Economic Analysis of Endogenous Growth Model with ICT Capital

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Abstract : This paper clarifies the role of ICT capital in Economic Growth. Albeit ICT remarkably contributes to economic growth, there are few studies on ICT capital in ICT sector from theoretical point of view. In this paper, production function of ICT which is used as input of intermediate good in final good and ICT sectors is incorporated into our model. In this setting, we analyze the role of ICT on balance growth path and show the possibility of general equilibrium solutions for this model. Through the simulation of the equilibrium solutions, we find that when ICT impacts on economy and economic growth increases, it is necessary that increases of efficiency at ICT sector and of accumulation of non-ICT and ICT capitals occur simultaneously.