Title: Productivity comparisons by country: the government sector versus the private sector

Author(s): Hideyuki Kamiryo
Institution/Country: Hiroshima Shudo University

For the amounts of key items in national accounts, I set the additivity of the government and private sectors, based on the balance of payment = budget surplus/deficit + the difference between saving and net investment in the private sector. As a preparatory step, I estimated both capital and the rate of return or rents at the same time, based on national disposable income (NDI instead of GDP) after depreciation and taxes and, starting with my function of consumption to estimate the relative share of labor. And, I apply my endogenous growth model (in a broad sense, similarly to Solow’s and Jorgenson’s) in the transitional path, using the Cobb-Douglas (under CRS) and its bypass (under DRS/IRS) productivity functions, without introducing opportunity cost (different from Jorgenson’s user cost of capital). I prepare for my data-sets of 31 countries 1995-2004 by sector, starting with the data of IMF. In the transitional path, the growth rate of output comes from the rate of technological progress, which is the product of the ratio of net investment to output (i) and the ratio of qualitative investment to the sum of qualitative and quantitative investments (1-beta). Also, in my dual structure of productivity (ALP, TFP, and ACP) by sector, TFP is not a residual but shows a whole level of technology, whose 1-beta is a weighted average accumulated in TFP. I reveal hidden facts, by sector, regarding the budget deficit and abnormal TFP suffering from oppressed growth rates.