



Dipartimento di Scienze Economiche ed Aziendali
Direttore: Prof. Patrizio Monfardini
Dottorato in Scienze Economiche e Aziendali
Doctoral Program in Economics and Business
Coordinatrice: Prof.ssa Francesca Cabiddu

Topics in labour and health economics

Course leader: Thomas Siedler; Timothy Moore

Ref: Silvia Balia, Rinaldo Brau, Giovanni Sulis

Aims of the course

Provide an overview of current frontier research in the health and labour field

Learning outcomes and competences

Make students able to understand frontier research in labour and health economics and critically assess its methods and findings. Enable them to acquire advanced skills in causal inference and applied empirical analysis using administrative and survey data.

Pre-requisites

No formal requisites are required. Students are expected to benefit from their previous graduate studies

Course contents and syllabus

The first part of the course, taught by Prof. Thomas Siedler will cover two topics.

March 12th 2 to 6 pm (Room 8): Topic 1: Health Impacts of Transboundary Air Pollution: Evidence from the German-Polish Border

Air pollution remains one of the most pressing environmental and public health challenges worldwide. While pollution is often regulated at the national level, airborne pollutants do not respect political borders. This creates a classic problem of transboundary externalities, where emissions generated in one country impose health and economic costs on neighboring regions. Understanding the magnitude, distribution, and policy implications of these cross-border spillovers is central to modern environmental economics and public policy.

This part of the course examines the economic and health consequences of particulate matter (PM_{2.5} and PM₁₀), with a particular focus on cross-border pollution between Germany and Poland. The case provides a compelling natural laboratory: differences in energy systems—

especially Poland's historically strong reliance on coal for residential heating—generate substantial variation in pollution exposure across space and time.

March 13th 3 to 5 pm (Room 8): *Topic 2: Do Internships pay off?*

Understanding how educational experiences translate into labor market success is a central question in labor economics. While formal schooling and degrees have been studied extensively, less is known about the causal impact of experiential learning—particularly internships—on long-term earnings and employment trajectories. Internships are often promoted as a bridge between higher education and the labor market, yet identifying their true causal effect poses substantial empirical challenges due to selection bias and unobserved heterogeneity.

This part of the PhD course examines the economic returns to student internship experience, using evidence from mandatory firm internships at universities in Germany as a quasi-experimental setting. The institutional structure of compulsory internships provides a powerful source of exogenous variation in internship participation. By leveraging this variation as an instrument, we can move beyond simple correlations and estimate the causal effect of internship experience on early-career outcomes.

The second part of the course, taught by Prof. Timothy Moore, will cover two topics.

Topic 1: “Causes and Consequences of Illicit Drug Epidemics”

It examines the economics of illicit drug epidemics, with a focus on the demand- and supply-side forces that generate rapid changes in drug markets. The course will analyze the key drivers behind the emergence, diffusion, and decline of drug epidemics, emphasizing market dynamics, incentives, and structural factors shaping both consumption and supply conditions. It will also address the broader consequences of these epidemics, including social, economic, and public health effects that extend beyond drug use itself, and will discuss implications for policy design and future research.

Topic 2: “The Health Effects of Retirement.”

It investigates the relationship between Social Security eligibility and mortality. Building on evidence of a discontinuous increase in male mortality at age 62, the course will emphasize empirical strategies to identify causal effects at retirement thresholds. Particular attention will be devoted to econometric methods using administrative population data and complementary survey evidence, highlighting how these sources can be combined to study behavioral mechanisms and lifestyle changes associated with labor force exit.

Organization of the course

Throughout the course, students will be guided through key readings drawn from handbook chapters, peer-reviewed journal articles, and recent working papers.

Assessment method

Individual presentation in class on a chosen related paper.

Reading list

- [1] Anderson, Michael L., “As the Wind Blows: The Effects of Long-Term Exposure to Air Pollution on Mortality,” *Journal of the European Economic Association*, 2019.
- [2] Currie, Janet, Matthew Neidell, and Johannes F. Schmieder, “Air pollution and infant health: Lessons from New Jersey,” *Journal of Health Economics*, May 2009, 28 (3), 688–703.
- [3] Margaryan, S., Saniter, N., Schumann, M., & Siedler, T. (2022). Do Internships Pay Off? The Effects of Student Internships on Earnings. *Journal of Human Resources*, 57(4), 1242–1275.
- [4] Baert, S., Neyt, B., Siedler, T., Tobbach, I., & Verhaest, D. (2021). Student Internships and Employment Opportunities after Graduation: A Field Experiment. *Economics of Education Review*, 83, 102141.
- [5] Moore, T.J. and Pacula R. (2021) Causes and Consequences of Illicit Drug Epidemics . In David Marcotte and Klaus Zimmermann (eds.) *Economics of Risky Behavior, Handbook in Labor, Human Resources and Population Economics*, Springer Nature, Cham Switzerland.
- [6] Hansen B. , Moore T.J. and Olney (2023). Importing the Opioid Crisis? International Trade and Fentanyl Overdoses. NBER Working Paper No. 31885.
- [7] Fitzpatrick, M and Moore, T.J. (2018). The Mortality Effects of Retirement: Evidence from Social Security Eligibility at Age 62, *Journal of Public Economics*, 157: 121-137.