Family Structure Dynamics and Child Well-Being

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Economic trajectories in childhood depend on:

• Type and sequencing of family structure change (from single to two-parent household or vice versa)

• Children’s economic trajectories prior to family structure change
Analytic steps

• Characterize trajectories of family economic disadvantage during childhood

• Within trajectories, examine the economic consequences for children of movements between single and married parent households

• Consider consequences of economic trajectories and marital transitions for child health and development
Group-Based Trajectory Analysis Using Latent Class Growth Models

Model trajectories of family economic disadvantage for each child/family

Classify children with similar family economic trajectories

Estimate the proportion of children who fall into these different trajectories
Group-Based Trajectory Analysis Using Latent Class Growth Models

The population is composed of a mixture of groups with distinctive distributions.

Group membership is unobserved and represented by a latent categorical variable.

Observed indicators at each time point as indicators of latent class.
Modeling Framework

Latent Poverty Group

Baseline covariates

Observed indicators

Time-varying covariates
Data

Dataset
- Panel Study of Income Dynamics
  Child Development Supplement
  Wave I (PSID-CDS)

Sample
- Children ages 8-12 in 1997

Sample Size
- 942 children
Measures

Family economic trajectories

child annual poverty status from birth

Time-varying covariates

child living with one or two parents

Time-stable covariates

child gender, age, race of head, # children in family, unemployed head, female head, head < high school education
How many latent trajectory poverty groups?
## Model Fit

<table>
<thead>
<tr>
<th>Number of Latent Trajectory Groups</th>
<th>BIC</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-group solution</td>
<td>-2429.10</td>
<td>-2346.68</td>
</tr>
<tr>
<td>4-group solution</td>
<td>-2392.96</td>
<td>-2276.61</td>
</tr>
<tr>
<td>5-group solution</td>
<td>-2431.26</td>
<td>-2280.98</td>
</tr>
</tbody>
</table>
Estimated Probability of Living in Poverty
LCGA: 4-Group Solution

- Long-term poor: 7.7%
- Later poverty: 14.8%
- Early poverty: 5.1%
- Non-poor: 72.1%
Family Structure Change When Child is 4-7: Later poverty group

![Graph showing the probability of poverty for children aged 4-7, with child age on the x-axis and probability of poverty on the y-axis. The graph compares the probability of poverty for children whose parents married throughout their child's age with those whose parents married to single status at ages 4-7.](image-url)
Family Structure Change When Child is 4-7: Later Poverty Group

![Graph showing probability of poverty over child age. The graph compares single throughout and single to married 4-7 scenarios. The y-axis represents the probability of poverty ranging from 0 to 1, and the x-axis represents child age from 0 to 12. The graph indicates that the probability of poverty increases with age and that there is a higher probability for those who single throughout compared to those who single to married 4-7.]
Family Structure Change:
Later poverty group

<table>
<thead>
<tr>
<th>Child Age</th>
<th>Probability of poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.2</td>
</tr>
<tr>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>4</td>
<td>1.0</td>
</tr>
</tbody>
</table>

- Married throughout
- Single throughout
- Single to married 4-7
- Married to single 4-7
Family Structure Change When Child is 4-7
Early poverty group

Child Age
Probability of poverty
married throughout
married to single 4-7
Family Structure Change When Child is 4-7 Early Poverty Group

Probability of poverty vs Child Age graph.

- Single throughout
- Single to married 4-7
Family Structure Change: Child 4-7
Early poverty group

![Graph showing family structure change for children aged 4-7, focusing on the probability of poverty. The graph illustrates the probability of poverty over child age for different family structures, including married throughout, single throughout, single to married 4-7, and married to single 4-7.]
Summary of Major Findings

- Among children who are persistently poor, marriage and divorce do not alter the risk of poverty.
- Divorce accelerates movement into poverty for children who start out life with relatively low probability of poverty.
- Among children moving out of poverty, transitions from two-parent to one-parent households do not alter poverty trajectories. However, children who move from single-parent households, to two-parent households, and back again, experience somewhat greater risk of poverty later in childhood.
Next Steps

Examine the consequences for child health and development of poverty trajectories and family structure transitions.

Control for other time-varying determinants of poverty trajectories, such as parental health and employment.

Consider additional indicators of family economic circumstances.