The Economic Gains and Environmental Losses of US Consumption: A Social Network and Input-Output Approach

Topic: Input-Output Economics and Network Theory II

Author: Christina Prell

Co-Authors: Klaus Hubacek, Kuishuang Feng, Laixiang Sun

In this article, we show how consumption in the U.S., a core country, triggers distributions of value-added and sulfur dioxide throughout the global economy. We track these distributions for all commodities and services consumed in the U.S. (our macro level), then for six commodity groupings (our meso level), and lastly for two case studies (our sector level), these being 'Motor Vehicles' and 'Wearing Apparel'. We use a mixture of social network analysis and MRIO. Our findings show how the production of commodities for U.S. consumption tends to reify inequalities in the world-system: larger shares of value-added (in comparison to shares of pollution) are generally prompted within the core, whereas the opposite effect tends to be experienced in the non-core. We also discuss interesting exceptions to these general trends occurring at different levels of analysis. Finally, we draw special attention to China, the elephant in the room that exhibits both core and peripheral characteristics.