Family Structure and Economic Mobility

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Outline of Talk

- Motivation
- Literature
- Data
- Results
- Additional models
- Conclusions
Motivation

- There is substantial economic mobility in the U.S.
  - Less than or about the same as other industrialized countries
- Why do some children succeed relative to others?
- Why are there differences in mobility across groups?
Isaacs et al. “Getting Ahead or Losing Ground: Economic Mobility in America”

- 2/3 of Americans have higher income than their parents
- Relative economic positions are strongly related to one’s parent’s relative economic position
- Blacks are less likely than whites to surpass their parents’ incomes
  - Only 31 percent of black children born to middle-income parents make more than their parents did
FIGURE 2
Percent of Children with Family Income above their Parents, by Parents’ Income Ranking

- **ALL CHILDREN**: 67%
- **PARENTS IN TOP QUINTILE**: 43%
- **PARENTS IN 4TH QUINTILE**: 67%
- **PARENTS IN MIDDLE QUINTILE**: 66%
- **PARENTS IN 2ND QUINTILE**: 74%
- **PARENTS IN BOTTOM QUINTILE**: 82%

*Source: PSID data tabulations.*
Children’s Chances of Getting Ahead or Falling Behind, by Parents’ Family Income

Source: PSID data tabulations of family income averaged over several years and reported in 2006 dollars.
FIGURE 4
Percent of Children with Family Income above their Parents’ Family Income, by Race

<table>
<thead>
<tr>
<th>Category</th>
<th>Whites</th>
<th>Blacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Children</td>
<td><strong>67%</strong></td>
<td><strong>63%</strong></td>
</tr>
<tr>
<td>Parents in Top Quintile</td>
<td><strong>44%</strong></td>
<td></td>
</tr>
<tr>
<td>Parents in 4th Quintile</td>
<td><strong>67%</strong></td>
<td><strong>49%</strong>*</td>
</tr>
<tr>
<td>Parents in Middle Quintile</td>
<td><strong>68%</strong></td>
<td><strong>31%</strong></td>
</tr>
<tr>
<td>Parents in 2nd Quintile</td>
<td></td>
<td><strong>52%</strong></td>
</tr>
<tr>
<td>Parents in Bottom Quintile</td>
<td></td>
<td><strong>73%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>78%</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>90%</strong></td>
</tr>
</tbody>
</table>

Percentage of children with higher income than their parents (inflation-adjusted)

Notes: * Interpret data with caution due to small sample size. ** Too few observations to report estimate.
Source: PSID tabulations.
FIGURE 6
Chances of Getting Ahead or Falling Behind in Income Ranking, by Parental Income and Race

Parents’ Income Quintile

Percent Reaching Income Quintile

- Bottom Quintile: 31%
- Second Quintile: 54%
- Middle Quintile: 22%
- Fourth Quintile: 16%
- Top Quintile: 8%

Note: ** indicates significant difference.
What Role Does Family Structure Play?

- May be related to factors that enable children to succeed economically
  - Human capital
  - Cognitive and Non-cognitive skills
  - Occupation

- There are racial differences in family structure
  - Do these differences explain the racial difference in mobility?
Percent of Births to Unmarried Mothers

Source: Census Bureau based on June 1980 and June 1995 CPS
Percent of Births to Unmarried Mothers

Source: Census Bureau based on June 1980 and June 1995 CPS
Preview of Findings

- Family structure does matter for economic mobility
- Family structure does not explain differences in mobility between black and white families
Previous Studies

- Literature on the associations between family structure and:
  - Child outcomes
  - Children’s adult outcomes
  - Economic mobility
Family Structure and Child Outcomes

- Children of single-parent families have lower educational attainment
  - McLanahan and Sandefur (1994)

- Children of divorced parents have worse behavioral outcomes
  - Amato (1993, 1994)

- Children of non-continuously married parents have worse behavioral and cognitive outcomes
  - Carlson and Corcoran (2001)
Family Structure and Children’s Adult Outcomes

- Children of divorced parents are more likely to marry and have children early and/or out of wedlock
  - McLanahan and Bumpass (1988)
- Children of divorced parents have lower occupational attainment
  - Biblarz and Raftery (1993)
Family Structure and Mobility

- Much less evidence on this direct link

- Divorce lowers the association between fathers’ and children’s income and increases the association between mothers’ and daughters’ income
  - Fertig (2004)

- Little difference in mobility rates between daughters of married and unmarried mothers
  - Musick and Mare (2004)
  - Some differences by race
Table 2. Joint Intergenerational Mobility Matrix

<table>
<thead>
<tr>
<th>Mother’s Poverty and Marital Status</th>
<th>Daughter’s Poverty and Marital Status</th>
<th>Total</th>
<th>Mother Marginals</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Poor Married</td>
<td>Not Poor Unmarried</td>
<td>Poor Married</td>
<td>Poor Unmarried</td>
</tr>
<tr>
<td>All Races</td>
<td>Not poor married</td>
<td>70.7</td>
<td>23.8</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Not poor unmarried</td>
<td>59.8</td>
<td>33.1</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Poor married</td>
<td>48.1</td>
<td>27.1</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>Poor unmarried</td>
<td>41.3</td>
<td>33.7</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>Daughter marginals</td>
<td>65.8</td>
<td>25.8</td>
<td>2.2</td>
</tr>
<tr>
<td>White</td>
<td>Not poor married</td>
<td>72.5</td>
<td>22.4</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Not poor unmarried</td>
<td>64.4</td>
<td>30.3</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Poor married</td>
<td>53.3</td>
<td>22.9</td>
<td>11.4</td>
</tr>
<tr>
<td></td>
<td>Poor unmarried</td>
<td>68.3</td>
<td>24.0</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Daughter marginals</td>
<td>70.6</td>
<td>23.3</td>
<td>2.1</td>
</tr>
<tr>
<td>Black</td>
<td>Not poor married</td>
<td>46.2</td>
<td>43.1</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Not poor unmarried</td>
<td>35.5</td>
<td>49.1</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Poor married</td>
<td>40.1</td>
<td>32.2</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>Poor unmarried</td>
<td>26.4</td>
<td>38.1</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>Daughter marginals</td>
<td>37.4</td>
<td>40.2</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: Proportions and Ns are weighted.

Source: Pooled sample from the NLSYW (N = 1,469, respondents aged 14–18 in 1968) and the NLSY (N = 2,040, respondents aged 14–18 in 1979).
Summary

- Family structure and disruption affects human capital, non-cognitive factors, occupational attainment
- These outcomes in turn affect earnings and income
- One might suppose that family structure, thereby, affects mobility
- Not a lot of evidence one way or the other
Data

- Panel Study of Income Dynamics

- Sample:
  - Children who were aged 0-18 in 1968
  - Martial history available for biological mother
  - Family income available for at least 3 of 5 years from 1967-1971
Defining Family Structure

1. Continuously married
   - Child’s biological mother is always married when the child is age 0 to 18

2. Ever divorced
   - Child’s biological mother is married when the child is born and divorces before the child is 19

3. Out of wedlock birth
   - Child’s biological mother is unmarried when the child is born

4. Family structure missing
## Family Structure Distribution

<table>
<thead>
<tr>
<th></th>
<th>African American</th>
<th>White</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parents Always</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>350</td>
<td>1,228</td>
<td>22</td>
<td>1,600</td>
</tr>
<tr>
<td></td>
<td>60%</td>
<td>87%</td>
<td>89%</td>
<td>83%</td>
</tr>
<tr>
<td>Parents Ever</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>103</td>
<td>175</td>
<td>2</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td>21%</td>
<td>1%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Out of Wedlock</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birth</td>
<td>131</td>
<td>15</td>
<td>1</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>19%</td>
<td>12%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Parents' Family Structure Missing</td>
<td>82</td>
<td>120</td>
<td>2</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>666</td>
<td>1,538</td>
<td>27</td>
<td>2,231</td>
</tr>
</tbody>
</table>
Measuring Income

- Parents:
  - Average of per-capita family income of the biological mother from 1967-1971 (in $2006)

- Children:
Income Tertiles

- **Parents**
  - Low Third: Income < $20,600
  - Middle Third: $20,600 < Income < $31,700
  - Top Third: Income > $31,700

- **Children**
  - Low Third: Income < $32,900
  - Middle Third: $32,900 < Income < $55,100
  - Top Third: Income > $55,100
## Per-Capita Family Income Distribution

<table>
<thead>
<tr>
<th></th>
<th>Parents</th>
<th>Children</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>28,756</td>
<td>52,779</td>
<td>84%</td>
</tr>
<tr>
<td>10th</td>
<td>10,878</td>
<td>17,512</td>
<td>61%</td>
</tr>
<tr>
<td>25th</td>
<td>17,081</td>
<td>28,576</td>
<td>67%</td>
</tr>
<tr>
<td>50th</td>
<td>26,453</td>
<td>43,535</td>
<td>65%</td>
</tr>
<tr>
<td>75th</td>
<td>36,019</td>
<td>63,305</td>
<td>76%</td>
</tr>
<tr>
<td>90th</td>
<td>47,827</td>
<td>91,651</td>
<td>92%</td>
</tr>
</tbody>
</table>
Data

Children born between 1950 and 1968


Marital status
Family income measured

Marital status
Family income measured

Children aged 0-18 in 1968
Marital history file
Data Issues

- Family structure missing/incomplete for:
  - Those who do not complete the 1986 marital history file
  - We do try to fill in missing data using core surveys
    - Don’t extend to periods prior to 1968

- Income is measured at different ages

- Income is measured differently for different marital histories
  - post-divorce / post-remarriage
Data Problems Example

- Divorced in 1952
- Divorced in 1975

Family income measured

- 1950
- 1968
- 1972
- 1986

Family income measured

- 1950
- 1950
Results

- Absolute mobility
  - Percent of children with income that exceeds their parents’ income

- Relative mobility
  - Children’s position in the income distribution relative to their parents’ position
Absolute Mobility: All

- All Categories [n=2,231] 0.810
- Parents Always Married [n=1,600] 0.816
- Parents Ever Divorced [n=280] 0.792
- Out-of-Wedlock Birth [n=147] 0.883
- Missing Family Structure [n=204] 0.757
Absolute Mobility: African American

- AA: All Categories [n=666]
- AA: Parents Always Married [n=350]
- AA: Parents Ever Divorced [n=103]
- AA: Out-of-Wedlock Birth [n=131]
- AA: Missing Family Structure [n=282]
Absolute Mobility: White

- WH: All Categories [n=1,538] - 0.815
- WH: Parents Always Married [n=1,228] - 0.815
- WH: Parents Ever Divorced [n=175] - 0.835
- WH: Out-of-Wedlock Birth [n=15] - 1.000
- WH: Missing Family Structure [n=120] - 0.760
Absolute Mobility By Income Tertile

Top Third, All Categories [n=553] 0.70
Top Third, Parents Always Married [n=465] 0.72
Top Third, Born Out of Wedlock [n=1] 0.64
Top Third, Parents Ever Divorce [n=39] 0.84

Middle Third, All Categories [n=641] 0.84
Middle Third, Parents Always Married [n=499] 0.85
Middle Third, Born Out of Wedlock [n=12] 0.66
Middle Third, Parents Ever Divorce [n=88] 0.82

Bottom Third, All Categories [n=1,037] 0.89
Bottom Third, Parents Always Married [n=636] 0.90
Bottom Third, Born Out of Wedlock [n=134] 0.92
Bottom Third, Parents Ever Divorce [n=153] 0.84
Absolute Mobility By Income Tertile, Continuously Married

- Top Third, All Categories [n=465] 0.716
- Top Third, African American [n=8] 0.720
- Top Third, White [n=449] 0.745

- Middle Third, All Categories [n=499] 0.852
- Middle Third, African American [n=38] 0.617
- Middle Third, White [n=452] 0.859

- Bottom Third, All Categories [n=636] 0.901
- Bottom Third, African American [n=304] 0.865
- Bottom Third, White [n=327] 0.912
Absolute Mobility: African American

- Top, African American [n=9] 0.67
- Top, Parents Always Married [n=8] 0.75
- Top, Born Out of Wedlock [n=0]
- Top, Parents Ever Divorce [n=1]

- Middle, African American [n=66] 0.58
- Middle, Parents Always Married [n=38] 0.62
- Middle, Born Out of Wedlock [n=10]
- Middle, Parents Ever Divorce [n=12] 0.51

- Bottom, African American [n=591] 0.82
- Bottom, Parents Always Married [n=304] 0.86
- Bottom, Born Out of Wedlock [n=121] 0.90
- Bottom, Parents Ever Divorce [n=90] 0.68
Absolute Mobility: White

Top, White [n=535] 0.71
Top, Parents Always Married [n=449] 0.72
Top, Born Out of Wedlock [n=1] 0.65
Top, Parents Ever Divorce [n=37] 0.86

Middle, White [n=565] 0.85
Middle, Parents Always Married [n=452] 0.86
Middle, Born Out of Wedlock [n=2] 0.86
Middle, Parents Ever Divorce [n=76] 0.86

Bottom, White [n=438] 0.92
Bottom, Parents Always Married [n=327] 0.91
Bottom, Born Out of Wedlock [n=12] 0.93
Bottom, Parents Ever Divorce [n=62] 1.00
Summary

- 80% of children have per-capita family incomes that exceed those of their parents
  - No large differences by family structure for whites
  - Black children of divorced parents have lower chances of exceeding parents income (60%)

- Black children of “middle income” have only a 60% chance of exceeding parents income (compared with 85%) for whites
  - Also true for continuously married
Relative Mobility: All

- Parent Bottom Third: 53% (n=1,037)
- Parent Middle Third [n=641]: 35% (34% of 641)
- Parent Top Third [n=553]: 32% (52% of 553)
Relative Mobility: Continuously Married

Parent Bottom Third [n=636]  Parent Middle Third [n=499]  Parent Top Third [n=465]

15  35  54
50  35  32

Relative Mobility: Ever Divorced

Parent Bottom Third [n=153]  Parent Middle Third [n=88]  Parent Top Third [n=39]

- Parent Bottom Third: 13 (31), 56
- Parent Middle Third: 33 (34), 33
- Parent Top Third: 37 (46), 16

[n indicates sample size]
Relative Mobility: Born Out of Wedlock

- Parent Bottom Third [n=134]: 9 (Blue), 33 (Red), 59 (Total)
- Parent Middle Third [n=12]: 34 (Blue), 22 (Red), 56 (Total)
- Parent Top Third [n=1]: 100 (Blue)

Total: 90 (Parent Bottom Third), 56 (Parent Middle Third), 100 (Parent Top Third)
Relative Mobility: African American

Parent Bottom Third [n=591]  Parent Middle Third [n=66]  Parent Top Third [n=9]

- Parent Bottom Third: 66%
- Parent Middle Third: 25%
- Parent Top Third: 33%

- Parent Bottom Third: 24%
- Parent Middle Third: 19%
- Parent Top Third: 19%
Relative Mobility: White

- Parent Bottom Third [n=438]: 17% White
- Parent Middle Third [n=565]: 35% White
- Parent Top Third [n=535]: 52% White
Relative Mobility: Continuously Married African American

- Parent Bottom Third [n=304]: 62
- Parent Middle Third [n=38]: 42
- Parent Top Third [n=8]: 25
Relative Mobility: Continuously Married White

Parent Bottom Third [n=327]  Parent Middle Third [n=452]  Parent Top Third [n=449]

- Parent Bottom Third: 18 (45%) 37 (35%) 45 (14%)
- Parent Middle Third: 35 (35%) 35 (35%) 32 (14%)
- Parent Top Third: 54 (37%) 32 (35%) 14 (10%)

10/8/2009
Relative Mobility: Ever Divorced
African American

- Parent Bottom Third [n=90]: 7 (81%)
- Parent Middle Third [n=12]: 1 (99%)
- Parent Top Third [n=1]: 0 (100%)

10/8/2009
Relative Mobility: Ever Divorced White

Parent Bottom Third [n=62] Parent Middle Third [n=76] Parent Top Third [n=37]
Summary

- In relative terms, children of divorced parents or born out of wedlock have less upward mobility.
- Blacks have less upward mobility relative to whites.
  - Also true among continuously married and among divorced.
Models

- Estimate probits and ordered probits to model absolute and relative mobility
- Adjust for:
  - Family characteristics, including the ages of parents and their children
  - The timing of divorce (relative to when income is measured)
- Construct counterfactual distributions of absolute and relative mobility
- Results: same as descriptive results!
Conclusion

- Family structure matters for mobility
  - Divorce reduces absolute mobility among blacks
  - Divorce / out of wedlock births reduce relative mobility for everyone

- Despite being at greater risk of parental divorce or being born out of wedlock, family structure does not explain differences in mobility between black and white families