The Theory of Uncertainty Reduction Revisited: Does Parenthood Provide Certainty?

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Motivation

• Theory of Values of Children
  ‣ Fertility is motivated by instrumental and immanent values
  ‣ Criticism: child-related values are defined in an ad hoc manner
  ‣ Suggestion: Human behavior is motivated by a small number of general values
    - Children as social production functions for material well-being and social approval
    - Children as a mean to reduce uncertainty in life

• Reception of the theory of uncertainty reduction in research on fertility
  ‣ Alternative to neoclassical household economics
  ‣ Mix of empirical support and rejection
  ‣ Core arguments were never empirically tested
    - Perception of children as a source of uncertainty reduction
    - Expected reduction of uncertainty due to children motivates fertility
Reduction of Uncertainty

• Rational actors avoid uncertain situations
  ‣ Uncertainty: no probabilities of desired or undesired consequences of different courses of action are known => no decision possible
  ‣ Risk: probabilities are known => insurance possible

• Strategies under uncertainty
  ‣ Collection of additional information
  ‣ “Do nothing“
  ‣ Decision for a goal with long-term commitments
    - Long-term commitments are at least partly known
    - No further decisions about what to do in general are needed
    - Only decisions on commitment-related activities have to be made
Reduction of Uncertainty by Children

- Three strategies of long-term uncertainty reduction:
  - Successful occupational career
  - Stable marriage
  - Children

- Children have the most binding consequences
- Individuals become motivated to have children, if alternative strategies of uncertainty reduction are blocked or are not promising

- Marriage
  - Prospect of marriage or a stable marriage increase certainty and reduce fertility
  - Counter-arguments:
    - Stable marriages support marriage-specific investments
    - Norms of marital fertility
  - Mixed empirical support
  - Support from African-Americans
Reduction of Uncertainty by Children

- Occupational career
  - Favorable occupational prospects increase certainty and reduce fertility
  - Counter-argument:
    - Income hypothesis
  - Mixed empirical support
  - Empirical support by unemployed women in Europe
Reduction of Uncertainty by Children

• Shortcomings
  ‣ Criticism primarily under a perspective of costs
  ‣ Uncertainty is measured via proxy variables
    - Proxies for uncertainty: heterogeneity of marriage partners, risk of divorce, low educational qualifications, unemployment
    - Uncertainty is assumed, if people miss marital or occupational standards
    - No unambiguous empirical tests possible. For example: Female unemployment supports motherhood
      * Confirmation of uncertainty reduction theory
      * Confirmation of substitution hypothesis (low opportunity costs)
  ‣ Uncertainty as a subjective perception/evaluation of situations is not considered
    - Subjective perceptions to what extent an occupational situation or marriage is uncertain
    - Subjective perceptions to what extent a first or another child would increase or decrease uncertainty in life
Research Questions

- Influences on the perception that children reduce uncertainty in life
  - Number of children (transition to parenthood)
  - Age (biographical uncertainty)
  - Gender (societally accepted role model)
  - Partnership status (degrees of institutionalization)
  - Partnership quality (indicator for partnership certainty)
  - Occupational situation (proxies for occupational certainty)
  - Occupational certainty
Data and Variables

• Data
  ‣ Generations and Gender Survey of the Czech Republic (2005)
  ‣ Face-to-face interviews of 10,006 individuals
  ‣ 2,433 female respondents aged 18 to 45
  ‣ 2,813 male respondents aged 18 to 50

• Dependent variable
  ‣ Attitudes on having a first or another child
    - “If you were to have a/another child during the next three years, would it be better or worse for … certainty in your life?”
    - Answer categories: “much better”, “better”, “neither better nor worse”, “worse”, “much worse”
  ‣ Categories used in the analyses:
    - increase of certainty, no change, decrease of certainty (multinomial logit)
    - increase of certainty vs. no change or decrease of certainty (binary logit)
Data and Variables

• Independent variables
  ‣ Parity, age, gender
  ‣ Marital status
  ‣ Partnership quality
    - Frequency of disagreements
    - Satisfaction with the partnership
    - Considered to break up the partnership
  ‣ Occupational situation
    - Educational degree
    - Employment situation
  ‣ Occupational certainty
    - Kind of work contract
    - Satisfaction with job security
    - Control about work situation within the next three years
Change of Certainty Due to a Child
Effects of Parity and Age Separated by Gender (multinomial logit)

Control variables: marital status, employment situation, level of education.
Levels of significance: $\leq 0.1$, $\cdot \leq 0.05$, $** \leq 0.01$, $*** \leq 0.001$. 
Change of Certainty Due to a First Child
Effect of Gender (multinomial logit, childless respondents, aged 18 – 35)

Average change of probability

Control variables: age, marital status, employment situation, level of education.
Levels of significance: * ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.
Change of Certainty Due to a First Child
Effects of Partnership Status Separated by Gender
(multinomial logit, childless respondents, aged 18 – 35)

Control variables: age, employment situation, level of education.
Levels of significance: + ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.
Change of Certainty Due to a First Child
Effects of Partnership Quality Separated by Gender
(binary logit, childless respondents with a partner, aged 18 – 35)

Control variables: age, employment situation, level of education.
Levels of significance: * ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.
Change of Certainty Due to a First Child
Effects of Education and Employment Situation Separated by Gender
(multinomial logit, childless respondents, aged 18 – 35)

Control variables: age, marital status.
Levels of significance: + ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.
Change of Certainty Due to a First Child
Effects of Occupational Certainty Separated by Gender
(binary logit, childless respondents being employed, aged 18 – 35)

Control variables: age, marital status, level of education, income quartiles.
Levels of significance: + ≤ 0.1, * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001.
Conclusions

• A couple of results are in line with the theory, as a reduction of uncertainty due to children matters …
  ‣ … for the transition to parenthood
  ‣ … at beginning of adult life
  ‣ … more for childless women than for childless men

• Occupational certainty
  ‣ Women: uncertain current vs. uncertain future situation

• Marital certainty
  ‣ Men: Children are not sources of certainty in themselves, but means to reduce marital uncertainty