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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.

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David de la Croix
Frontmatter
More information

Contents

List of figures *page* ix
List of tables xi
List of symbols xiii
List of definitions xv
List of propositions xvi

Introduction **1**

PART ONE DIFFERENTIAL FERTILITY 7

1 Benchmark model **9**
1.1 The model 9
1.2 Introducing a lump sum transfer 16
1.3 Numerical illustration 17

2 Implications for the growth–inequality relationship **20**
2.1 The model economy 22
2.2 Theoretical results 25
2.2.1 The tradeoff between the quality and quantity of children 25
2.2.2 The balanced growth path 28
2.2.3 The dynamics of individual human capital 31
2.2.4 Extension with endogenous child rearing time 33
2.3 Computational experiments 35
2.3.1 Calibration 35
2.3.2 Initial inequality, fertility, and growth 39
2.3.3 The dynamics of inequality, fertility, and growth 41
2.4 Conclusion 46

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CAMBRIDGE

Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

3 Understanding the forerunners in fertility decline 48
3.1 Rouen and Geneva data 49
3.2 A simple model of fertility 52
3.3 Numerical experiments – calibration 58
3.4 Numerical experiments – comparative statics 60
3.5 Additional data 63
3.6 Conclusion 65

PART TWO EDUCATION POLICY 67

4 Education policy: private versus public schools 69
4.1 The model 72
4.1.1 The set-up with private education 72
4.1.2 Fertility and education choices under private education 74
4.1.3 The set-up with public education 75
4.1.4 Fertility and policy choices under public education 76
4.2 Comparing private and public education 77
4.2.1 Long-run dynamics 77
4.2.2 Implications for growth 81
4.3 Growth and inequality over time 84
4.3.1 Calibration 85
4.3.2 Initial conditions and growth 85
4.3.3 Human capital accumulation and inequality dynamics 87
4.4 Conclusion 89

5 Education politics and democracy 91
5.1 The model economy 93
5.1.1 Preferences and technology 93
5.1.2 Timing of events and private choices 94
5.1.3 The political mechanism 97
5.1.4 The equilibrium 100
5.2 Comparing the education regimes 102
5.3 Political power and multiple equilibria 106
5.4 Alternative timing assumptions 112
5.4.1 Outcomes with full government commitment 112
5.4.2 Outcomes with partial government commitment 114
5.5 A dynamic extension 116
5.5.1 The model economy 116
5.5.2 Private choices 117

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CAMBRIDGE

Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

5.5.3 The political mechanism 117
5.5.4 The equilibrium 118
5.5.5 Comparing the education regimes 119
5.5.6 The dynamics of education regimes 123
5.6 Extensions to an ethnic dimension 128
5.7 Conclusion 129

6 Empirical evidence 130
6.1 Inequality, fertility, and schooling across US states 130
6.2 Determinants of fertility and public versus private schooling at the household level 134
6.3 Schooling over time 138
6.4 Inequality, fertility, and schooling across countries 141
6.5 Public education spending and democracy 147
6.6 Conclusion 149

PART THREE SUSTAINABILITY 151

7 Environmental collapse and population dynamics 153
7.1 Historical evidence 155
7.2 The model 158
7.2.1 Preferences and technology 159
7.2.2 The bargaining problem 161
7.2.3 The fertility choice 164
7.2.4 Dynamics 171
7.3 Numerical simulations and robustness analysis 173
7.3.1 The Nash Equilibrium 173
7.3.2 Resources and population dynamics 175
7.3.3 Simulation of transition paths 177
7.4 Extension to the sustainability of diverse societies 178
7.5 Conclusion 180
7.6 Additional material – concave utility 181

8 Production, reproduction, and pollution caps 184
8.1 The model 186
8.1.1 Production and pollution 186
8.1.2 Households 187
8.1.3 Aggregate dynamics 189
8.2 Pollution cap and tradable rights 191
8.2.1 Households 191

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CAMBRIDGE

Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

8.2.2 Equilibrium 193
8.2.3 Dynamics 194
8.3 Numerical experiment 198
8.3.1 Calibration 198
8.3.2 Simulation 200
8.4 Conclusion 203

9 Population policy 205
9.1 Procreation entitlements 207
9.2 Implementing tradable procreation rights 208
9.3 Effects on inequality 218
9.4 Effects on education 226
9.5 Moving from national to global level 228
9.6 Conclusion 232

10 Conclusion: endogenous fertility matters 233

Bibliography 235
Author index 245

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

Figures

1.1	Fertility as a function of parents' human capital	*page* 13
1.2	Construction of the Gini coefficient with two groups	14
1.3	Calibrated fertility and education relationships	18
2.1	Completed Fertility of Married Mothers, USA 1990	21
2.2	Steady state human capital as a function of τ	32
2.3	The relationship of inequality and growth with endogenous fertility (solid), exogenous fertility (dashed), and in Barro's regression (dotted)	40
2.4	Growth, fertility, inequality, and differential fertility for $\tau = 0.05$ (solid) and $\tau = 0.2$ (dashed)	42
2.5	Density functions after eighteen periods	44
2.6	Exogenous versus endogenous growth: $\kappa = 1 - \tau$ (solid), $\kappa = 0.1$ (dashed), data (dots)	45
3.1	Fertility as a function of human capital when $\theta > \epsilon > 0$	58
3.2	Fertility rates: calibration and simulation	60
3.3	Literacy rates: calibration and simulation	61
3.4	Fertility of aristocrats versus whole population	64
4.1	Private education and rural inequality circa 2000 across Indian states	70
4.2	Private education and growth circa 2000 across Indian states	70
4.3	Initial conditions for which growth is higher with public education	86
4.4	Dynamics with public (solid) and private (dashed) education over time – $\tau = 0.22$	87
4.5	Public (solid) and private (dashed) education over time – $\tau = 0.5$	88
5.1	Probabilistic voting versus median voter	98
5.2	The fixed point with $\sigma = 0.5$ (left) and $\sigma = 0.8$ (right)	102

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CAMBRIDGE

Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

5.3	The fixed point with multiple equilibria ($\sigma = 0.5, \bar{x} = 0.7$)	110
5.4	The education regimes	123
5.5	Example of a period-2 cycle	126
6.1	Education spending per capita versus share of private education across states	133
6.2	Education spending per student versus share of private education across states	134
6.3	Share of public education over time – declining cases	139
6.4	Share of public education over time – high and constant cases	139
6.5	Share of public education over time – increasing cases	140
6.6	Inequality and education systems across countries	141
6.7	Density of public education spending (percent of GDP)	148
7.1	Population of Easter Island and Tikopia	156
7.2	Forest coverage on Easter Island	157
7.3	Easter Island and Tikopia	158
7.4	Fertility reaction functions (r_1, r_2) and comparative statics	167
7.5	Fertility reaction functions: case I (solid); case II (dashed)	174
7.6	Collapse zones as a function of parameters	176
7.7	Simulation for environmental collapse and no collapse	178
8.1	Steady state population with pollution cap	195
8.2	Income and population dynamics in the examples	202
9.1	Solution to the individuals problem: regimes R1 to R4	215
9.2	Fertility as a function of income and procreation price	216
9.3	Redistributive nature of tradability	223
9.4	Fertility as a function of income and procreation price in the example. Unskilled (solid line) and skilled (dashed)	227
9.5	The procreation price in the example. Anti-natalist (dots), neutral (short dashes), pro-natalist (long dashes)	227
9.6	The ratio of unskilled to skilled. Anti-natalist (dots), neutral (short dashes), pro-natalist (long dashes)	228

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CAMBRIDGE

Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

Tables

1	Total fertility rates by education	*page* 2
1.1	Estimation results on global data	19
2.1	Calibration: a summary	36
2.2	Initial growth with endogenous and exogenous fertility	39
3.1	Data for Rouen	50
3.2	Data for Geneva	51
3.3	Global trends in forerunners' fertility	52
3.4	Forerunners' fertility and differential fertility	52
3.5	Forerunners' reproduction rates and differentials	52
3.6	Results of the calibration procedure	59
4.1	Calibration: a summary	85
5.1	Share of private resources in total education funding, 2003	92
5.2	Typology of education regimes	103
5.3	Education regimes with two types of households	119
6.1	Public schooling across US states: correlations	132
6.2	Estimation results: households' fertility behavior	136
6.3	Estimation results: households' education behavior	137
6.4	PISA data: education, fertility, and social status (1)	143
6.5	Statistics for countries with different education regimes	146
6.6	Public education spending and the democracy index	148
6.7	Public education spending in democracies and non-democracies	148
7.1	Benchmark parameterization of the population race model	173
7.2	Outcome for generation born at t, cases I and II	174
7.3	Risk aversion (ξ), fertility rates and bargained shares	182
8.1	Calibration: a summary	198
8.2	Benchmark simulation – world economy 1983–2208	200

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Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

8.3 Simulation with a constant pollution cap – 1983–2208 201
8.4 Simulation with an increasing pollution cap – 1983–2208 203
9.1 Implementation sequence of procreation entitlements for a country 209

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Frontmatter
More information

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

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David de la Croix
Frontmatter
More information

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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CAMBRIDGE

Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

Definitions

1.1	Benchmark inter-temporal equilibrium	*page* 11
2.1	Intertemporal equilibrium with heterogeneity	25
4.1	Private education inter-temporal equilibrium	74
4.2	Public education inter-temporal equilibrium	76
5.1	Political economy equilibrium with perfect foresight	100
5.2	Political equilibrium with two types of agents	118
5.3	Political economy inter-temporal equilibrium	124
7.1	Sustainability	153
7.2	Diverse society	179
7.3	Sustainability of a diverse society	179
9.1	Inter-temporal equilibrium with procreation rights	210

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CAMBRIDGE

Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

Propositions

1.1	Dynamics of the composition of population	*page* 15
2.1	Existence and uniqueness of the equilibrium	29
2.2	Balanced growth path and limiting distribution	30
2.3	Dynamics around the transcritical bifurcation	33
4.1	Balanced growth path with private education	78
4.2	Balanced growth path with public education	80
4.3	Public and private education in the long run	82
4.4	Comparison of public and private regime	83
5.1	Existence and uniqueness of equilibrium	101
5.2	Occurrence of education regimes	103
5.3	Inequality and segregation	105
5.4	Multiplicity of equilibria for $\bar{x} > 1 - \sigma$	108
5.5	Coverage of public education as a function of $\bar{x}$	111
5.6	Equilibrium with commitment	114
5.7	Occurrence of education regimes	120
5.8	Existence and uniqueness of inter-temporal equilibria	125
5.9	Global dynamics	125
5.10	Dynamics with public education	127
7.1	Bargaining outcome as a function of population	163
7.2	Population race as a Nash Equilibrium	165
7.3	Sustainable initial populations	172
8.1	Equilibrium with binding and non-binding cap	193
8.2	Population and the pollution cap	197
9.1	Solution to the individual problem	212
9.2	Fertility, education and income	214

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CAMBRIDGE

Cambridge University Press
978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

9.3 Fertility and procreation price 215
9.4 Existence and uniqueness of equilibrium 217
9.5 Redistributive nature of tradability 222
9.6 Education and procreation price 226

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978-1-107-02959-0 - Fertility, Education, Growth, and Sustainability
David de la Croix
Frontmatter
More information

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