

ESTIMATING THE COST OF RAISING CHILDREN FOR BASIC INCOME

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The Issue

- 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)
 - Historically: Manitoba Agriculture's Budget Guides (2001, 2004)
 - 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

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Questions?

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