

## **Environmental responsibility and exposure of finance: combining Environmentally-extended Input-Output and Balance Sheet approaches**

Topic: Methodological aspects of input-output analysis (Chair: Bart Los, University of Groningen)

Author: Paul Hadji-Lazaro

Finance both contributes to environmental degradation and is vulnerable to environmental degradation. This article sets the methodological groundwork for assessing both concerns in an integrated macro-accounting framework. It is presented how the combination of Environmentally extended Input-Output analysis and balance sheet methods and data can be used to evaluate the contribution of finance to environmental degradation (responsibility) and the vulnerability of finance to environmental risks (exposure). The paper interprets the notions of environmental responsibility and exposure of finance (with an emphasis on transition risks) in a framework combining EIO and BS approaches, and provide methods for assessing them in such a framework. The paper also illustrates the methodological contribution in an empirical case study based on the EXIOBASE MRIO database and an industry-level financial database from the European Central Bank (called BACH). Ultimately, the article contributes to the development of a disaggregated ecological macroeconomy integrating monetary and biophysical flows and stocks.