Accounting for dualistic production technologies in input-output analysis

Topic: 811Z International Trade (2)

Author: Chakrin UTIT

Co-Authors: M. Yusof SAARI, Nur adilah HAMID

Why growth in final demand does not bring considerable implications on structural changes and income equality in Malaysia? What are the factors that can be put forward to explain the lower impacts of economic growth? The current input-output models are unable to provide explicit answer to these questions because they ignore dualities in production technologies. The major limitation of the models is production sectors are aggregative and thus homogeneity biases underlying in the models could not be avoided. In particular, one might get a false impression that development in some sector will "trickle down― to benefit all equally. What is needed is a systematic methodological approach that links the different dualistic production structures. This paper aims to develop a new approach for input-output model that split the production technologies according to firm sizesâ€"small, medium and large firms. To develop the model, the production sectors in the input-output table will be separated according to group of small, medium and large firms. This paper has two main contributions to the literature. First, it develops new database that differentiates economic sectors according to the technologies and links them consistently in a single macroeconomic framework. Second, using the database, a number of novel empirical applications that aim to validate the homogeneity assumption and the extent to which the different production technologies affect value added and income inequality.