Effects of Fiscal Policy on Labor Markets:
A Dynamic General Equilibrium Analysis

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노동시장에 미치는 영향』의 제4장을 수정・보완한 것으로 일부 내용이 중복될 수 있음을 밝힌다.

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This paper considers a heterogeneous agent dynamic general equilibrium model and analyzes effects of an increase in labor income tax rate on labor market and the aggregate variables in Korea. The fiscal policy regarding how the government uses the additional tax revenue may take the two forms: 1) general transfer and 2) earned income tax credit (EITC). The model features are as follows: 1) Workers are heterogeneous in their productivity. 2) Labor is indivisible, hence the analysis focuses on the variation in labor supply through the extensive margin in response to a change in fiscal policy. 3) The incomplete markets are introduced, so individual workers can not perfectly insure themselves against risks related to stochastic changes in income or employment status. 4) The model is of general equilibrium, hence it is equipped to analyze the feedback effect of changes in aggregate variables on individual workers' decisions.

In the case of general transfer policy, the government equally distributes the additional tax revenue to all workers regardless of their employment states. Under this policy, an increase in the labor income tax rate dampens work incentives of individual workers so that the aggregate employment rate decreases by 1% compared with the benchmark economy. In the case of EITC policy, only employed workers whose labor incomes are below a certain EITC ceiling are eligible for the EITC benefits. Unlike the general transfer policy, the EITC induces low-income workers to participate the labor market to be eligible for EITC benefits. Hence, the aggregate employment rate may increase by 2.7% at the maximum. As the EITC ceiling increases, too many workers can collect the EITC but the benefits per worker becomes too little so that the increase in employment rate is negligible. By and large, this study demonstrates that EITC may effectively raise the aggregate employment rate, and that it can be a useful policy tool in response to the decrease in the labor force due to population aging as observed in Korea recently.