



Wittgenstein Centre

FOR DEMOGRAPHY AND
GLOBAL HUMAN CAPITAL



The hybrid seminar will be held
online via Zoom and in person at
Dr. Ignaz Seipel – Platz 2, 1010 Vienna,
Museumszimmer (stair 1, 2nd floor)

www.wittgensteincentre.org

WIC Hybrid Colloquium

Infection Risk at Work, Automatability, and Employment.

**Wednesday, 17th January 2024,
11:00 – 12:00 (CET)**



Klaus Prettner

WU (Vienna University of Economics and
Business)

Abstract:

We propose a model of production featuring the trade-off between employing workers versus employing robots and analyze the extent to which this trade-off is altered by the emergence of a highly transmissible infectious disease. Since workers are - in contrast to robots - susceptible to pathogens and also spread them at the workplace, the emergence of a new infectious disease should reduce demand for human labor. According to the model, the reduction in labor demand concerns automatable occupations and increases with the viral transmission risk. We test the model's predictions using Austrian employment data over the period 2015-2021, during which the COVID-19 pandemic increased the infection risk at the workplace substantially. We find a negative effect on occupation-level employment emanating from the higher viral transmission risk in the COVID years. As predicted by the model, a reduction in employment is detectable for automatable occupations but not for non-automatable occupations.

Please click [here](#) to register.

Login information will be sent to registered participants shortly before the presentation.

About the presenter:

Klaus Prettner is a Professor of Economics (especially Macroeconomics and Digitalization) at the Vienna University of Economics and Business (WU). His research is primarily concerned with the interrelations between economic growth and inequality, the economic consequences of automation, and the impacts of demographic developments on long-run economic outcomes. Klaus Prettner has published in journals such as the Journal of Monetary Economics, The Economic Journal, Journal of Economic Literature, Journal of Economic Growth, Journal of Health Economics, Research Policy, Journal of Urban Economics, Health Affairs, and The BMJ. He obtained his Ph.D. in Economics in 2009 from the University of Vienna.

The Wittgenstein Centre is a collaboration among the Austrian Academy of Sciences (OeAW), the International Institute for Applied Systems Analysis (IIASA) and the University of Vienna.

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