Inoperability and Income Distribution: the IEM Approach

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Abstract

In this paper an effort is made to enrich the current Input-Output methodologies employed for studying the disruptive events, by extending the IO framework and including all the phases of the circular flow of income into the overall disaster impact. In this respect the Inoperability Extended Model is created and implemented in order to estimate the higher order effects in terms of value added percentage variations. The Social Accounting Matrix referred to the United Kingdom, is constructed and it is proposed as a starting point for assessing the effects of a system perturbation. The case of study is related to the eruption of the Volcano Eyjafjallajökull in mid April 2010 which became an international disruptive event heavily affecting the air transport services due to a full closure of British Air Space for several days. Finally the ranking of those commodities which are badly affected can provide guidance to the policy makers to minimize the overall impact on the economy.

Keywords: Inoperability Input-Output Model, Social Accounting Matrix, Natural Disaster, Air Transport.
JEL classification: C67, D57, E16, L93, Q54.

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