ESTIMATING THE COST OF RAISING CHILDREN FOR BASIC INCOME

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Designing an adequate basic income for children requires using the best approaches available to determine the cost of raising children.
Agenda

- Measurement Issues
- Types of Costs
- Estimation Approaches
  - Budget Standard Approach
  - Expenditure Survey Approaches
- Current Applications
- Our Recommendations
Measuring the Costs of Raising Children

- Not as easy as it looks!
- Challenges due to:
  - Differences in tastes and preferences
  - Differences in opportunities and constraints
  - Deciding what to include and how to measure what is included

- Caveat: the focus is on costs of raising children, not on the benefits of children
Types of Costs Incurred

- **Direct**
  - e.g., food, housing, transportation

- **Indirect**
  - e.g., forgone income, unpaid time in household work and childcare

- **Intangible**
  - e.g., lack of sleep, stress related to children
Two Main Costing Approaches

- **Budget Standard Approach**
  - A basket of goods and services at a chosen standard of living is priced.
  - Answers the question: How much income does a family with children need compared to a childless family?

- **Expenditure Survey Approaches**
  - A variety of methods that use data from expenditure surveys.
  - Answers the question: How much do parents spend on their children? or How much income does a family with children need to be as well off as a family with none?
Budget Standard Approach

- Choose a standard of living (often a basic needs level) (Fisher, 2007)
- Select a basket of goods and services needed to meet the standard and price the basket
- Examples:
  - Montreal Diet Dispensary (2014)
  - Winnipeg Harvest and the Social Planning Council of Winnipeg’s Acceptable Living Level (2012)
  - Fraser Institute (Sarlo, 2013)
  - Statistics Canada’s Market Basket Measurement (MBM) of low income (Hatfield, Pyper & Gustajtis, 2010)
Budget Standard Approach

- **Advantages:**
  - Transparency
  - Flexibility

- **Disadvantages:**
  - Divergence between budget standards and actual household behaviour
  - Subjectivity
  - Updating as prices and standards change
Expenditure Survey Approaches

- Single equation estimation:
  - Engel (or iso-prop) method
  - Rothbarth (or adult goods) method
- Complete demand systems (e.g., Douthitt & Fedyk, 1990; Phipps, 1998)
- Other:
  - United States Department of Agriculture (USDA) estimates (Lino, 2014)
  - MoneySense magazine estimates (Cornell, 2011)
Expenditure Survey Approaches

- Engel and Rothbarth methods
  - Use food or necessities (Engel) or adult goods (Rothbarth) as measures of household well-being
  - Advantages:
    - Relatively easy to estimate
    - Capture income effects and the marginal costs of children
  - Disadvantages:
    - Underlying assumptions
    - Not based on utility theory unless strong assumptions are made
Expenditure Survey Approaches

- Complete demand systems
  - Advantages
    - Accounts for simultaneous effect of independent variables on consumption
    - Accounts for income and substitution effects
    - Choice of statistical models and functional forms
    - Derived from consumer demand theory
  - Disadvantages
    - Data availability
Expenditure Survey Approaches

- United States Department of Agriculture (USDA)
  - Child-specific expenditures in the data are estimated directly (e.g., clothing, childcare, education)
  - Other relevant expenditures are adjusted to obtain per child estimates (e.g., food, health care, housing)
  - Advantages:
    - Estimates the average actual amount spent on children
    - Estimates are more reasonable than Engel, Rothbarth
  - Disadvantages:
    - Arbitrary decisions on non child-specific expenditures
    - Doesn’t account for parental preferences
Costing the Expenditure Categories

- Which expenditure categories are relevant?
- Key areas of disagreement:
  - Childcare
  - Shelter
Current Applications

- Equivalency scales to adjust poverty thresholds for children
- Determining foster care maintenance payments
- Developing child support guidelines
Our Recommendations

- No consensus exists on an optimal method; all have significant disadvantages.
- Use a complete demand system based on national data and develop a comprehensive standard budget based on expert norms and broad parental and expert consultation.
- Develop estimates based on both approaches and take the average.
Selected References


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Questions?

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