Population economy - influence of population on economic welfare and business

Why are population growth theories important?

An integral part of macroeconomic growth models

Population development has a major impact on government budgets in the long term

Technological growth is directly linked to population growth

Marriage

What are economic reasons?

1. Increase of returns – division of labor
2. Imperfect credit market – extending credit and coordination of investment activities
3. Sharing collective goods – nonrival goods (house)
4. Risk pooling – one works, one is sick

Are children an inferior or a normal good?

1. Theory and econometrics disagree.
2. What role does education play?
3. How much do women have a say in fertility and how much do men?
4. Do contraception and abortion reduce population growth?

Má pravdu ekonometrie nebo teorie?

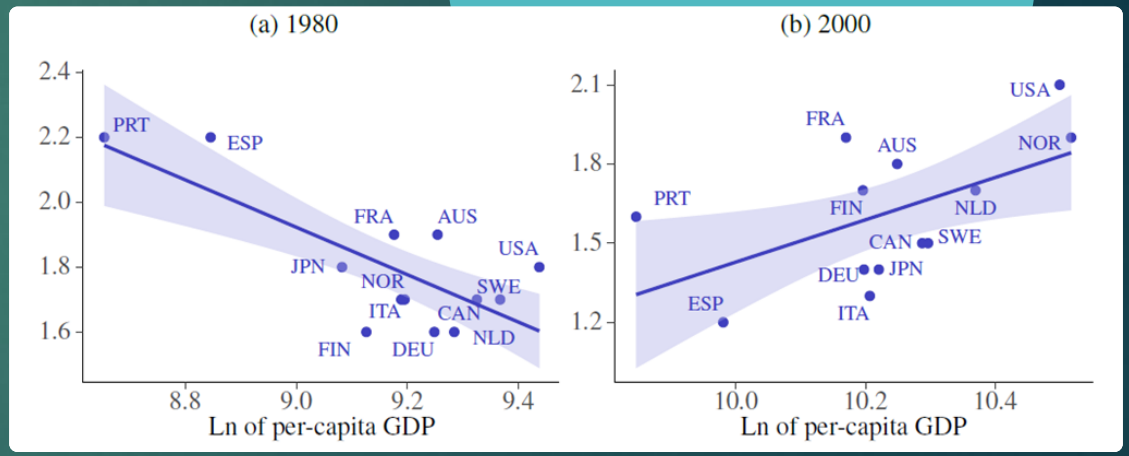
1. A child is an inferior good -> as income increases, the quantity of children decreases.
2. Child is a normal good -> as income increases, the quantity of children increases more slowly

Vysvětlující proměnná	Level of inome per capita	
	Low income countries	High income countries
Education - woman	-0.17 až -0,06	-1,1 až -0,19
Education – man	-0.98 až +0,55	-0,4 až -0,06
Wage - woman	-0,35 až - 0,16	-0,6 až -0,17
Wage - man	+0,05	-0,11 až +0,23
Family income	--	+0,09 až +0,38
Mortality	+0,05 až 0,28	--

The truth is in the data.

The problem of identification:

1. Use of inappropriate methods
2. Insufficient time period
3. Use of other control variables
4. Correlation or causality?



More uneducated children or less educated children?

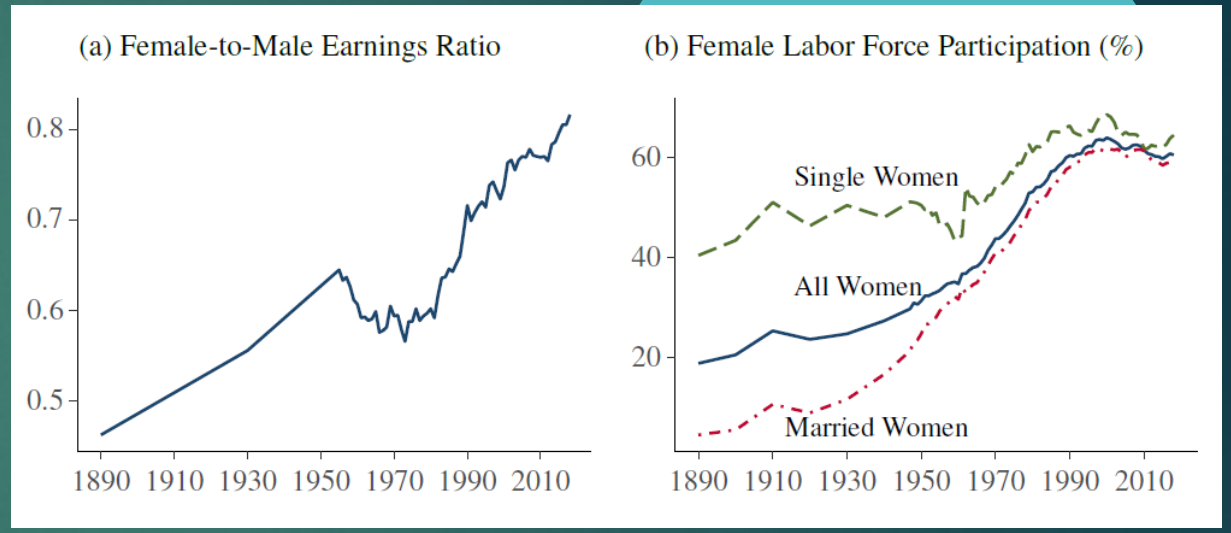
The relationship between education and the number of children is negative.

True, however, for low-income families. High-income families have this relationship neutral. The number of children is affected by sacrificed consumption and leisure opportunities.

Natural experiments on twins confirm these effects.

I'm in charge here!

- Women decide on the number and quality of children to a greater extent than men.
- Before World War II, there was no sacrificed opportunity for women.
- After WW2 there is greater participation of women in the labour market -> emergence of the sacrificed opportunity.



Is contraception a scourge on fertility? What about legalized abortion?

Contraception does not cause a drop in fertility, but the timing of pregnancy does.

Insufficient literature on the subject.

Which effect is stronger?

Increasing wages and ensuring financial security leads to an increase in the number of children

or

Greater opportunity cost and therefore a reduction in demand for children.

Legalising abortion may offer the answer

1. The legalization of abortion has spillover effects on increased female school attendance and subsequent labor supply.
2. Legalizing abortion leads to increased investment in human capital for the next generation.
3. Legalizing abortion leads to lower crime rates.
4. The political economy around abortion is complicated and controversial.
5. Women in states where abortion is illegal report lower mental well-being, greater risk of insolvency, and increased divorce rates in the early years of a child's life.

What about macroeconomics?

Correlation vs. causation:

1. Unidirectional relationship -> GDP per capita growth leads to population growth
2. Unidirectional relationship -> Population growth leads to GDP per capita growth
3. Bidirectional relationship -> GDP per capita growth leads to population growth and population growth leads to GDP per capita growth
4. No relationship

A miracle called empirical research? It doesn't look like it.

The authors use different methods and different control variables.

All the first three relationships are found in the country data.

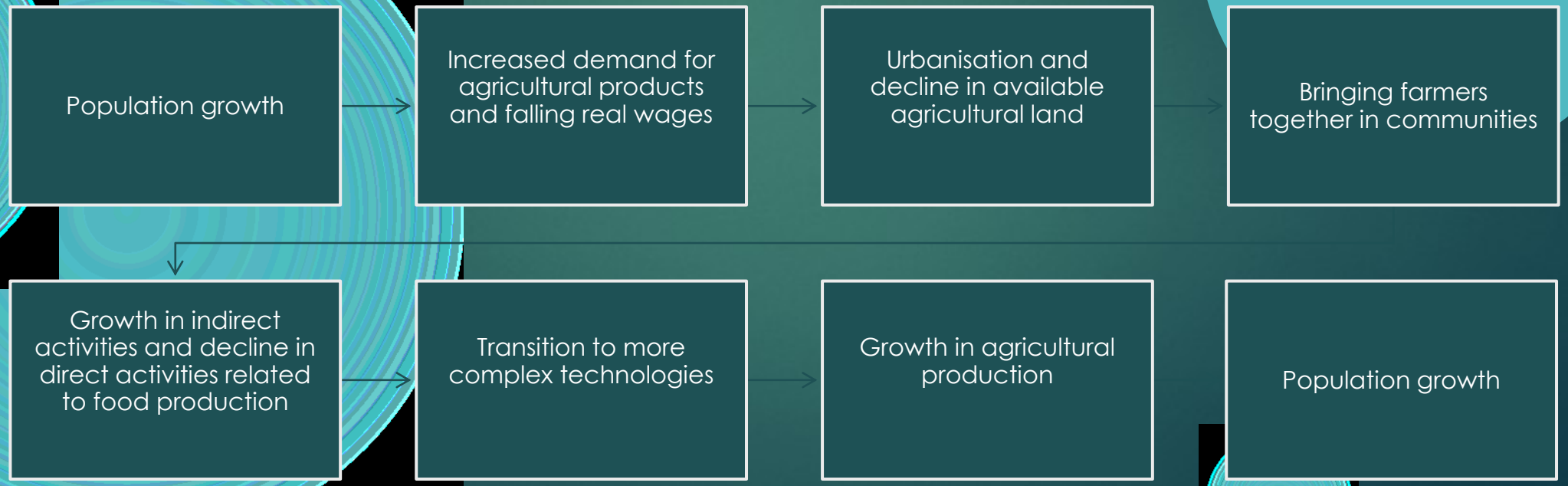
The ambiguity in the relationship...is it positive or negative?

So what are the conclusions?

The direction and relationship is determined by exogenous shocks to technological growth or human capital accumulation and country starting conditions.

And who feeds it all?

Agriculture plays a vital role in population growth. Boserup theory is the most advanced theory to explain this relationship:



What have you learned so far?

- We know we know something, but everyone knows it differently.
- Inconsistency in conclusions in both microeconomic research and macroeconomic research.
- The mismatch between theory and econometric research.

Fertility

What is the cost of the children? Are costs dependent on family income?

What about revenues?

Demographic transition

Mortality and Health

What is the most frequent reason for mortality in history?

Famine in England and France during 1500 – 1800 were mostly man made.

Technological advance in agriculture leads to 50% increase of consumption of food.

Improvements in nutritional status explains 90% of decline in mortality rate

Migration

Why people want to migrate?

What is the impact of regulations on migration?

What is the effect of migration to the labor markets?

Table 5
Impact of immigration on labor market outcomes in the US
(percentage change due to doubling of recent immigrants)

	0–5	6–10	11–15	Hispanics	Blacks
Wages	–0.032	–0.021	–0.010	+0.007	–0.010
Earnings	–0.026	–0.018	–0.010	+0.015	–0.006

Source: LaLonde and Topel (1991b: Tables 6.7, 6.9, 6.10).

Assimilation of immigrants

Aging, Demographic Composition, and The Economy

Retirement and social security

Table 6
Average wealth and distribution (1979)[a]

	Mean wealth	Percentage
Housing	26.9	18
Business and property	11.6	8
Financial	22.5	15
Pensions	18.0	12
SSI, welfare and transfers	2.3	2
Medicare and Medicaid	17.7	12
Social security	44.0	30
Future earnings	3.9	3
Total	146.7	100

[a]Wealth in thousands of 1979 dollars. Based on 6610 (1979) observations from the RHS. Farm families and farm wealth excluded.

Aging, Demographic Composition, and The Economy

Present versus future consumption and effect of interest rate

Bequest

Dissaving

Table 10
One-year wealth change (%) by age and health status[a]

Age range	Health status				Number of observations
	Poor	Average	Very good	All	
Singles					
65–69	−3.5	−2.8	5.7	−0.1	370
70–74	−12.3	−4.4	−2.9	−4.8	405
75+	−9.5	−6.2	−3.2	−6.0	548
All	−9.2	−4.7	−0.1	−3.9	1323
Couples					
65–69	−0.1	1.5	5.6	2.3	298
70–74	−11.9	−5.2	−2.0	−5.9	238
75+	−5.4	−2.8	−5.6	−3.7	206
All	−5.9	−1.8	1.9	−1.8	742
All					
65–69	−1.1	−0.2	5.7	1.3	668
70–74	−12.1	−4.8	−2.5	−5.3	643
75+	−7.5	−4.8	−3.6	−5.1	754
All	−7.3	−3.2	0.7	−2.9	2065

[a]Retired singles and couples. Health status: "Poor" means at least one family member reported poor health; "Very good" means all family members reported very good to excellent health; "Average" is all others.

Source: 1984 SIPP, Waves 3, 4 and 7.

Aging, Demographic Composition, and The Economy

Aging and labor market

The response of social security system to demographic change

Aggregate Population Change and Economic Growth

Does population growth causes GDP growth or vice versa?

Society and social institutions and effect on population growth

Population growth in the long run and short run

Distribution of intergenerational welfare