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The economic and ecological impact of consumption expenditures by household's categories:
An input-output analysis

By

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In the proposed paper we use an input-output model to evaluate the direct and indirect impacts of consumption expenditures by households subcategories on CO2 emissions. Because of differences on composition of consumption expenditures, the environmental impact could depend on the type of households considered. First, we break down consumption expenditures according to four criteria: income level, social status, age and family structure. Then, by using an input-output analysis, we quantify and compare the impact of these different structures of household's expenditures on production, hence on environmental pressures due to production.

The question of the relationship between social wealth and ecological pressure have lead to several theories, among them the most famous is the environmental curve of Kuznets (EKC). According to the EKC upholders, the environmental health indicators, such as air pollution, show an inverted U-shaped curve. This hypothesis is based on the belief that environment is a superior good : higher-earning households can allocate much more of their revenues to products that put less pressure on environment. The input-output model by social subcategories allows us to test this hypothesis. In the paper we will focus on the effects in terms of air emission: CO2, SO2, other gas. In France, 70% of CO2 emissions are linked with the intermediate consumption process. The input-output model will re-affect these air emissions to each product. By crossing social aspects with ecological concerns in a monetisation of eco-efficiency of the national demand, this work is an input-output approach of the question of sustainable growth.

Data used are data from national French national account(s), survey on households budget (to distinguish between household categories), symmetric input-output tables and Air Namea Matrix (Air emission from environmental accounts - SOeS)

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