



The Research Centre of the School of Economics and Business cordially invites you to a research seminar on Wednesday, 5 February 2025, at 14:00 CET in room P-119 at the University of Ljubljana School of Economics and Business

Vanja Piljak (University of Vaasa, School of Accounting and Finance)
will present the article

## Volatility and Connectedness of Hydrogen Economy, Green Assets, and Commodity Markets

This study provides novel insights into green finance by focusing on hydrogen as a new green asset. Motivation comes from the fact that hydrogen is one of the most promising fuel sources of the future, and as such it is part of the broader energy transition and climate change mitigation. In particular, we examine the dynamic connectedness and volatility interactions between the hydrogen economy, green assets (bonds and equity), and commodity markets. We utilize an Asymmetric Time-Varying Parameter Vector Autoregressive (TVP-VAR) approach to analyse how positive and negative shocks influence interactions and risk transmission between hydrogen economy, green assets, and commodity markets. Our findings demonstrate that positive shocks contribute to moderate market connectedness, while negative shocks significantly affect interdependence, affecting SP500, VIX, and crude oil volatility. Green equity and green bonds remain stable and show strength against market disruptions. The hydrogen economy and its dual role (acting both as a source and receiver of shocks) in risk transmission are increasingly important in financial networks.

We look forward to seeing you.