



Institute for Labour Law and Industrial Relations

in the European Union

## **J** Workshop on Health and the Labour Market

Institute for Labour Law and Industrial Relations in the European Union | Trier University

## **Workshop on Health and the Labour Market** 20<sup>th</sup> May, 2022

Institute for Labour Law and Industrial Relations in the European Union (IAAEU) Trier University, Campus II Behringstraße 21 54296 Trier





#### Welcome to the

#### Institute for Labour Law and Industrial Relations in the European Union

The Institute for Labour Law and Industrial Relations in the European Union (IAAEU) was established as a public foundation in 1983 and is funded by the state government of Rhineland-Palatinate. While being a public foundation, the IAAEU is also a research institute of Trier University and is situated in the heart of the Petrisberg Technology Park on Campus II. The IAAEU comprises two working groups of which one engages in research in the area of European labour law (Legal Team) and one engages in the theoretical and empirical analysis of personnel and labour economic issues (Economics Team). Depending on the research questions and the available data the economists rely on experimental data drawn from the experiments conducted in the institute's laboratory or on survey and corporate data. Since January 2012 Laszlo Goerke is one of the directors of the IAAEU and head of the Chair of Personnel Economics at Trier University. He is also a research fellow of the Institute of Labor Economics (IZA) and the CESifo Group Munich.

For detailed information have a look at our website.

#### **About TriECON**

TriECON is a workshop series initiated and conceptualized by the Institute for Labour Law and Industrial Relations in the European Union (IAAEU) in cooperation with the Chair of Personnel Economics at Trier University. Each workshop is designed to offer a platform for scientific exchange on a particular topic. The workshop series supports the networking among scientists and promotes the exchange of research ideas and results with other scientists as well as with the wider, interested public.

We hope you have a pleasant event and that you will you get some new insights!

For information about the upcoming workshops, we invite you to visit the corresponding website.

#### **Instructions for Presenters:**

Your presentation should not exceed 40 minutes. This will leave about 20 minutes for discussion. If you send us your file in advance, we can upload it on the computer in the lecture room.

If you have any further questions, please do not hesitate to contact the local organisers.

#### **Contact:**

Laszlo Goerke <u>Goerke@iaaeu.de</u> Tel.: +49 651 201 4740



#### Arrival

Please observe that the IAAEU is located on floor 7 of the H-building on Campus 2 of Trier University. You find information on how to get to the building and the top floor on our <u>homepage</u>.

If you come by car you can park it directly in front of the building.

#### Departure

We will go from the conference site into town either by bus or by car and provide you with according information once we know about your preferences concerning modes of transport.

#### **Trier University, Campus II**

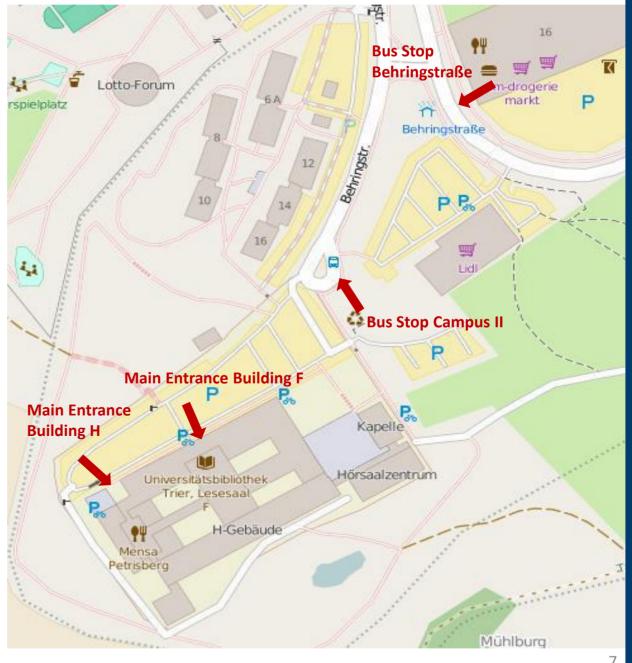
#### Venue:

IAAEU

Trier University, Campus II (Building H) Behringstraße 21 54296 Trier

**Meeting Room:** 

H 714 (Building H, 7<sup>th</sup> Floor)



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#### **Building H, 7th Floor**

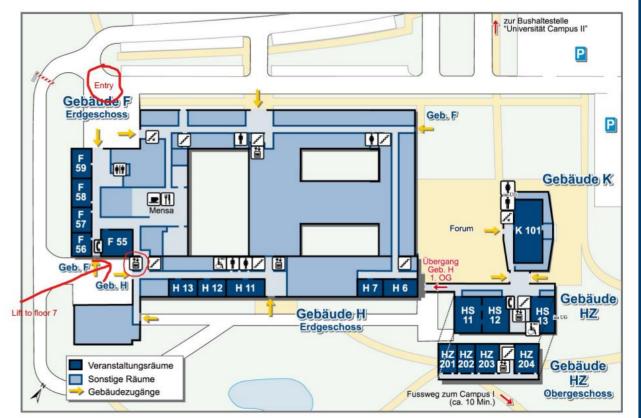
#### Venue:

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Trier University, Campus II (Building H) Behringstraße 21 54296 Trier

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Food:

Lunch:

We will have lunch in the cafeteria on the ground floor of the building where the conference takes place. The costs for presenters will be covered by the IAAEU.

Dinner:

We will have dinner in a restaurant in downtown Trier. Details will be provided in time. Unfortunately, we cannot cover the costs for dinner. Please let us know if you do not participate in the conference dinner.

Please let us also know if you have any dietary requirements that we should be aware of.

#### COVID:

The university requires its members and visitors to wear face masks, unless they present or during coffee breaks etc. Here is the quote from the university homepage:

"The obligation to wear a facial mask (FFP2 standard or medical mask) applies inside all buildings and during lectures and examinations. The mask can be removed by the lecturer when presenting (or when a teaching activity requires this) as well as by individuals when seated inside the canteen/cafeteria."

## Schedule (Friday, May 20<sup>th</sup> 2022)

09:50 - 10:00	Welcome and Opening		
10:00 - 11:00	Martin Kerndler: "Wealth for Health?"		
11:00-12:00	Niccolo Gentile: "Human Wellbeing and Machine Learning"		
12:00 – 13:15	Lunch (ground floor, H-building)		
13:15 – 14:15	Anthony Lepinteur: <i>"Depression and Early Retirement Age: Causal Evidence from a Gene-</i> Environment Setup"		
14:15 – 15:15	Till Seuring: "The Impact of Heat Stress on Labor Productivity in England and Wales: Evidence from Survey Data"		
15:15 – 15:45	Coffee Break		
15:45 – 16:45	Gianmaria Niccodemi: "Early-life economic determinants of type-2 diabetes"		
16:45 – 17:45	Dennis Gottschlich: "The Unintentional Costs of Austerity"		
19:00 – Open-end	Dinner		

## Abstracts

#### Martin Kerndler, Alexia Prskawetz, Miguel Sánchez-Romero: "Wealth for Health?"

We study the impact of mortality risk at the workplace on mortality differentials. To this purpose we build a life-cycle search and matching model with wealth accumulation where on-the-job mortality risk is bargained between workers and firms. Our quantitative analysis shows that wealthy individuals optimally choose lower mortality risk. Getting wealthy, however, either requires higher risk-taking in the early career or a favorable labor market history. We document that mortality differentials increase over the life-cycle as a result of diverging labor market histories that create heterogeneous incentives for risk-taking.

#### Niccolo Gentile: "Human Wellbeing and Machine Learning"

There is a vast literature on the determinants of human subjective wellbeing. International organisations and statistical offices are now collecting such survey data at scale. However, standard regression models explain surprisingly little variation, limiting our ability to predict wellbeing. In response, we here assess the potential of Machine learning (ML) approaches to make better predictions. We analyse wellbeing data on over a million respondents from Germany, the UK, and the United States. In terms of predictive power, our ML approaches do improve compared to traditional models. Although the size of this improvement is small in absolute terms, it turns out to be substantial when compared to key variables like income and health. Moreover, we find that dramatically expanding the set of explanatory variables can double the predictive power of both OLS and the ML approaches on unseen data. The variables identified as important by our algorithms – i.e. material conditions, health, and meaningful social relations – are similar to those already identified in the literature. In that sense, our data-driven ML results validate the findings of conventional approaches.



## Abstracts

Anthony Lepinteur: "Depression and Early Retirement Age: Causal Evidence from a Gene-Environment Setup"

Differences in genetic endowments can make individuals more or less reactive to changes in their environment (such as policy interventions and living conditions). We here estimate the role of differences in the genetic propensity to be depressed as moderating factors of the association between a pension reform in the UK and individual health outcomes. Using data from the Understanding Society longitudinal study and exogenous variations in the 1995 to 2011 Pensions Acts, we show that women who were exposed to the increase in pension age are more likely to be employed and to exhibit worse mental and physical health. While the employment effect is orthogonal to genetic predispositions for depression, we find that the adverse health effects of the reform are only found for women with higher polygenic scores for depression. Our results suggest that labour market reforms can have unexpected effects on individuals' health that enhance pre-existing health inequalities.

## *Till Seuring,* Matteo Pinna Pintor: "The Impact of Heat Stress on Labor Productivity in England and Wales: Evidence from Survey Data"

Climate change is expected to increase extreme weather events, including long periods of unusually high temperatures. Exposure to high temperatures can lead to health problems by affecting the human body's ability to maintain its optimal temperature. Individuals and communities in warmer countries have developed strategies to adapt to high temperatures, however, in countries with temperate climates, behavioral adaptations are less common, even though they are likely to experience an increase in heat waves in the near future. We explore if exposure to high temperatures in a historically temperate climate has affected individual productivity over the last decade. We use panel data for England and Wales from the Understanding Society (US) survey and temperature data from the Copernicus project covering the years 2009 to 2020. To identify the effect of heat exposure on productivity, we link daily average temperatures at the respondents' place of residence in the 30 days preceding the interview date to a binary self-reported measure of health-related reductions in effort at work ('presenteeism'). Using Poisson regression and calculating marginal effects, we estimate the effect of an additional working day with average temperature in a given four-degree temperature bin on the probability to report reductions in accomplished work. We find that one additional day at the 27-31 C° bin increases the probability to accomplish less work by 0.7 percentage points, or approximately 20 percent. We further find that the effect is concentrated on people working in occupations with a medium risk of heat-exposure, while those in low-risk occupations appear unaffected. Our findings indicate that even in temperate climates, heat exposure can lead to immediate health-related reductions in productivity.

#### TriECON

## Abstracts

#### Gianmaria Niccodemi: "Early-life Economic Determinants of Type-2 Diabetes"

We study the effect of economic conditions early in life on the occurrence of type-2 diabetes in adulthood using contextual economic conditions and within-sibling pair variation. We use data from Lifelines: a longitudinal cohort study and biobank including 51,270 siblings born in the Netherlands from 1950 onward. Sibling fixedeffects account for selective fertility. To identify type-2 diabetes we use biomarkers on the hemoglobin A1c concentration and fasting glucose in the blood. We find that adverse economic conditions around birth increase the probability of type-2 diabetes later in life both in males and in females. Inference based on self-reported diabetes leads to biased results, wrongly suggesting the absence of a relationship between early-life conditions and type-2 diabetes later in life. The same applies to inference that does not account for selective fertility.

#### Dennis Gottschlich, Andreas Lichter: "The Unintentional Costs of Austerity"

This paper estimates the causal effect of social welfare spending on citizens' (mental) health. For identification, we exploit the large-scale cuts in social welfare spending in the United Kingdom during the early 2010s that affected different regions across the country to significantly varying extent. We link the resulting local variation in the intensity of these austerity reforms to practice-level diagnostics data and set up a difference-in-differences design to uncover causal effects. Our estimates show that those regions particularly affected by spending cuts experienced a notable increase in depression prevalence rates. Back-of-the-envelope calculations suggest that the spending cuts caused unanticipated annual costs of up to £6 billion

## **Participants**

Last Name	First Name	Affiliation
Becker	Björn	IAAEU Trier & Trier University
Bedaso	Fenet	IAAEU Trier & Trier University
Clemens	Marco	IAAEU Trier & Trier University
Feld	Jonas	IAAEU Trier & Trier University
Gentile	Niccolo	University of Luxembourg
Goerke	Laszlo	IAAEU Trier & Trier University
Geißler	Theresa	IAAEU Trier & Trier University
Gottschlich	Dennis	Heinrich-Heine University Düsseldorf
Hartmann	Sven	IAAEU Trier & Trier University
Huang	Yue	IAAEU Trier & Trier University
Kerndler	Martin	Vienna University of Technology
Lepinteur	Anthony	University of Luxembourg
Niccodemi	Gianmaria	University of Luxembourg
Palermo	Alberto	IAAEU Trier
Paulus	Nora	IAAEU Trier & Trier University
Seuring	Till	Luxembourg Institute of Socio-economic Research (LISER)



## Notes



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