

# Endogenous population growth, social security, and dynamic inefficiency

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## Abstract.

We derive an optimal social security level in an 80-period overlapping generations model a la İmrohorođlu *et al.* (1995) with endogenous population growth. It is shown that (i) the optimal payroll tax rate is 4% in the benchmark case, (ii) the optimal payroll tax rate is lower than the one in the exogenous case, and (iii) the optimal payroll tax rate is not very much affected even without borrowing constraints, which is contrasted to the result of Hubbard and Judd (1987).

JEL Classification: E62, H24, J13

Keywords; endogenous population growth, borrowing constraint, social security, dynamic inefficiency.

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