Industrial Strategy and Competitiveness Research Using Innovative Data Analytics

Summary

A research team working on industrial strategy and competitiveness using innovative data analytical methods and tools is looking for a PhD candidate interested in economic complexity and global value chains. The PhD candidate would join the two on-going international projects, carried out in co-operation with outstanding research partners.

Research field:	Business
Supervisors:	Prof. Dr. Tarmo Kalvet
	Dr. Marek Tiits
Availability:	This position is available.
Offered by:	School of Business and Governance
	Department of Business Administration
Application deadline:	Applications are accepted between June 01, 2022 00:00 and June 30, 2022 23:59 (Europe/Zurich)

Description

The research group is driven by the understanding that the living standard of nations depends fundamentally on their ability to earn export revenues. The dependence on foreign trade is especially obvious for small(er) economies. However, not all products are the same in terms of their potential to contribute to the increase in living standards. Evolutionary economics maintains that in order to increase living standards, nations should increase the knowledge intensity of products. Research on economic complexity operationalises this by focusing on the ubiquity and related-ness of products, and the analysis of potential pathways for entering more complex product groups. Open-data, big-data, and other novel data science approaches are currently seen as transforming the landscape for socio-economic policy and research, as well as for business management and decision-making.

The objective of the research project is to develop research methods, with a particular focus on advanced data analytics skills to be exploited to conduct improved analysis of global value chains (GVCs) and clusters, and to identify and analyse the impact of relevant public policies.

Responsibilities and (foreseen) tasks

The researcher is expected to contribute to the research project "Economic Complexity, Machine Learning and Economic Policy" (2022-2025). This project advances the state-of-the art by integrating the market demand side of the international trade and considering risks involved in a country's participation in global value chains. Another major novelty is the inclusion of data not generally utilised for such research and the use of explainable machine learning, acknowledged as a crucial feature for the practical deployment of AI models. On the basis of the research, a framework is built on business intelligence and public services, and on policy support. The above leads to actionable research results on upgrading the competitive advantages and securing the strategic autonomy of the European economies.

As part of the CatChain project ("Catching-Up along the global value chain: business models, determinants and policy implications in the era of the Fourth Industrial Revolution", 2018-2024), fully funded short term research trips (in total up to 12 months) to Seoul National University (South Korea), University of Malaya (Malaysia), University of Campinas (Brazil) and to our other strategic research partners, are available and highly encouraged.

The researcher will be also part of the H2020 project "Industrial Strategy and Competitiveness Studies at TalTech" (2020-2023). This project develops strategic partnership between TalTech as the beneficiary, and Bocconi University (Italy), Aalto University (Finland) and NESTA (United Kingdom).

The candidate is expected to have master's degree in economics or policy/governance studies or ICT, have very good command of English and have very good qualitative and quantitative (such as R) research skills.

We offer

- 4-year PhD position (employed as an Early-Stage Researcher at the Department of Business Administration) in a strong team of researchers with international publication records and experience in leading and participating in pan-European research consortia.
- The chance to do high-level research in a dynamic academic environment.
- Opportunities to be involved in ongoing research projects and in new initiatives and to be part of an evolving collaborative research network.
- Fully funded based on the employment contract, including social and health benefits for a nominal study period of up to 4 years. Optional remunerated larger scale teaching activities or high-level publications are possible.

About the department

The Department of Business Administration deals with topical and relevant aspects of businesses – covering sustainable business development, knowledge and innovation management, risk management, strategic management, marketing, operations management, supply chain management, accounting, human resources management, performance management, digitalization, international business, and entrepreneurship – in its research and teaching activities.

The department is highly internationalised. Its staff have been involved in a multitude of international research projects with the EU (INTERREG, COST, FP7, H2020).

To get more information or to apply online, visit https://taltech.glowbase.com/positions/499 or scan the the code on the left with your smartphone.