

Decomposition of Wage Inequalities in the World Economy: an Input-output Approach

Topic: (10.6) Structural Decomposition Analysis

Author: Martin LÄjbaj

Co-Authors: Paula Puskarova

Income and wealth inequalities, both between and within the advanced and developing countries, have attracted much attention in current economic debates. Wage inequalities appear to play a key role in the generation of final inequalities in terms of households' income, consumption and wealth. In this paper, we propose a decomposition approach based on the input-output analysis that allows us to disentangle the effects on the final inequalities' levels into the contributions of various determinants. So far, the analysis of income and wealth inequalities measured by standard inequality indices, e.g. Gini coefficient, Theil index, has received limited space in the input-output analysis. This does not imply that issues of income and wealth inequalities have been ignored in this stream of research. The focus of the input-output research has however been directed into different aspects of inequalities. In one way, researchers have put a lot of effort in the understanding how the income and wealth inequalities influence the structure of final demand of households, and eventually generate ambivalent effects on production, value added and employment. Other stream of research in input-output analysis has paid a lot of attention to inequalities that arise from the distribution of income that goes to labour and capital. We propose to calculate cross-industry and cross-country wage inequalities directly from the input-output tables, and analyze the final inequality variations through the lens of changes in the inputs. Detailed industry-level data on employees' wages linked to their hours worked and education attainments, which are covered by the World input-output database, allow us to illustrate the application of proposed methodology on major advanced and developing countries in the world. The analysis contributes to solving the puzzle around the impacts of human capital and technological progress on income inequality, but may shed also more light on the rising global inequalities unfolded by international trade and fragmentation of global value chains.