ABSTRACT

Title of Dissertation The Parental Time Allocation for the Thai Economy

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Degree Doctor of Philosophy (Economics)

Year 2015

In the altruism hypothesis, parents care about the well-being of their children. They invest both their material resources and time into raising their children because they gain utility from such behaviors. Many economic literatures have focused on the material part of investment in children, such as the education expenditure and bequests. However, time investment is thought to be equally important to the development of children's skills and abilities. The parental time allocation for child care can affect basic cognitive and behavioral skills of a child, which in turn will have an impact, together with formal schooling, on his human capital and on his productivity. Since parent's time devoted to child care is taken away from leisure and/or paid employment, parents consider the benefits and costs of time spent on activities and make decisions to allocate their time between the activities in the best possible way that gives them maximum utility. These decisions are based on private returns and costs. From the macroeconomic perspective, a social planner would choose the amounts of parental time for child care so that it results in an optimal solution to achieve a social objective. This social optimal parental time allocation for child care may not coincide with the parents' decisions in a competitive economy. This draws our motivation to find out what the social parental allocation for child care would be in order to achieve social objectives, in particular, maximizing the total output and minimizing inequality. Our first objective in this study is to construct an

economic model with intergenerational transfer within the family that includes bequests, education and parental time allocation for child care, to mimic the earning and income inequality of Thailand. The second objective is to determine the parental time allocation for the Thai economy regarding different social goals such as minimizing earning inequality, minimizing wealth inequality and maximizing total output.

We constructed a five period overlapping generation model which differs from a general heterogeneous overlapping generation model. While recent studies focus on both unplanned and planned bequests (money and education) as intergenerational links, we add parental time allocation variables into the economic model. Parental time allocation variable is another channel, besides education, that help children develop their human capital which in turn increases efficient wage earning, hence better wealth in the future. We use the calibrated parameters from previous studies and compare the results with some statistics, in particular, education distribution and the earning and income distribution, generated by a previous study from the 2000 Household Socio-Economic Survey.

In general, the model generates the education distribution and the earning and income distribution reasonably close to that of the real data. Disabling the parental time allocation link in the model, while keeping all parameters with same values, we demonstrate that the model without parental time allocation is not as good as the benchmark model in terms of mimicking the education distribution and earning distribution. We conclude that the parental time allocation link is important and that the benchmark model can be used as a reference economy in any future analysis.

In order to find the solutions of parental time allocation for Thai economy, the benchmark model is modified slightly by taking the parental time allocation variable as exogenous. We alter different values of parental time allocation in the model to generate the results for three different scenarios, each of which corresponds to a social goal; minimize the earning GINI coefficients, minimize the wealth GINI coefficients and maximize the total output. For each scenario we explore further in order to see how the model generates the results in different environments by using different values of elasticity of earning with respect to parents' parental time allocation. To minimize wealth inequality the parental time allocation should be set at 12-15%. To

maximize the total output, the average parental time allocation should be set at 12-21% of available time. While increasing the parental time allocation will be beneficial in improving output and wealth equality, it comes at the cost of a wider earning gap.

Recommendations to improve the current situation regarding parental time are to improve the quantity and quality of parental time. To improve on the quantity of parental time, a government can introduce a policy to create an incentive for parents to give up working and leisure time in order to take care of their children. As far as the quality of parental time is concerned, a government can help improve the quality of parental time by creating a better environment for children or enhancing the parents' awareness on the benefits of increased parental time.