

# **Taxation and Human Capital Accumulation with Endogenous Mortality**

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## **Abstract**

We study the impact of taxation on long run levels of human capital when mortality of household agents is endogenously determined. The survival probability of agents in our economy depends positively on their past levels of consumption. We characterize and solve the dynamic optimization problem facing household agents in the economy. Even though all households in our economy have identical preferences and have access to the same human capital accumulation technology, with endogenous mortality, there is a possibility of multiple steady state equilibria. Households with initial endowment of human capital above a threshold choose to accumulate human capital and attain higher levels of human capital and income in steady state. Households below the threshold end up with very low levels of human capital and income. Using empirical estimates of income-mortality relationship in US to calibrate our model, we find that multiple steady states are empirically plausible. Based on the initial endowment of human capital the economy gets segregated into two groups in steady state - "high" and "low". Our simulations show that changes in proportional tax rates have more than twice the impact on aggregate human capital in endogenous mortality model compared to the infinite horizon model.

## **Speaker Profile**

Prof. Debajyoti Chakrabarty is a Senior Lecturer in the Research School of Economics at the Australian National University. He works in the areas of macroeconomics, growth theory, and development economics. He obtained his Ph.D. from Rutgers University in 2001. Since then he has published in the Journal of Economic Behaviour and Organization, Journal of Institutional and Theoretical Economics, BE Journal of Macroeconomics, Economic Record, and Indian Growth and Development Review.