J., "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," Econometrica, 71:6, pp. 1695-1725, 2003.
  - (\*)Chaney, Thomas, "Distorted Gravity: Heterogeneous Firms, Market Structure and the Geography of International Trade," American Economic Review, 2005.
  - (\*)Arkolakis, C., Costinot, A. and Rodriguez-Clare, A., "New Trade Models, Same Old Gains?" American Economic Review, 2011.
  - Bernard, Andrew B., Stephen Redding, Peter K. Schott, "Comparative Advantage and Heterogeneous Firms," Review of Economic Studies, 2004.
  - Melitz and Ottaviano, "Market Size, Trade, and Productivity," Review of Economic Studies, 2008.
  - Hopenhayn, Hugo, "Entry, Exit, and Firm Dynamics in Long Run Equilibrium," Econometrica, 60: 621-653, 1992.

## Firm level facts in international trade

- (\*)Bernard, A. B., and J. B. Jensen, "Exporters, Jobs, and Wages in US Manufucturing: 1976-1987," Brooking Papers: Microeconomics, pp. 67-119, 1995.
- (\*)Bernard, A. B., J. Eaton, B. Jensen, and S. Kortum, "Plants and Productivity in International Trade," American Economic Review, 93(4), 1268-1290, 2003.
- Clerides, S. K., S. Lach, and J. R. Tybout, "Is Learning by Exporting Important? Micro-Dynamic Evidence from Colombia, Mexico, and Morocco," The Quarterly Journal of Economics, pp. 903-947, 1998.
- (\*)Eaton, Kortum and Kramarz, "An anatomy of International Trade, Evidence from French firms," 2005.
- (\*)Lu, Dan, "Exceptional Exporter Performance? Evidence from Chinese Manufacturing Firms," 2010.
- Pavcnik, N., "Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants," The Review of Economic Studies 69, January 2002, pp. 245-76.

## Firms import behavior, intermediate inputs import and firm productivity

- Amiti, M., and J. Konings, "Trade liberalization, intermediate inputs, and productivity: Evidence from Indonesia", American Economic Review, 2007.
- Goldberg, P., Khandelwal, A., Pavcnik, N. and Topalova, P., "Imported intermediate inputs and domestic product growth: Evidence from india", The Quarterly Journal of Economics, 2010.
- (\*)Gopinath, G., and B. Neiman, "Trade Adjustment and Productivity in Large Crises", 2011.
- (\*)Halpern, L., M. Koren, and A. Szeidl, "Imported Inputs and Productivity", American Economic Review, 2011.
- (\*) Dan Lu, Asier Mariscal and Luis Fernando Mejia, "How Firms Accumulate Inputs: Evidence from Import Switching"
- Kugler and Verhoogen, "Plants and Imported Inputs: New Facts and an Interpretation" American Economic Review, 2009.

## 4. Trade and misallocations

- (\*)Hsieh, Chang-Tai and Peter J Klenow. 2009. "Misallocation and manufacturing TFP in China and India." The Quarterly journal of economics 124 (4):1403–1448.
- (\*\*)Yan Bai, Keyu Jin and Dan Lu, "Misallocation Under Trade Liberalization"
- Restuccia, Diego and Richard Rogerson. 2008. "Policy distortions and aggregate productivity with heterogeneous establishments." Review of Economic dynamics 11 (4):707–720.
- (\*)Arkolakis, Costas, Arnaud Costinot, Dave Donaldson, and Andrés Rodríguez-Clare.
  2018. "The elusive pro-competitive effects of trade." The Review of Economic Studies 86 (1):46–80.
- Bai, Chong-En, Chang-Tai Hsieh, and Zheng Michael Song. 2019. "Special deals with Chinese characteristics."
- Baqaee, David Rezza and Emmanuel Farhi. 2020. "Productivity and Misallocation in General Equilibrium." Tech. rep., Quarterly Journal of Economics.
- David, Joel M and Venky Venkateswaran. 2017. "The sources of capital misallocation."
- Edmond, Chris, Virgiliu Midrigan, and Daniel Yi Xu. 2018. "How costly are markups?"

# 5. Financial frictions and firm dynamics

- Arellano, C., Y. Bai, and J. Zhang (2012): "Firm dynamics and financial development," Journal of Monetary Economics, 59(6), 533–549.
- Cooley, T. F., and V. Quadrini (2001): "Financial Markets and Firm Dynamics," American Economic Review, 91(5), 1286–1310.
- David, J., and V. Venkateswaran (2017): "The Sources of Capital Misallocation,"
- Gopinath, G., S. Kalemli-Özcan, L. Karabarbounis, and C. Villegas-Sanchez(2017): "Capital allocation and productivity in South Europe," The Quarterly Journal of Economics, 132(4), 1915–1967.
- Midrigan, V., and D. Y. Xu (2013): "Finance and Misallocation: Evidence from Plant-Level Data," American Economic Review.
- Moll, B. (2014): "Productivity Losses from Financial Frictions: Can Self-financing UndoCapital Misallocation?," American Economic Review.
- Song, Z., K. Storesletten, and F. Zilibotti (2011): "Growing like china," The American Economic Review, 101(1), 196–233.
- (\*)Yan Bai, Dan Lu and Xu Tian, "Do Financial Frictions Explain Chinese Firm Saving and Misallocation? "

# Academic honesty and plagiarism

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at http://www.cuhk.edu.hk/policy/academichonesty/.

With each assignment, students will be required to submit a signed declaration that they are aware of these policies, regulations, guidelines and procedures. For group projects, all students of the same group should be asked to sign the declaration.

For assignments in the form of a computer-generated document that is principally textbased and submitted via VeriGuide, the statement, in the form of a receipt, will be issued by the system upon students' uploading of the soft copy of the assignment. Assignments without the receipt will not be graded by teachers. Only the final version of the assignment should be submitted via VeriGuide.