# Insuring the Risks of Fertility Choices: The Macroeconomic Roles of Education Subsidy*

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August 19, 2024

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**Abstract**

This paper studies the macroeconomic roles of college education subsidies by constructing a heterogeneous-agent general-equilibrium (GE) overlapping-generations model with fertility and college education choices. My calibrated and validated model demonstrates that an income-tested college subsidy offers partial insurance against the risks associated with fertility choices under income uncertainty; because fertility choices are irreversible, having (more) children can lead to significantly lower consumption per household member in the event of a negative income shock, resulting in substantial welfare costs. More educated parents benefit more from this insurance; they are more willing to spend on their children's education, expecting high returns from college due to the intergenerational persistence of abilities and tastes. The resulting fertility responses induced by this insurance amplify the policy's effects on inequality reduction, welfare improvement, and raising educational attainment and average income in the long run, operating through the GE effects and intergenerational linkages.

Keywords: Fertility, education, overlapping-generations, college subsidy
JEL codes: C68, I28, J13, J24

*I am deeply indebted to my advisors, Makoto Nirei and Sagiri Kitao, for their continuous guidance and support. I am also grateful to Minsu Chang, James Graham, Fergal Hanks, Chihiro Inoue, Akira Ishide, Yusuke Ishihata, Ryo Jinnai, Akihisa Kato, Tomoaki Kotera, Minjoon Lee, Kazushige Matsuda, Colin McKenzie, Toshihiko Mukoyama, Tomoyuki Nakajima, Yena Park, Ponpoje Porapakkarm, Xavier Ragot, Yuta Takahashi, Satoshi Tanaka, Kazuhiro Teramoto, Makoto Watanabe, Tomoaki Yamada, Shintaro Yamaguchi, Minchul Yum, and seminar participants at the Annual Macro Conference at Osaka University, Hitotsubashi University, OzMac workshop at Monash University, Waseda University, 2024 Spring Meeting of Japanese Economic Association, Meeting of the Society of Economics of the Household, 30th CEF Conference, and the Summer Workshop on Economic Theory for their many helpful comments. This study is financially supported by the Japan Society for the Promotion of Science (23KJ0374).

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