

# World Trade Institute, University of Bern

## Summer Courses for PhD Students

### Week 1: International Trade, Labour Markets and Development 22-26 August 2016 (4 ECTS)

The goal of the course is to gain a thorough understanding of the recent theoretical and empirical literature on the interaction between international trade, labour markets, and development. After the course, students should be able to apply some of the workhorse models in this literature and they should be familiar with some of the most important applications at the nexus between international trade, labour markets, and development.

### Course Content

#### International Trade

1. Comparative advantage: Eaton-Kortum, Eaton and Kortum (2002)
2. International trade and firm heterogeneity: Melitz (2003)
3. Comparison of models: Arkolakis et al. (2012), Costinot and Rodriguez-Clare (2013), Bekkers and Francois (2016)

#### Trade, labour, and inequality

4. Trade, labour, and inequality: an overview: Harrison et al. (2011)
5. Trade and inequality with firm heterogeneity: Helpman et al. (2016)

#### Trade shocks and labour impacts

6. Trade shocks, transition costs, and inequality: Artuc and McLaren (2015)
7. Import competition from China and labour market effects: : Autor et al. (2013), Autor et al. (2016)
8. Employment, trade, and technology: Autor et al. (2015)

#### Trade and development

9. Trade and technology diffusion: Keller (2004), Levchenko and Zhang (2016)
10. Trade, specialization and preferences: Caron et al. (2014)

### Grading

Class participation (10%); take-home exam (90%). Lecture hours: 25.

### Timetable and Registration

The course takes place from Monday to Friday from 9:30a.m. to 12:00p.m. and from 1:30p.m. to 4p.m.

Price for 1 week: 500 Swiss Francs.

Register for the **PhD Summer Programme** at:

<http://www.wti.org/education/doctoral-programme/>

This is an intensive course. Please try to complete some readings before the course begins.

### Readings

- Arkolakis, C., A. Costinot and A. Rodriguez-Clare (2012). 'New Trade Models, Same Old Gains?' American Economic Review 102(1): 94-130.
- Artuc E. and J. McLaren (2015). Trade policy and wage inequality: A structural analysis with occupational and sectoral mobility. Journal of International Economics 97: 278-294.
- D.H. Autor, D. Dorn and G.H. Hanson (2013). The China Syndrome: Local Labor Market Effects of Import Competition in the United States. American Economic Review 103(6): 2121-2168.
- D.H. Autor, D. Dorn and G.H. Hanson (2015). Untangling Trade and Technology: Evidence from Local Labour Markets. The Economic Journal 125: 621-646.
- D.H. Autor, D. Dorn and G.H. Hanson (2016). The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade. CESIFO Working Paper No. 5825.
- Bekkers, E. and J. Francois (2016). Incorporating Modern Trade Theory into CGE Models. Mimeo University of Bern.
- Costinot, A. and A. Rodriguez-Clare (2013). 'Trade Theory with Numbers: Quantifying the Consequences of Globalization.'
- Caron, J., T. Fally and J.R. Markusen (2014). 'International Trade Puzzles: A Solution Linking Production and Preferences.' Quarterly Journal of Economics.

- Eaton, J. and S. Kortum (2002). Technology, Geography, and Trade. Econometrica 70: 1741-1779.
- Harrison, A., J. McLaren, and M. McMillan (2011). Recent Perspectives on Trade and Inequality. Annual Review of Economics 3: 261--89.
- Helpman, E., O. Itzhak, M.-A. Muendler, S.J. Redding (2016). Trade and Inequality. From Theory to Estimation. Review of Economic Studies forthcoming.
- Keller, W. (2004). International Technology Diffusion. Journal of Economic Literature 42(3): 752-782.
- Levchenko A.A. and J. Zhang (2016). 'The Evolution of Comparative Advantage: Measurement and Welfare Implications.' Forthcoming Journal of Monetary Economics.
- Melitz, M.J. (2003). The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity. Econometrica 71(6): 1695-1725.



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Michael Pfaffermayr is Professor of International Economics in Innsbruck, Austria and consultant at the Austrian Institute of Economic Research. His research focuses on empirical international trade as well as applied econometrics, where he concentrates on panel econometric and spatial econometrics. Email: [michael.pfaffermayr@uibk.ac.at](mailto:michael.pfaffermayr@uibk.ac.at).

## Week 2: Advanced Panel Data Econometrics 29 August – 2 September 2016 (4 ECTS)

This course discusses recent developments in panel econometrics covering IV-methods in panels, limited dependent variable panel models. Special emphasis will be given to panel methods used for estimation of gravity models of bilateral trade.

There will be a series of lectures where we discuss the main material and applications. Furthermore, we will have lab sessions, where applications in Stata will be discussed and important applied work published in refereed journals is replicated. The lab sessions include work on a own projects of the students.

**Lectures 4 and 5:** Maximum likelihood estimation, limited dependent variables and panel data I (random effects probit, fixed effects logit)

**Lecture 6:** Limited dependent variables and panel data II (multinomial logit and simulated maximum likelihood)

**Lecture 7:** Limited dependent variables and panel data III (state dependence vs. heterogeneity)

**Lecture 8:** Limited dependent variables and panel data IV (sample selection in panel models)

**Lectures 9 and 10:** Poisson and fractional response (cross-section and panel) models

**Lectures 11 and 12:** Stata programming, maximum likelihood and GMM estimation in Stata, discussion and replication of relevant papers

### Course Content

**Lecture 1:** Review of linear one-way and two-way error component models (FE, RE)

**Lectures 2 and 3:** GMM, weak instruments and IV estimation in panel models (IV-FE, IV-RE, HT)

### Grading

Grading will be based on a take home exam and an individual project. Details will be given during the first lecture. Total number of hours: 25. There will be 12 lectures of 1.5 hours and 5 units will comprise 1.5 lab hours.

### Timetable and Registration

The course takes place from Monday to Friday from 9:30a.m. to 12:00p.m. and from 1:30 p.m. to 4p.m.

Price for 1 week: 500 Swiss Francs.

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This is an intensive course. Please try to complete some readings before the

### Readings

- Arellano, M. (2003). Panel Data Econometrics, Oxford University Press, Oxford.
- Baltagi, B. (2005). Econometric Analysis of Panel data, Wiley, New York, 3.edition.
- Cameron, A.C. and P.K. Trivedi (2005). Microeconometrics, Methods and Applications, Cambridge University Press, Cambridge.
- Hsiao, C. (2003). Analysis of Panel data, Cambridge University Press, Cambridge.
- Wooldridge, J. (2012). Econometric Analysis of Cross Section and Panel Data, Second Edition, MIT-Press, Cambridge MA.
- Further references will be provided in the lectures.