Estimating and comparing multiplier matrices: the role of resources and the role of technology.

Topic: Theory and application of CGE modelling
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We study and compare the properties of different multiplier matrices. Each multiplier matrix responds to a set of distinct behavioral assumptions. Three main scenarios are introduced. The first one is the traditional input-output set-up. The Leontief inverse, as is well known, picks up direct and indirect interaction effects under the usual assumptions. In the second scenario we compute the multiplier matrix of an applied general equilibrium model where resource constraints are in effect. We compute the jacobian matrix of the reduced form to estimate multiplier effects of exogenous government spending. This matrix is then compared to the standard Leontief inverse. Because of its general equilibrium nature, however, output and substitution effects are both at play. To isolate output and substitution effects we introduce the third scenario. It corresponds to a universal Leontief general equilibrium model. Since no substitution is allowed only output effects are at work. This yields a third multiplier matrix that can be compared to the second one (to decompose output and substitution effects, with fixed resources) and to the first one (to isolate the role of given resources, with no substitution effects under a Leontief characterization of the economy).