Contribution of Fiscal and Financial Options of Infrastructure Development on Income Distribution and Growth in Indonesia: an Application of Financial CGE Model

Topic: 716C Special session: Development of CGE Models for Transportation Policies Author: Euijune KIM Co-Authors: Yasir N. SAMUDRO

We develop a Financial Computable General Equilibrium Model (FCGE) model of 2007 that can analyze the economic impacts of the infrastructure investment projects and their financing options on growth and distribution in Indonesia economy. The FCGE model integrates a real economy with a financial one within the unified economic system, and can trace out the flows of financial and real resources among economic agents. The model is designed to analyze the economic effects of fiscal policies such as the transportation investment expenditures and their procurement approaches on economic growth and distribution among socio-economic classes, linking the investment expenditures with specific financial resource. The model has eight economic institutions, and the portfolio choice for financial instruments is disaggregated into real wealth, government bond, and composite financial assets including private bonds, equity, and deposits. It is possible to estimate growth and distributional effects of each project based on the financing method over the construction and operation periods if the information on the investment expenditures, the construction location and the accessibility of the project are injected into the FCGE model. The simulations on the Indonesian transportation projects find that the government financing with tax revenues could generate higher effects on GDP than other financing methods.