

Course Book

Evaluation of Development Policies

Summer Term 2014

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Chair of Development Economics

[\(www.wiwi-uni-passau.de/grimm.html\)](http://www.wiwi-uni-passau.de/grimm.html)

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Chapter 1: General information

1.1 Course contents

Slow economic development in many parts of the world has led to development aid pessimism. While some think aid in general does not work and argue that development cannot be planned others think that in fact aid was simply not significant enough to be successful. Hence the former argue in favour of smaller steps and to build on what works, while the latter ask for a substantial increase of aid. This debate has raised the interest in and need of rigorous policy and project evaluations which can in a credible way establish a link between cause and effect. This course introduces students to the concept and various methods of impact evaluations. All methods are presented using real world examples. Hence policies and projects are discussed in conjunction with the methods that can be used to evaluate them. Examples include a conditional cash transfer program, an electrification program, the implementation of health insurance and labour market policies.

The methods that are discussed in this course are similar to those used in OECD countries to evaluate labour market and social policies. Hence, the course is not only of interest for students with a special interest in development, but all students that aim to get experience in policy evaluation more generally.

The course is accompanied by a tutorial in which students acquire hands-on experience on how to conduct policy evaluations in practice. The first few lessons help students to get acquainted with Stata, the leading statistical software package in economics and other social sciences.

Chapter overview

- Chapter 1: Introduction to the evaluation of development policies – why evaluate?
- Chapter 2: Determining evaluation questions
- Chapter 3: Causal inference and counterfactuals
- Chapter 4: Randomized selection methods
- Chapter 5: Introduction to quasi-experimental methods
- Chapter 6: Regression discontinuity
- Chapter 7: Difference-in-differences
- Chapter 8: Matching
- Chapter 9: Instrumental variables

- Chapter 10: Choosing the sample and survey design
- Chapter 11: Complementing quantitative evaluations by qualitative investigation methods
- Chapter 12: The search for the elusive keys to economic development - a critical discussion
- Chapter 13: Systematic reviews

From June 28-29, the chair of development economics hosts the annual conference on development economics of the German Economic Association in Passau. Key-note speakers are Prof. Paul Glewwe (University of Minnesota) and Prof. Erwin Bulte (Wageningen University and Tilburg University). The conference will feature a large number of high quality impact evaluations and other policy relevant work. All students are invited and strongly encouraged to attend the conference.

1.2 Aims of the course

Upon completion of the course students

- Are able to select an adequate evaluation tool for a given policy or project.
- Are able to construct the theory of change associated with a policy or project.
- Are able to conduct the data analysis in line with the various evaluation methods using the Stata software package.
- Are able to critically assess the quality of impact evaluations.
- Are able to derive policy recommendations from impact evaluations.

1.3 Prior knowledge

Basic knowledge in quantitative-statistical analysis is required. Prior knowledge in econometrics is an advantage as is prior knowledge in development economics.

1.4 Credits and workload

Course credits: 5 ECTS-LP.

	Contact hours	Self-study
Lecture	28h	42h
Tutorial	28h	14h
Course work		25h
(Preparation) final exam	1.5h	10
Total	150h	

1.5 Inscription and contact

Inscriptions via StudIP.

For questions related to the administration of this course, please contact:

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Chapter 2: Course set-up

2.1 Organization

This course is organized in a set of lectures and tutorials (Übungen). In the lectures the various methods of evaluation projects and interventions are successively developed. The classes closely follow a text-book complemented by relevant research papers. In the tutorial students learn to implement and apply what has been learned in the lectures. Students solve set problems in relation to the lectures. This part of the course takes place in the computer lab.

2.2 Scheduling

Start lecture: 8 April 2014, Room: N.N.
End lecture: 21 May 2014 (!!)

Start tutorial: 10 April 2014, Room: N.N.
End tutorial: 10 July 2014

NOTE TO THE SCHEDULING: The **first half** of the term there are **two lectures per week** (Tuesday 16-18 and Wednesday 8-10) and one Tutorial (Thursday 16-18). The **second half** of the term there is **only the tutorial** (Tuesday 16-18) and no lecture anymore. Students have then time to work on their evaluation problem and to prepare the exam.

Written final exam at the end of the term (exact date to be announced). The course work (the 'small evaluation problem') has to be submitted by 31 August 2014.

2.3 Grade components

- Final written exam, 90 min (50%).
- Course work to be submitted (50%).

The course work consists of a small evaluation problem that needs to be carried out using a data set and the Stata software package. The output to be submitted should be a short research note explaining the evaluation problem, the used evaluation approach, the main results and a policy relevant conclusion.

2.4 General background readings

- Angrist, J.D. and J.-S. Pischke (2009). *Mostly Harmless Econometrics. An Empiricists Companion*. Princeton: Princeton University Press.
- Banerjee, A.V. and E. Duflo (2008). *The Experimental Approach to Development Economics*. Cambridge, MA:MIT. [<http://economics.mit.edu/faculty/eduflo/papers>]
- Banerjee, A.V. and E. Duflo (2011). *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. PublicAffairs.
- Cameron, A.C. and P.K. Trivedi (2010). *Microeconometrics using Stata*. Stata Press.
- Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. [free download of pdf on World Bank web site]
- Hsiao, C. (2003). *Analysis of Panel Data*, 2nd Edition. Cambridge: Cambridge University Press.
- Khandker, S.R., G.B. Koolwal and A.H. Samad (2010). *Handbook of Impact Evaluation. Quantitative Methods and Practices*. Washington D.C.: World Bank. [free download of pdf on World Bank web site]
- Ravallion, M. (2001). The Mystery of the Vanishing Benefits: An Introduction to Impact Evaluation. *The World Bank Economic Review*, 15(1): 115-140. [free download of pdf on World Bank web site]
- Ravallion, M. (2008). Evaluating Anti-Poverty Programs, Chapter 13. In: T. P. Schultz and J. Strauss (eds.). *Handbook of Development Economics*, Volume 4, Amsterdam: North-Holland.
- Wooldridge, J.M. (2006). *Introductory Econometrics: A Modern Approach*, 3rd Edition. Thomson/South Western.

2.5 Course material

- Readings
- Presentation slides (script)
- Set problems (tutorial/Übung)

Chapter 3: Chapter details

Chapter 1: Introduction to the evaluation of development policies – why evaluate?

Basic reading:

Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. Chapter 1.

Khandker, S.R., G.B. Koolwal and A.H. Samad (2010). *Handbook of Impact Evaluation. Quantitative Methods and Practices*. Washington D.C.: World Bank. Chapters 1 & 2.

Optional reading:

Ravallion, M. (2008). Evaluating Anti-Poverty Programs, Chapter 13. In: T. P. Schultz and J. Strauss (eds.). *Handbook of Development Economics*, Volume 4, Amsterdam: North-Holland.

Chapter 2: Determining evaluation questions

Basic reading:

Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. Chapter 2.

Chapter 3: Causal inference and counterfactuals

Basic reading:

Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. Chapter 3.

Optional reading:

Heckman, J.J. (2008). *Econometric Causality*. CEMMAP Working Paper 1/08 IFS. London.

Heckman, J.J. and E. J. Vytlačil (2007). *Econometric Evaluation of Social Programs, Part I: Causal Models, Structural Models and Econometric Policy Evaluation*, Chapter 70. In: J.J. Heckman and E. E. Leamer (eds.). *Handbook of Econometrics*, Volume 6B, Amsterdam: North-Holland.

Chapter 4: Randomized selection methods

Basic reading:

Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. Chapter 4.

Khandker, S.R., G.B. Koolwal and A.H. Samad (2010). *Handbook of Impact Evaluation. Quantitative Methods and Practices*. Washington D.C.: World Bank. Chapter 3.

Optional reading:

Duflo, E., R. Glennester and M. Kremer (2008). *Using Randomization in Development Economics Research: A Toolkit*, Chapter 61. In: T. P. Schultz and J. Strauss (eds.). *Handbook of Development Economics*, Volume 4, Amsterdam: North-Holland.

Chapter 5: Introduction to quasi-experimental methods

Basic reading:

Ravallion, M. (2001). *The Mystery of the Vanishing Benefits: An Introduction to Impact Evaluation*. *The World Bank Economic Review*, 15(1): 115-140.

Optional reading:

Blundel, R., M.C. Dias (2000). *Evaluation Methods for Non-Experimental Data*, *Fiscal Studies*, 21(4): 427-468.

Heckman, J.J. (1990). *Varieties of Selection Bias*. *American Economic Review*, 80(2): 313-318.

Chapter 6: Regression discontinuity

Basic reading:

Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. Chapter 5.

Khandker, S.R., G.B. Koolwal and A.H. Samad (2010). *Handbook of Impact Evaluation. Quantitative Methods and Practices*. Washington D.C.: World Bank. Chapter 7.

Optional reading:

Imbens, G.W. and T. Lemieux (2007). Regression Discontinuity Designs: Guide to Practice. *Journal of Econometrics*, 127(2): 615-635.

Chapter 7: *Difference-in-differences*

Basic reading:

Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. Chapter 6.

Khandker, S.R., G.B. Koolwal and A.H. Samad (2010). *Handbook of Impact Evaluation. Quantitative Methods and Practices*. Washington D.C.: World Bank. Chapter 5.

Optional reading:

Bertrand M., E. Duflo, and S. Mullainathan (2002). How much should we trust Difference-in-Difference Estimates? *Quarterly Journal of Economics*, 119(1): 249-275.

Chapter 8: *Matching*

Basic reading:

Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. Chapter 7.

Khandker, S.R., G.B. Koolwal and A.H. Samad (2010). *Handbook of Impact Evaluation. Quantitative Methods and Practices*. Washington D.C.: World Bank. Chapter 4.

Optional reading:

Heckman, J.J., H. Ichimura and P. Todd (1998). Matching as an Econometric Evaluation Estimator. *Review of Economic Studies*, 65(2): 261-294.

Chapter 9: *Instrumental variables*

Basic reading:

Khandker, S.R., G.B. Koolwal and A.H. Samad (2010). *Handbook of Impact Evaluation. Quantitative Methods and Practices*. Washington D.C.: World Bank. Chapter 6.

Optional reading:

Heckman, J. J. (1997). Instrumental Variables: A Study of Implicit Behavioural Assumptions Used in Making Program Evaluations. *Journal of Human Resources*, 32(2):441-62.

Wooldridge, J.M. (2006). *Introductory Econometrics: A Modern Approach*, 3rd Edition. Thomson/South Western. Chapter 15.

Chapter 10: Choosing the sample and survey design

Basic reading:

Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. Chapter 11.

Khandker, S.R., G.B. Koolwal and A.H. Samad (2010). *Handbook of Impact Evaluation. Quantitative Methods and Practices*. Washington D.C.: World Bank. Chapter 4.

Chapter 11: Complementing quantitative evaluations by qualitative investigation methods

Basic reading:

Adato, M. (2011), Combining quantitative and qualitative methods for program monitoring and evaluation: Why are mixed-method designs best? (7 pages)
[<http://siteresources.worldbank.org/INTPOVERTY/Resources/335642-1276521901256/premnoteME9.pdf>]

Bamberger, M. (2012), Introduction to mixed methods in Impact Evaluation. Impact Evaluation Notes. InterAction/Rockefeller Foundation. (35 pages)
[<http://seachangecop.org/sites/default/files/documents/2012%2009%20Mixed%20Methods%20in%20Impact%20Evaluation%20%28English%29.pdf>]

Gertler, P., S. Martinez and P. Premand (2010). *Impact Evaluation in Practice*. Washington D.C.: World Bank. Chapter 12.

Chapter 12: The search for the elusive keys to economic development - a critical discussion

Basic reading:

Deaton, A. (2010). Instruments, Randomization and Learning about Development, *Journal of Economic Literature*, 48: 424-455.

Optional reading:

Rodrik, D. (2008). The New Development Economics: We Shall Experiment, But How Shall We Learn? Mimeo, Harvard University.
[<http://www.hks.harvard.edu/fs/drodrik/Research%20papers/The%20New%20Development%20Economics.pdf>]

Chapter 13: Systematic reviews

Basic reading:

White, H. and H. Waddington (2012). Why do we care about evidence synthesis? An introduction to the special issue on systematic reviews. *Journal of Development Effectiveness*, 4 (3): 351-358.
[<http://www.tandfonline.com/doi/full/10.1080/19439342.2012.711343>]

Waddington H., H. White, B. Snilstveit, J. Garcia Hombrados, M. Vojtkova, P. Davies, A. Bhavsar, J. Evers, T. Perez Koehlmoos, M. Peticrew, J. C. Valentine and P. Tugwell (2012). How to do a good systematic review of effects in international development: a tool kit. *Journal of Development Effectiveness*, 4(3): 359-387.
[<http://www.tandfonline.com/doi/full/10.1080/19439342.2012.711343>]