Fertility, Education, Growth, and Sustainability

THE CICSE LECTURES IN GROWTH AND DEVELOPMENT

David de la Croix

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Fertility, Education, Growth, and Sustainability

DAVID DE LA CROIX

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Fertility, Education, Growth, and Sustainability

Fertility choices depend not only on the surrounding culture but also on economic incentives, which have important consequences for inequality, education, and sustainability. This book outlines parallels between demographic development and economic outcomes, explaining how fertility, growth, and inequality are related. It provides a set of general equilibrium models in which households choose their number of children, analyzed in four domains. First, inequality is particularly damaging for growth as human capital is kept low by the mass of grown-up children stemming from poor families. Second, the cost of education can be an important determining factor on fertility. Third, fertility is sometimes viewed as a strategic variable in the power struggle between different cultural, ethnic, and religious groups. Finally, fertility might be affected by policies targeted at other objectives. Incorporating new findings with the discussion of education policy and sustainability, this book is a significant addition to the literature on growth.

DAVID DE LA CROIX is Professor of Economics and a member of both IRES and CORE at UCLouvain, Belgium. He is associate editor for the *Journal of Economic Dynamics and Control*, the *Journal of Development Economics*, and, the *Journal of Public Economic Theory*. His research interests cover growth theory, human capital, demographics, and overlapping generations.

The CICSE Lectures in Growth and Development

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Symbols

Notation of parameters is harmonized across chapters.

Parameter	Description	Chapters
α	1−share of labor in output	2,7
β	psychological discount factor	2,3,7
γ	weight of children in utility	1,2,3,4,5,8,9
δ	intrinsic growth rate of natural resource	7
ϵ	goods cost of surviving children	3
ζ	sensitivity of the probability of winning a war to the size of the clan	7
η	rate of return of education spending	1,2,3,4,5,8,9
$\hat{\eta}$	$(1-\eta)^{1/\eta}$	5
θ	education level reached in the absence of education spending	1,2,3,4,9
ι	importance of space in the cost of rearing children	8
κ	human capital externality at the social level	2
λ	marginal disutility of child rearing	7
μ	efficiency parameter of education technology	1,2,4,5,8
ν	fertility objective of the government	9
ξ	degree of relative risk aversion	7
π	probability of becoming skilled	1,5
π^A	adult survival probability	3
π^C	child survival probability	3
π^ω	probability of winning a war	7
ϖ	political power	5
ρ	growth rate of productivity	2

Parameter	Description	Chapters
ϱ	elasticity of the children's human capital with respect to parental time	2
σ	standard error of the distribution of human capital	2,5
τ	intergenerational transmission of human capital within the family	2,4
υ	average productivity of labor	1,9
ϕ	time cost of rearing children	1,2,3,4,5,8,9
φ	weight of leisure in utility	8
χ	old-age support	7
ψ	additional time cost of rearing children in case of survival	3
ω	cost of war (as % of output)	7

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