

# On the Optimal Progressivity of Higher Education Subsidies: the Role of Endogenous Fertility

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## Abstract

I develop a simple dynastic model in the style of Barro and Becker, with endogenous fertility and human capital accumulation, to quantify the optimal progressivity of higher education subsidies. I find that the optimal policy is characterised by a higher degree of progressivity than current U.S. education subsidies. Additionally, the relation between progressivity of education policy and welfare/ population growth is hump-/ U-shaped respectively. While an assumption of endogenous fertility is quantitatively important, heterogeneity in fertilities is sufficient to generate these results. This is because welfare gains from more progressive subsidies are driven not only by decreases in fertility rates of low income individuals, but also by the fact that their children transit to states associated with higher incomes and, consequently, relatively low fertilities.

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