

# Pollution, fertility and public policies

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## 1 Introduction

This work extends the existing OLG literature on pollution to include endogenous fertility and endogenous mortality thus allowing the model to belong to the unified growth theory narrative (Galor and Weil, 2000; Kalemli-Ozcan, 2002). With specific regard to the theoretical analysis, we assume that individuals are not aware of the effects of their choices on environmental quality (Antoci et al., 2011, 2016). Environmental quality also affects individual mortality, which - as several empirical works pinpoint (see Raffin and Seegmuller, 2014, and the literature cited therein) -, is strongly related to level of pollution. In this context, we analyse the role of public policies (financed at a balanced budget) on health and environmental quality. The main aim of the work is to analyse, on the one hand, the dynamics of the transition of the economy from a phase of underdevelopment to a phase of sustained development and, on the other hand, how public policies can favour the take off within an environmentally sustainable trajectory.

## References

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