



Bachelor thesis seminar
Digitalization: Opportunities and Challenges for Firms and Workers

Lecturer

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Overview

The seminar discusses recent research on the economic implications of digitalization and information and communication technologies (ICT). The seminar is structured around two broad themes:

(1) How do digitalization and ICT affect firms?

Examples of recent topics include

- The effect of digitalization on firm organization
Literature: Aral et al. (2012), Bloom et al. (2014).
- The effect of ICT on the organization of value chains
Literature: Abramovsky & Griffith (2006), Fort (2017).
- The effects of internet competition on offline markets
Literature: Brown & Goolsbee (2002), Kroft & Pope (2014).

(2) How do digitization and ICT affect workers?

Examples of recent topics include

- The effect of digitalization and automation on wages and wage inequality
Literature: Beaudry & Lewis (2014), Janssen & Mohnenweiser (2018).
- The effect of digitalization on job search
Literature: Kroft & Pope (2014), Kuhn & Mansour (2014).

Interested students can conduct independent empirical work as alternative to a literature-based thesis.

Presentations will take place during a blocked seminar.

What I expect you to do

Every participant is expected to submit a written thesis and to present the main results of the thesis in a blocked seminar. Participants are also expected to actively take part in the class discussion.

A good thesis (and presentation) demonstrates that the student has a clear understanding of the research question, methodology and main results of the underlying papers, and is able to critically assess their strength and weaknesses. An excellent thesis (and presentation) includes independent ideas regarding how to push the research frontier forward.

How I support you to achieve this

I will provide you with the research papers (usually two) that should be the basis of your thesis as well as some instructions. We will meet and discuss in detail the outline of your thesis. We will review the strength and weaknesses of your thesis before the seminar as preparation for your presentation.

For students interested in independent empirical work, I will offer data and support for the empirical analysis (in particular, more frequent meetings).

Prerequisites

The seminar will discuss empirical research papers that use micro data on firms and workers. Students should therefore be familiar with statistics and have a basic understanding of econometrics, or be willing to acquaint themselves with econometric techniques.

References

- Abramovsky, Laura and Rachel Griffith (2006): „Outsourcing and Offshoring of Business Services: How important is ICT?“, *Journal of the European Economic Association*, Vol. 4(2-3), 594-601.
- Aral, Sinan, Erik Brynjolfsson and Lynn Wu (2012): “Three-Way Complementarities: Performance Pay, Human Resource Analytics, and Information Technology”, *Management Science*, Vol. 58, 913-931.
- Beaudry, Paul and Ethan Lewis (2014), „Do Male-Female Wage Differentials Reflect Differences in the Return to Skill? Cross-City Evidence from 1980-2000“, *American Economic Journal: Applied Economics*, Vol. 6(2), 178-194.
- Bloom, Nicholas, Luis Garicano, Raffaella Sadun and John Van Reenen (2014): „The Distinct Effects of Information Technology and Communication Technology on Firm Organization“, *Management Science*, Vol. 60, 2859-2885.
- Brown, Jeffrey R. and Austan Goolsbee (2002), „Does the Internet make markets more competitive? Evidence from the life insurance industry“, *Journal of Political Economy*, Vol. 110(5), 481-507.
- Fort, Teresa (2017): „Technology and Production Fragmentation: Domestic versus Foreign Sourcing“, *Review of Economic Studies*, Vol. 84(4), 650-687.
- Janssen, Simon, and Jens Mohrenweiser (2018), "The Shelf Life of Incumbent Workers during Accelerating Technological Change: Evidence from a Training Regulation Reform." IZA DP No. 11312.
- Kroft, Kory and Devin G. Pope (2014), „Does Online Search Crowd Out Traditional Search and Improve Matching Efficiency? Evidence from Craigslist“, *Journal of Labor Economics*, Vol. 23(2), 259-303.
- Kuhn, Peter, and Hani Mansour (2014), “Is internet job search still ineffective?”, *The Economic Journal*, Vol. 124, 1213-1233.