

Advanced Empirical Economics II: Empirical International Trade

MARIO LARCH AND JOSCHKA WANNER

CHAIR OF EMPIRICAL ECONOMICS

August 14, 2018

1 General Issues

The course “Advanced Empirical Economics II: Empirical International Trade” addresses master students of Business Administration, Economics, Internationale Wirtschaft und Governance, and Philosophy & Economics. Advanced interested bachelor students may also participate.

The course will focus on empirical international trade. The aim is to introduce state-of-the art empirical methods which are used to i) evaluate the determinants of trade flows, and ii) to quantify the effects of international policies, such as the effects of regional trade agreements and currency unions. To course consists of three parts:

1. Student presentations will cover recent methods of empirical international trade. We provide the topics for the presentation (including the respective reading material) as well as an introductory article via the e-learning for download. Therefore, please register in the e-learning for the course. Our first **compulsory introductory meeting** will be on **October 23rd, 2018, 10am-12am** (the room will be announced in the e-learning), where we will discuss organizational issues and allocate presentation topics. The dates for the **presentation** of your topics are **November 23rd and 24th, 2018, 9am-6pm** (depending on the

number of participants). Please send us your **presentation slides** the latest on **November 21st, 2018**.

2. We will introduce you to the implementation and actual estimation of structural gravity in the computer lab. The dates for the **computer classes** are **December 6th and 7th, 2018, 1pm-6pm**.
3. To practice the learned methods, you will in the end evaluate one specific international policy at your own and write a seminar thesis about it. The topics for your seminar thesis will be allocated at the end of the computer class on December 7th, 2018.

Interested students are asked to **sign up** by sending an email to Joschka Wanner (joschka.wanner@uni-bayreuth.de) before **October 20th, 2018**, indicating your previous knowledge in statistics, empirical economics, and international trade. Further please give three preferences for topics, including at least one from the list of core topics.

For further questions concerning course details please contact Mario Larch (mario.larch@uni-bayreuth.de) or Joschka Wanner (joschka.wanner@uni-bayreuth.de).

2 Requirements and Assessed Course Work

Requirements

In order to participate in the course, interest in and good knowledge of empirical economics at the level of Advanced Empirical Economics I is expected. Ideally, this includes knowledge of Stata, the program to be used in this course. Further, knowledge of international trade theory, for example at the level of Advanced Trade Theory (Theorie und Empirie des internationalen Handels), is helpful.

Assessed Course Work

The assessed course work consists of:

- Active course participation during the presentations and computer lab classes (20%).
- The presentation of your allocated topic (ca. 45 minutes) (30%).
- A term paper at the end about one possible empirical, ex-ante analysis, such as TTIP, EU-Mercosur agreement, GREXIT, or BREXIT. The term paper should consist of about 20,000 characters (including spaces, excluding references and figures). The specific topics for the term papers are discussed at the end of the computer class on December 7th, 2018. The date of submission of the term paper will be March 31st, 2019 (of course an earlier submission is possible at any time) (50%).

Language and Formal Requirements

The language of the course (and hence your presentation and presentation slides) is English. Hence, all the literature is in English. Your term paper can be written in German or in English, even though we suggest to write it in English. For more details concerning the formal requirements of the written assignments please see the style sheet available in German (Hinweis zur Formatierung von Seminar- und Abschlussarbeiten) and in English (Formal requirements for seminar papers and bachelor's/master's theses at the Chair of Economics VI: Empirical Economics).

3 Target Group

The course addresses students from the following degree courses:

- Betriebswirtschaftslehre (MA): as “Advanced Empirical Economics II” (as part of the bloc “B 1 Forschungsmethoden” or as part of the bloc “V Empirische Wirtschaftsforschung”).
- Economics (MA): as “Advanced Empirical Economics II” (which is part of the specialization “Modelltheorie”) or as substitute for “International Labor Markets” (which is part of the specialization “Internationale Wirtschaft”) or as “Individueller Schwerpunkt”.

- Internationale Wirtschaft und Governance (MA): as “Advanced Empirical Economics II” (which is part of the specialization “Ökonomische Modellbildung und empirische Analyse”) or as substitute for “International Labor Markets” (which is part of the bloc “Internationale Wirtschaft”) or as “Individueller Schwerpunkt”.
- Philosophy and Economics (MA): as electives course.
- History and Economics (MA): as specialization.

Additionally, interested bachelor students may participate.

4 Reading List

In order to have a common base for discussion in class, you are all required to read the *Advanced Guide to Trade Policy Analysis* by Yotov, Piermartini, Monteiro, and Larch (2016).

As further useful general background, we provide the following reading list:

- Anderson, Larch, and Yotov (forthcoming).
- Head and Mayer (2014).

5 Presentation Topics

Please note that when you indicate your preferences for topics, you have to choose at least one from the list of core topics. Depending on the number of participants, topics may be allocated to teams of two. You are therefore also free to indicate potential partners for the presentation topic.

5.1 Core Topics

1. General idea and an early application (main paper: Tinbergen, 1962, Appendix VI).
2. Theoretical foundation (main paper: Anderson and van Wincoop, 2003).

3. Theory-consistent estimation: fixed effects (main paper: Head and Mayer, 2014).
4. Zero trade flows and heteroskedasticity (main paper: Santos Silva and Tenreyro, 2006).
5. Taking endogeneity into account: estimating the effect of trade policy (main papers: Baier and Bergstrand, 2007; Bergstrand, Larch, and Yotov, 2015).
6. Trade and welfare effects in general equilibrium (main papers: Anderson, Larch, and Yotov, forthcoming; Fally, 2015).

5.2 Further Topics

1. Country-specific institutions and trade (main paper: Beverelli, Keck, Larch, and Yotov, 2018)
2. Varying deepness of regional trade agreements (main papers: Dür, Bacchini, and Elsig, 2014; Baier, Yotov, and Zylkin, 2016)
3. Gravity with high-dimensional fixed effects (main paper: Larch, Wanner, Yotov, and Zylkin, 2017)
4. Gravity for trade and growth (main paper: Anderson, Larch, and Yotov, 2015)
5. Gravity for trade and FDI (main paper: Anderson, Larch, and Yotov, 2017)
6. Gravity with CO₂ emissions (main paper: Larch and Wanner, 2017)
7. Gravity with multiple sectors (main paper: Caliendo and Parro, 2015)
8. Gravity with extensive margin (main paper: Egger, Larch, Staub, and Winkelmann, 2011)
9. Gravity with unemployment (main paper: Heid and Larch, 2016)

6 Overview of Important Dates

- October 20th, 2018: registration deadline.
- October 23rd, 2018, 10am-12am: compulsory introductory meeting, allocation of presentation topics.
- November 21st, 2018: submission deadline for presentation slides.
- November 23rd and 24th, 2018, 9am-6pm: student presentations.
- December 6th and 7th, 2018, 1pm-6pm: computer class, allocation of seminar paper topics.
- March 31st, 2019: submission deadline for seminar papers.

References

- ANDERSON, J., M. LARCH, AND Y. YOTOV (2015): “Growth and Trade with Frictions: A Structural Estimation Framework,” *NBER Working Paper No. 21377*.
- (2017): “Trade and Investment in the Global Economy,” *NBER Working Paper*, 23757.
- (forthcoming): “GEPPML: General Equilibrium Analysis with PPML,” *The World Economy*.
- ANDERSON, J., AND E. VAN WINCOOP (2003): “Gravity with Gravitas: A Solution to the Border Puzzle,” *American Economic Review*, 93(1), 170–192.
- BAIER, S., AND J. BERGSTRAND (2007): “Do Free Trade Agreements Actually Increase Members’ International Trade?,” *Journal of International Economics*, 71(1), 72–95.
- BAIER, S. L., Y. V. YOTOV, AND T. ZYLKIN (2016): “On the Widely Differing Effects of Free Trade Agreements: Lessons From Twenty Years of Trade Integration,” *CESifo Working Paper*, 6174.
- BERGSTRAND, J., M. LARCH, AND Y. YOTOV (2015): “Economic Integration Agreements, Border Effects, and Distance Elasticities in the Gravity Equation,” *European Economic Review*, 78, 307–327.
- BEVERELLI, C., A. KECK, M. LARCH, AND Y. V. YOTOV (2018): “Institutions, Trade and Development: A Quantitative Analysis,” *CESifo Working Paper*, 6920.
- CALIENDO, L., AND F. PARRO (2015): “Estimates of the Trade and Welfare Effects of NAFTA,” *Review of Economic Studies*, 82(1), 1–44.
- DÜR, A., L. BACCINI, AND M. ELSIG (2014): “The Design of International Trade Agreements: Introducing a New Dataset,” *The Review of International Organizations*, 9(3), 353–375.

- EGGER, P., M. LARCH, K. STAUB, AND R. WINKELMANN (2011): “The Trade Effects of Endogenous Preferential Trade Agreements,” *American Economic Journal: Economic Policy*, 3(3), 113–143.
- FALLY, T. (2015): “Structural Gravity and Fixed Effects,” *Journal of International Economics*, 97(1), 76–85.
- HEAD, K., AND T. MAYER (2014): “Gravity Equations: Workhorse, Toolkit, and Cookbook,” Chapter 3 in the Handbook of International Economics Vol. 4, eds. Gita Gopinath, Elhanan Helpman, and Kenneth S. Rogoff, Elsevier Ltd., Oxford, pp. 131–195.
- HEID, B., AND M. LARCH (2016): “Gravity with Unemployment,” *Journal of International Economics*, 101, 70–85.
- LARCH, M., AND J. WANNER (2017): “Carbon Tariffs: An Analysis of the Trade, Welfare, and Emission Effects,” *Journal of International Economics*, 109, 195–213.
- LARCH, M., J. WANNER, Y. V. YOTOV, AND T. ZYLKIN (2017): “The Currency Union Effect: A PPML Re-assessment with High-Dimensional Fixed Effects,” *CESifo Working Paper*, 6464.
- SANTOS SILVA, J., AND S. TENREYRO (2006): “The Log of Gravity,” *Review of Economics and Statistics*, 88(4), 641–658.
- TINBERGEN, J. (1962): *Shaping the World Economy: Suggestions for an International Economic Policy*. The Twentieth Century Fund, New York.
- YOTOV, Y. V., R. PIERMARTINI, J.-A. MONTEIRO, AND M. LARCH (2016): *An Advanced Guide to Trade Policy Analysis: The Structural Gravity Model*. World Trade Organization, Geneva.