Modeling of an investment activity in a macroeconometric GE-IO model of the Russian economy

Topic: Dynamic Methods I
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This study is concerned with a problem of extension of the macroeconometric GE-IO model of the Russian economy (V. Gilmundinov, 2012) with the model of fixed capital investments. Based on the behavioral approach for macroeconometric modeling (see, i.e., C. Almon, 1989) we develop macroeconometric equations of fixed capital investments for main sectors of the Russian economy. For this purposes we build production functions with variable degree of capacity utilization for each sector. Using the theoretical concept of a required capital we construct econometric equations describing dependence of fixed capital investments on profitability, current degree of capacity utilization, real interest rate, real exchange rate, relative real wage, expected real total output growth rate, etc. The econometric equations are estimated for the main sectors of the Russian economy in 2003-2014. It allows us to incorporate this equations in the general scheme of the macroeconometric GE-IO model. Theoretical frameworks and empirical results of the fixed capital formation for the Russian economy are also contained in the paper. According to the obtained results the most significant factors which explain dynamic of the fixed capital investments for the Russian economy are degree of capacity utilization and real interest rate.

References
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