

## **Endogenous explanation of activities' levels and the exploding multiplier**

Topic: Multipliers and income distribution

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What happens if we increase the number of activities the output of which is explained endogenously? An early example of what may happen is found in the study of income multipliers when households' consumption is explained endogenously - often resulting in unlikely high multipliers. A related example is obtained when IO tables of regions or countries are interconnected through trade flows or otherwise. A problem arises if 'more and more' production and consumption is explained endogenously, and 'less and less' is exogenously given. We may end up with a situation in which multipliers increase unboundedly while the exogenous "stimulus" becomes smaller and smaller. The problem has received much attention in regional applications of IO modeling, where it is known as the problem of the "exploding" or "infinite" multiplier.

In this paper we show that under certain conditions multipliers will indeed explode, but that in such cases the rate in which the stimulus is decreasing may exactly balance the associated effects. Implications for specific cases are given.