Workshop in International Commerce 2: Advanced Quantitative Methods for Trade and Development Policy Analysis (8751.620)¹

Instructor: Ahn, JaeBin (jaebin.ahn@snu.ac.kr)

Class hours: 2020 Spring semester; Tuesdays 09:30-12:30 (140-2; #202)

Office hours: By appointment only (140-1; #602)

Teaching Assistant: Chun, Hyun Ji (jacklinchun@naver.com)

Prerequisite Course:

Although there are no official course requirements, it is strongly recommended to have taken "International Economic Relations" (875.512) and "Research Methodology and Skills" (875.810) in advance.

Course Description:

This course reviews the core econometric methodologies and studies empirical strategies in frontier research in economics, mostly covering topics in—but not limited to—international trade and development. The main goal of the course is to help students well equipped with econometric concepts and skills for their own independent research projects.

Materials and Reference:

Students are expected to read key reference papers (listed below in lecture plan) prior to each week's class.

Recommended readings:

International Economics: Theory and Policy (Krugman, Obstfeld & Melitz; Pearson)

Introductory Econometrics: A Modern Approach (Wooldridge; Cengage Learning)

Mostly Harmless Econometrics (Angrist and Pischke; Princeton University Press)

Evaluation Method:

Class attendance and participation: 10% (ATTN: electronic attendance system)

Problem sets (using Stata; 4 times): (10%×4=40%)

¹ Last revised on Feb.13.2020 in accordance with the change in SNU academic calendar.

- Research proposal and presentation (by a group of up to 3): (30%)
- Take home referee reports (20%): this substitutes for one week's course (make-up class for a missing week due to coronavirus).

Lecture Plan (tentative; topics and key reference papers are subject to changes)

Week 1 (Mar.17): Introduction and Course Overview; Review of Basic Econometrics (OLS & panel data methods)

Week 2 (Mar.24): Identification Issues in Economic Analysis (I)

Angrist, Joshua and Alan Krueger, 1999, "Empirical Strategies in Labor Economics", In Orley Ashenfelter and David Card Eds. Handbook of Labor Economics, v3. Ch.23, Amsterdam: Elsevier.

Angrist, Joshua and Alan Krueger, 2001, "Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments", *Journal of Economic Perspectives*, 15(4): 69-85.

Week 3 (Mar.31): Identification Issues in Economic Analysis (II)

Angrist, Joshua and Alan Krueger, 1999, "Empirical Strategies in Labor Economics", In Orley Ashenfelter and David Card Eds. Handbook of Labor Economics, v3. Ch.23, Amsterdam: Elsevier.

Angrist, Joshua and Alan Krueger, 2001, "Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments", Journal of Economic Perspectives, 15(4): 69-85.

Week 4 (Apr.7): Trade and Growth (I): Aggregate and sectoral analysis

Sachs, Jeffrey and Andrew Warner, 1995, "Economic Reform and the Process of Global Integration", *Brookings Papers on Economic Activity*, 26(1): 1-118

Frankel, Jeffrey and David Romer, 1999, "Does Trade Cause Growth?" *American Economic Review*, 89(3): 379-399.

Ahn, JaeBin, Era Dabla-Norris, Romain Duval, Bingjie Hu, and Lamin Njie, 2019, "Reassessing the Productivity Gains from Trade Liberalization", *Review of International Economics*, 27(1): 130-154.

Ahn, JaeBin and Romain Duval, 2017, "Trading with China: Productivity Gains, Job Losses", *Economics Letters*, 160: 38-42.

Week 5 (Apr.14): Trade and Growth (II): Firm-level analysis

Amiti, Mary and Jozef Kinings, 2007, "Trade Liberalization, Intermediate Inputs, and Productivity: Evidence from Indonesia", *American Economic Review*, 97(5): 1611-1638.

Topalova, Petia and Amit Khandelwal, 2011, "Trade Liberalization and Firm Productivity: The Case of India", *Review of Economics and Statistics*, 93(3): 995-1009.

Week 6 (Apr.21): Productivity Estimation and Applications: Theory and Empirics

Young, Alwyn, 1995, "The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience", *Quarterly Journal of Economics*, 110(3): 641-680.

Olley, Steven and Ariel Pakes, 1996, "The Dynamics of Productivity in the Telecommunications Equipment Industry", *Econometrica*, 64(6): 1263-1297.

Levinsohn, James and Amil Petrin, 2003, "Estimating Production Functions Using Inputs to Control for Unobservables", Review of Economic Studies, 70(2): 317-341.

Week 7 (Apr.28): Research Proposal Presentation I (proposal stage)

Week 8 (May.5): No class: National holiday

Week 9 (May.12): Gravity Model and Elasticity Estimation: Theory and Empirics

<u>Baier, Scott, Amanda Kerr and Yoto Yotov, 2018, "Gravity, Distance, and International Trade", In Bruce Blonigen</u> and Wesley Wilson Eds. *Handbook of International Trade and Transportation*: 15-78.

Ahn, JaeBin, Emine Boz, Maurice Obstfeld, and Petia Topalova, 2019, "Bilateral Trade Balances and Global Value Chains", mimeo.

Week 10 (May.19): **Guest Lecture by Prof. Choi, Jaerim (University of Hawaii, Manoa)**: Labor Market Consequences of International Trade

Autor, David, David Dorn, and Gordon Hanson, 2013, "The China Syndrome: Local Labor Market Effects of Import Competition in the United States", *American Economic Review*, 103(6): 2121-2168.

Choi, Jaerim and Mingzhi Xu, fothcoming, "The Labor Market Effects of the China Syndrome: Evidence from Korean Manufacturing", World Economy.

Week 11 (May.26): Intensive and Extensive Margins Analysis

Bernard, Andrew, Bradford Jensen, Stephen Redding, and Peter Schott, 2009, "Margins of US Trade", *American Economic Review*, 99(2): 487-493.

Week 12 (Jun.2): Micro- vs. Macro-level Analysis

Imbs, Jean and Isabelle Mejean, 2015, "Elasticity Optimism", *American Economic Journal: Macroeconomics*, 7(3): 43-83.

Ahn, JaeBin, Young-ju Kim, and Hyunjoon Lim, 2019, "For Whom the Levy Tolls: The Case of Macroprudential Stability Levy in South Korea", mimeo.

Week 13 (Jun.9): (Quasi-) Experimental Methods of Policy Evaluation

Atkin, David, Amit Khandelwal, and Adam Osman, 2017, "Exporting and Firm Performance: Evidence from a Randomized Experiment", Quarterly Journal of Economics, 132(2): 551-615.

Banerjee, Abhijit and Esther Duflo, 2014, "Do Firms Want to Borrow More? Testing Credit Constraints Using a Directed Lending Program", Review of Economic Studies, 81(2): 572-607.

Week 14 (Jun.16): Research Proposal Presentation II (preliminary analysis stage)

Problem Sets Schedule (tentative; subject to changes):

- 1. Empirical exercise #1: Trade and growth (to be posted in early April; due in 2 weeks)
- 2. Empirical exercise #2: Country-level productivity estimation: (to be posted in late April; due in 2 weeks)
- 3. Empirical exercise #3: Firm-level productivity estimation: (to be posted in mid May; due in 2 weeks)
- 4. Empirical exercise #4: Intensive and extensive margins analysis (to be posted in early June; due in 2 weeks)