Course Syllabus

ECO 7332: International Economics I
Southern Methodist University, **Spring 2022**

Instructor: Dr. Michael Sposi
Schedule: M/W 2:00–3:20pm (CT) in ULEE 301S.
Office hours: Monday 4:00-5:00PM; Tuesday 9:00-10:00AM; By appointment
Email: msposi@smu.edu

Description

This course will focus on the intersection of international trade and macroeconomic development, sometimes referred to as "macro-trade". We will first cover Armington and Ricardian trade frameworks with an emphasis on an overarching gravity structure. The trade structure will be combined with a dynamic neoclassical framework to address macro-development questions. I will introduce approaches to estimating and calibrating these models as well as computational algorithms for solving the dynamic general equilibrium. We will also consider multi-sector frameworks with input-output linkages and global value chains to study long-run patterns of economic growth and development. Note: trade models with monopolistic competition (part I B on the reading list below) will be covered by Professor Desmet in ECO 7337. Even if you do not plan to work in these areas, I will emphasize the formulation and execution of research questions, critical analysis of existing research, and oral/visual/written communication of research. A working understanding of general equilibrium and macroeconomics from first-year PhD is assumed, as is an understanding of computer programming (such as Matlab, Julia, Python, Fortran, C, Java, or other).

Learning outcomes

To demonstrate an understanding of research questions and the tools used at the frontier of the field of international economics; specifically pertaining to the intersection of international trade and macroeconomics. Be able to identify open research questions and implement solutions to models, both analytically and computationally.

Communication

Canvas will serve as the official means for all communication as well as repository for relevant materials. I will also directly communicate via SMU email as well so be sure to stay on top of both inboxes. Students may contact me by using either Canvas or direct email.

Content

Lectures: In class I will introduce some of the work-horse models based on original papers. (A reading list is provided below.) While a majority of the lectures will be conducted on the whiteboard, I will also show how to solve the models numerically by using the computer.

Class notes: I will provide typed notes for some of the models covered in class. My notes are not meant to be exhaustive, nor are they a substitute for in-class lectures or for reading papers on your own.

Textbooks: There is no mandatory textbook. However, useful textbooks include (i) Feenstra, R. (2015). *Advanced International Trade: Theory and Evidence Second Edition*, Princeton University Press; (ii) Obstfeld, M. and Rogoff, K. (1996). *Foundations of International Macroeconomics*, MIT Press; and (iii) Uribe, M. and Schmitt-Grohé, S. (2017). *Open Economy Macroeconomics*, Princeton University Press.

Assessment

Your course grade will consist of paper presentations (20%), class discussion (40%), problem sets (20%), and a research proposal (20%).

- Paper presentations: In-depth presentations targeted for about 45 minutes, excluding Q&A. You are expected to use some version of LaTeX (the Beamer package) in preparing your slides.
- Class discussion: At the beginning of class, non-presenters will submit a brief (between one-half and one-full page) summary of the paper. Everyone is expected to participate in the discussion during and after each presentation.
    - Describe the research question and why it is being studied.
    - What is the main conclusion, how did the author(s) arrive there, what are the strongest points, and what are the weakest points?
    - What questions are left unanswered?
- Problem sets: I will assign problem sets so that you can refine your technical skills. Some will be analytical (pencil and paper), some numerical (solving a model using Matlab, Julia, or other), and some empirical (analyzing data using Stata, R, or other).

Research proposal: You will submit a written proposal and present your proposal to the class. The proposal must (i) identify an open question, (ii) provide a clear motivation for why the question is worth exploring, and (iii) provide a preliminary result/hypothesis that is rigorously grounded either empirically or theoretically. You are encouraged to incorporate your current research or field of interest into your proposal. The only criteria is that the proposal have something to do with international economics or macro development – a criteria that I will be very loose about. You should be discussing ideas with me throughout the semester.

Masks

Masks are strongly recommended in class but not required. This masking recommendation is subject to change during the semester, and any changes will be announced in class, posted clearly in Canvas, and updated in the syllabus.

Readings (subject to modification)

Most of the material we cover will come directly from papers on the reading list below. I will cover key papers in class. The remaining articles on the reading list, while not exhaustive, are useful if you decide to pursue work in this area in the future.

I. International trade

A. Models with perfect competition

*Armington, P. (1969). "A Theory of Demand for Products Distinguished by Place of Production." *Staff Papers (International Monetary Fund)*, 16(1): 159-178.

*Dornbusch, R., Fischer, S. and Samuelson, P. (1977). "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods." *American Economic Review*, 67(5): 823-839.

*Eaton, J. and Kortum, S. (2002). "Technology, Geography, and Trade." *Econometrica*, 70(5): 1741-1779.

Feenstra, R. (2015). Chapters 1-3.

B. Models with imperfect competition (covered in ECO 7337 by Professor Desmet)

*Krugman, P. (1979). "Increasing Returns, Monopolistic Competition, and International Trade." *Journal of International Economics*, 9(4): 469-479.

*Melitz, M. (2003). "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity." *Econometrica*, 71(6): 1695-1725.

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

Krugman, P. (1980). "Scale Economies, Product Differentiation, and the Pattern of Trade." *American Economic Review*, 70(5): 950-959.

C. The gravity equation and the elasticity of trade

*Anderson, J. (1979). "A Theoretical Foundation for the Gravity Equation." *American Economic Review*, 69(1): 106-116.

Anderson, J. and van Wincoop, E. (2003). "Gravity with Gravitas: A Solution to the Border Puzzle." *American Economic Review*, 93(1): 170-192.

Costinot, A. and Rodríguez-Clare, A. (2014). "Trade Theory with Numbers: Quantifying the Consequences of Globalization" In: Gopinath, G., Helpman, E., and Rogoff, K. (Ed.): *Handbook of International Economics*, volume 4, chapter 4, 197-261.

Feenstra, R. (2015). Chapters 5-6.

Ruhl, K. (2008). "The International Elasticity Puzzle." Working Paper.

Simonovska, I. and Waugh, M. (2014). "The Elasticity of Trade: Estimates and Evidence." *Journal of International Economics*, 92(1): 34-50.

Simonovska, I. and Waugh, M. (2014). "Trade Models, Trade Elasticities, and the Gains from Trade." NBER Working Paper #20495.

Tinbergen, J. (1962). "An Analysis of World Trade Flows." In: Tinbergen, J. (Ed.) *Shaping the World Economy*, New York, N.Y.: Twentieth Century Fund.

Waugh, M. (2010). "International Trade and Income Differences." *American Economic Review*, 100(5): 2093-2124.

D. Multi-sector models of trade, input-output networks, and global value chains

*Antràs, P. and de Gortari, A. (2020). "On the Geography of Global Value Chains." *Econometrica*, 108: 387-412.

*Caliendo, L. and Parro, F. (2015). "Estimates of the Trade and Welfare Effects of NAFTA." *Review of Economic Studies*, 82(1): 1-44.

*Yi, K. (2010). "Can Multi-Stage Production Explain the Home Bias in Trade?" *American Economic Review*, 100(1): 364-393.

Chaney, T. (2018). "The Gravity Equation in International Trade." *Journal of Political Economy*, 126(1): 150-177.

De Gortari, A. (2018). "Disentangling Global Value Chains." Working Paper.

Feenstra, R. (2015). Chapter 4.

Grossman, G. and Rossi-Hansberg, E. (2008). "Trading Tasks: A Simple Theory of Offshoring." *American Economic Review*, 98(5): 1978-1997.

Hummels, D., Ishii, J. and Yi, K. "The Nature and Growth of Vertical Specialization in World Trade." *Journal of International Economics*, 54(1): 75-96.

Johnson, R. and Noguera, G. (2012). "Accounting for Intermediates: Production Sharing and Trade in Value Added." *Journal of International Economics*, 86(2): 224-236.

Oberfield, E. (2018). "A Theory of Input-Output Architecture". *Econometrica*, 86(2): 559-589.

Sposi, M., Yi, K.-M., Zhang, J., (2021). "Trade Integration, Global Value Chains, and Capital Accumulation."*IMF Economic Review*, 69:505-539

Yi, K. (2003). "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy*, 111(1): 52-102.

E. Dynamic models of trade

*Ravikumar, B., Santacreu, A. and Sposi, M. (2019). "Capital Accumulation and Dynamic Gains from Trade." *Journal of International Economics*, 119: 93-110.

Alessandria, G., Choi, H. and Ruhl, K. (2018). "Trade Adjustment and the Welfare Gains from Trade." Working Paper.

Alvarez, F. (2017). "Capital Accumulation and International Trade." *Journal of Monetary Economics*, 91(C): 1-18.

Caliendo, L. Dvorkin, M. and Parro, F. (2019). "Trade and Labor Market Dynamics: General Equilibrium Analysis of the China Trade Shock." *Econometrica*, 87(3): 741-835.

Eaton, J., Kortum, S., Neiman, B. and Romalis, J. "Trade and the Global Recession." *American Economic Review*, 106(11): 3401-3438.

Kehoe, T., Ruhl, K. and Steinberg, J. (2018). "Global Imbalances and Structural Change in the United States." *Journal of Political Economy*, 126(2): 761-796.

Reyes-Heroles, R. (2016). "The Role of Trade Costs in the Surge of Trade Imbalances." Working Paper.

Sposi, M., Yi, K., and Zhang, J. (2021). "Trade Integration, Global Value Chains, and Capital Accumulation." *IMF Economic Review,* 69:505-539

II. Macroeconomic development

A. Development accounting

Hall, R. and Jones, C. (1999). "Why Do Some Countries Produce So Much More Output Per Worker Than Others?" *Quarterly Journal of Economics*, 114(1): 83-116.

Klenow, P. and Rodriguez-Clare, A. (1997). "The Neoclassical Revival in Growth Economics: Has It Gone Too Far?" In: *NBER Macroeconomics Annual 1997*, Volume 12, 73-114.

Caselli, F. (2005). "Accounting for Cross-Country Income Differences." In: Aghion, P. and Durlauf, S. (Ed.): *Handbook of Economic Growth*, edition 1, volume 1, chapter 9, 679-741.

B. Relative prices and investment rates

*Hsieh, C. and Klenow, P. (2007). "Relative Prices and Relative Prosperity." *American Economic Review*, 97(3): 562-585.

Armenter, R. and Lahiri, A. (2012). "Accounting for Development through Investment Prices." *Journal of Monetary Economics*, 59(6): 550-564.

Eaton, J. and Kortum, S. (2001). "Trade in Capital Goods." *European Economic Review*, 45(7): 1195-1235.

Mutreja, P., Ravikumar, B. and Sposi, M. (2018). "Capital Goods Trade, Relative Prices, and Economic Development." *Review of Economic Dynamics*, 27: 101-122.

Restuccia, D. and Urrutia, C. (2001). "Relative Prices and Investment Rates." *Journal of Monetary Economics*, 47(1): 93-121.

C. Empirical evidence on structural change

Buera, F. and Kaboski, J. (2012). "Scale and the Origins of Structural Change." *Journal of Economic Theory*, 147(2): 684-712.

Herrendorf, B., Rogerson, R. and Valentinyi, A. (2014). "Growth and Structural Transformation." In: Aghion, P. and Durlauf, S. (Ed.): *Handbook of Economic Growth*, edition 1, volume 2, chapter 6, 855-941.

Rodrik, D. (2015). "Premature Deindustrialization." *Journal of Economic Growth*, 12: 1-33.

D. Structural change in closed economies

*Herrendorf, B. Rogerson, R. and Valentinyi, A. (2013). "Two Perspectives on Preferences and Structural Transformation." *American Economic Review*, 103(7): 2752-2789.

Boppart, T. (2014). "Structural Change and the Kaldor Facts in a Growth Model with Relative Price Effects and Non-Gorman Preferences." *Econometrica*, 82(6): 2167-2196.

Comin, D., Lashkari, D. and Mestieri, M. (2020). "Structural Change with Long-run Income and Price Effects." *Econometrica*, Forthcoming.

Kongsamut, P., Rebelo, S. and Xie, D. (2001). "Beyond Balanced Growth." *Review of Economic Studies*, 68(4): 869-882.

Acemoglu, D. and Guerrieri, V. (2008). "Capital Deepening and Non-Balanced Economic Growth." Journal of Political Economy, 116(3): 467-498.

Duarte, M. and Restuccia, D. (2010). "The Role of Structural Transformation in Aggregate Productivity." *Quarterly Journal of Economics*, 125(1): 129-173.

Ngai, R. and Pissarides, C. (2007). "Structural Change in a Multisector Model of Growth." *American Economic Review*, 97(1): 429-443.

Herrendorf, B., Rogerson, R., and Valentinyi, A. (2020). "Structural Change in Investment and Consumption: A Unified Analysis." *Review of Economic Studies*, Forthcoming.

E. Structural change in open economies

*Uy, T., Yi, K. and Zhang, J. (2013). "Structural Change in an Open Economy." *Journal of Monetary Economics*, 60(6): 667-682.

Lewis, L., Monarch, R., Sposi, M. and Zhang, J. (2020). "Structural Change and Global Trade." Working Paper.

Matsuyama, K. (2009). "Structural Change in an Interdependent World: A Global View of Manufacturing Decline." *Journal of the European Economic Association*, 7(2-3): 478-486.

Sposi, M. (2019). "Evolving Comparative Advantage, Sectoral Linkages, and Structural Change." *Journal of Monetary Economics*, 103: 75-87.

Sposi, M., Yi, K., and Zhang, J. (2021). "Deindustrialization and Industry Polarization." NBER Working Paper No. 29483.

Święcki, T. (2017). "Determinants of Structural Change." *Review of Economic Dynamics*, 24: 95-131.

University Rules

Disability Accommodations: Students needing academic accommodations for a disability must first register with Disability Accommodations & Success Strategies (DASS). Students can call 214-768-1470 or visit http://www.smu.edu/Provost/SASP/DASS to begin the process. Once approved and registered, students will submit a DASS Accommodation Letter to faculty through the electronic portal *DASS*

Link and then communicate directly with each instructor to make appropriate arrangements. Please note that accommodations are not retroactive and require advance notice to implement.

Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (https://www.smu.edu/StudentAffairs/Chaplain/ReligiousHolidays).

Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity should be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (See 2020-2021 SMU Undergraduate Catalog under "Enrollment and Academic Records/Excused Absences.")

Accommodations for pregnant and parenting students: Under Title IX students who are pregnant or parenting may request academic adjustments by contacting Elsie Johnson (elsiej@smu.edu) in the Office of the Dean of Students, or by calling 214-768-4564. Students seeking assistance must schedule an appointment with their professors as early as possible, present a letter from the Office of the Dean of Students, and make appropriate arrangements. Please note that academic adjustments are not retroactive and, when feasible, require advance notice to implement.

Plagiarism: All students are expected to abide by the SMU honor code https://www.smu.edu/StudentAffairs/HonorCouncil (Links to an external site.) including those sections related to plagiarism. Plagiarism is a serious academic offense and ignorance is not an excuse. Consequences include failure of the particular assessment task in question, failure of the course and disciplinary referral to the SMU Honor council.