

Individual Mental Health and Labour Market Outcomes in the Digital Era

Summary

Rapid adoption of digital technologies accentuated by the COVID-19 lockdown regime has markedly changed the ways of working and the work-life balance of individuals. Extensive microdata research on individual level registry records and multiple cross-sectional survey data enables to investigate the effects of mental health and digitalization jointly and separately for better explanation of individuals' labour market outcomes. The endogenous relationships arising in the interaction between labour market outcomes and mental health on the one hand and between digital skills and labour market outcomes on the other hand call for the application of modern econometric tools that allow to retrieve consistent estimates on the effects that either improve or impair individuals' labour market outlook in the labour market conditional on their individual characteristics. This line of research offers valuable insights for the policy makers for improving the inclusiveness of the labour market and well-being of the individuals.

Research field:	Economics and finance
Supervisors:	Prof. Dr. Aaro Hazak Prof. Dr. Kadri Männasoo
Availability:	This position is available.
Offered by:	School of Business and Governance Department of Economics and Finance
Application deadline:	Applications are accepted between June 01, 2022 00:00 and June 30, 2022 23:59 (Europe/Zurich)

Description

Studying the links between individual mental and general health and economic decisions and economic outcomes in digital and technology transformed society belongs to the relatively new branch of economic sciences—behavioural economics and finance (refer to Thaler (2016), the Nobel Prize winner in 2017). Mood, anxiety, and stress-related disorders are increasingly prevalent mental health conditions internationally (WHO, 2022), and their socio-economic consequences are much broader than health deterioration, health costs and reduced workability. On the background of mental health issues the labour market outcomes may be suboptimal, bringing potentially along deeper socio-economic inequality and suboptimal social inclusion of individuals (see e.g. De Quidt & Haushofer, 2018; Smith & Mazure, 2021). Earlier empirical studies have shown links of mental health with labour market outcomes (e.g. Banerjee, Chatterji & Lahiri, 2017). The manifestations of individual labour market outcomes are e.g. participation in the labour market, profession, workload, salary level, and work vs. entrepreneurship choices.

The methodology of the research relies on the one hand on microeconomic methods that address causal relationships and endogeneities arising between health status and economic outcomes using conditional maximum likelihood method and instrumental estimators. On the other hand the research employs computational and AI methods for pattern detection. As an added value this research is going to employ and develop the applications of high performance computing capacities at TalTech.

This doctoral thesis research is supported and related with two main international research projects. Firstly, European Commission Horizon 2020 research project "Individual Behaviour and Economic Performance: Methodological Challenges and Institutional Context" (IBEP), led by Tallinn University of Technology (project leader Aaro Hazak, Work Package 2 leader Kadri Männasoo), in collaboration with Aalto, Helsinki and Tel Aviv universities. Secondly, European Economic Area (EEA) Financial Mechanism 2014-2021 Baltic Research Programme [project S-BMT-21-8 (LT08-2-LMT-K-01-073)] project ETAG21003 in collaboration with BI Norwegian Business School, Vilnius University, Baltic International Centre for Economic Policy Studies (BICEPS), University of Tartu and The Hong Kong University of Science and Technology.

To understand the heterogeneity of the labour market outcomes across different socio-economic groups, a comprehensive set of micro data is needed. The collection of the primary data has been started in the framework of the

IBEP project. As the PhD thesis will contain at least three research articles, the PhD student will investigate several aspects within the above topic area, while exact research question for each paper will be formulated in the broader research context partly depending on the data availabilities and relationships with the ongoing research in this line of research within and outside the research group.

Expectations upon the successful candidate

Ideally, the well-motivated candidate has a strong grasp of economic theory and policy and is familiar with the main econometric estimators and can apply them using contemporary software for statistical and econometric analysis such as STATA, R, MatLab or others, and has a strong drive to become familiar with the cutting-edge research on causal evaluation.

References

1. Banerjee, S., Chatterji, P., & Lahiri, K. (2017). Effects of psychiatric disorders on labor market outcomes: a latent variable approach using multiple clinical indicators. *Health Economics*, 26(2), 184-205.
2. De Quidt, J., & Haushofer, J. (2018). Depression through the lens of economics: A research agenda. In: *The economics of poverty traps* (pp. 127-152). University of Chicago Press.
3. Smith, M. V., & Mazure, C. M. (2021). Mental health and wealth: depression, gender, poverty, and parenting. *Annual review of clinical psychology*, 17, 181-205
4. Thaler, R. H. (2016). Behavioral economics: Past, present, and future. *American Economic Review*, 106(7), 1577-1600.



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