

Taxation and Fiscal Expenditure in a Growth Model with Endogenous Fertility

Referee Report

To eliminate population scale effects in a growth setting, this paper makes population growth endogenous by modeling fertility along the lines of Barro and Becker (1989) and models an array of government policies to demonstrate how some of these policies can impact levels and growth rates in a scale-free endogenous growth model—unlike the semi-endogenous growth model for instance, where growth is proportional to the exogenous population growth rate but invariant to policy. In the model government policies are categorized according to whether they have level effects only, level and growth effects, or no impact on levels and/or growth.

This paper is well executed but I don't quite see what we learn from it that is really new. The authors claim that their key contribution is that they endogenise the fertility rate. More specifically they state that the new features of the paper is that it “fills two long standing gaps in the growth literature. First, a model is developed that is scale free and does not rely on the equality between the growth of sectors and the growth of population, but reintroduces a policy impact on the steady-state growth rate. Second, the model incorporates a more realistic government sector and can be used to understand a wide array of government spending and taxation policies.”

As far as I can tell, all of these alleged “new” contributions have been dealt with in previous contributions, at least in separate form; there is an extensive literature looking at endogenous fertility rates and growth, and there is an extensive one dealing with public expenditure and growth—in both cases in endogenous growth settings. There are also several papers combining both dimensions in overlapping generations (OLG) models—a much better setting, in my view, to address issues of endogenous fertility choices than an infinite horizon, representative agent framework.

Moreover, the model has several significant limitations: on the production side, there is no distinction between returns to scale and the elasticity of substitution between intermediate inputs; labor supply is inelastic; government spending is pure waste, with no effect on production or utility. Most critically, the authors assume that the cost of raising children is proportional to the capital-labor ratio. This assumption is completely arbitrary and appears to play a critical role in generating the results.