Induced subnational government expenditures in an Input-Output framework: a first assessment

Topic: Classical IO applications: Multiplier and Linkage Analysis
Author: FabrÃ-cio Pitombo Leite

The rationale for a differential treatment of state and local government spending vis-a-vis the central government spending can be found in Levinson (1998) and Clemens and Miran (2012). In a nutshell, as the subnational entities are subjected to balanced budget requirements, the pro-cyclicality of expenditures emerges as a consequence, which justify our strategy of endogenizing subnational government expenditures from the innovative standpoint of an input-output framework. On a theoretical level, all the subnational government expenditure could be considered induced by the aggregate national income, leaving the federal government spending aside as autonomous. An augmented multiplier / supermultiplier process can be described in algebraic terms and can be computed where appropriate data is available. This paper proposes a first assessment of this induction mechanism and its consequences through multisectoral modeling but rendering macroeconomic consequences. Estimates are presented using Input-Output data from the World Input-Output Database (WIOD) and Subnational Governemnt Spending data from OECD. The multisectoral representation of Keynesian multipliers, with endogenous consumption expenditures, has a clear connection with input-output multipliers. From this representation we depart towards the development of Sraffian supermultipliers (Serrano, 1995; Freitas and Serrano, 2015) by endogenizing investment expenditures, and, further, to the endogenization of subnational government expenditures. From a Sraffian macro-oriented perspective, we can find some recent tentative multisectoral representations in DejuÃ¡n (2014), Portella-CarbÃ³ (2016), Portella-CarbÃ³ and DejuÃ¡n (2018) and Leite (2018).