Is Mother’s Time With Their Children Home Production Time or Leisure?

by

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Is Mother’s Time With Their Children in the United States Home Production Time or Leisure?

a) Leisure  
b) Home Production  
c) Both of the above  
d) None of the above
Objectives

- Understand the nature of child care time in the United States as it relates to leisure and home production time
- Examine the determinants of child care time
- Estimate elasticities of child care time with respect to wages and the price of child care
Data come from the 2003 ATUS

Sample definition:

- Female
- Between the ages of 18 and 65
- Has a child or children under age 18 living in the same household
- Not part of multifamily household, not currently in school or in the active military or unemployed
- Information for all right hand side variables

Resulting Sample Size:
-- 1817 weekday diaries
-- 1928 weekend diaries
Table 1: Average Minutes Spent per Day on Leisure, Child Care, Home Production and Employment

<table>
<thead>
<tr>
<th>Activity</th>
<th>Weekdays</th>
<th>Weekends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minutes of child care (including zeros)</td>
<td>119.8</td>
<td>82.6</td>
</tr>
<tr>
<td>Minutes of child care (excluding zeros)</td>
<td>155.3</td>
<td>131.4</td>
</tr>
<tr>
<td>Minutes of employment (including zeros)</td>
<td>239.1</td>
<td>59.3</td>
</tr>
<tr>
<td>Minutes of employment (excluding zeros)</td>
<td>440.5</td>
<td>309.6</td>
</tr>
<tr>
<td>Minutes of home production (including zeros)</td>
<td>194.3</td>
<td>253.4</td>
</tr>
<tr>
<td>Minutes of home production (excluding zeros)</td>
<td>207.0</td>
<td>267.5</td>
</tr>
<tr>
<td>Minutes of leisure (including all day)</td>
<td>846.5</td>
<td>1031.3</td>
</tr>
<tr>
<td>Minutes of leisure (excluding all day)</td>
<td>842.5</td>
<td>1022.8</td>
</tr>
</tbody>
</table>
Weekday minutes spent in activities by marital status and age of youngest child
Comparison of Weekday and Weekend Minutes in 4 Activities by Marital Status for Women with Youngest Child 0 to 5
Weekday minutes spent in activities by marital status and mother’s predicted wage category
Comparison of Weekday and Weekend Minutes in 4 Activities by Marital Status for Low Wage Women
Estimation Strategy

- Estimate Price of Child Care for families with children aged 0 to 5 and families with a 6 to 12 year old using Survey of Income and Program Participation (SIPP) data. Use a bivariate probit selection model (selecting for employment and paying for child care).

- Use estimated coefficients to predict two prices of child care for ATUS mothers. The price is zero if the household has no children in the age range.

- Estimate the wage for all ATUS mother using a standard Heckman correction.

- Estimate correlated Tobits of time use which include Predicted Pcc and Predicted Wage as RHS variables. Estimate separate models for weekdays and weekends.
Results—
Marginal Effects of Demographic Determinants of Minutes Spent in Leisure, Child Care, Home Production, and Employment for Weekdays
Results—
Marginal Effects of Demographic Determinants of Minutes Spent in Leisure, Child Care, Home Production, and Employment for Weekend Day
Conclusions

- Child care time does not act like home production time nor does it act like leisure. It is, thus, important that child care time not be aggregated into either home production time or into leisure. In many ways (but certainly not all ways) child care time acts like employment, increasing with the hourly wage, decreasing on a holiday or a weekend day.

- Married mothers spend more weekday time in employment and more on home production than non-married mothers, less time on child care and leisure.

- The price of time as measured by predicted hourly wage and the price of child care of children aged 0 to 5 has expected effects on time use on weekdays except for the effect of higher hourly wage on child care time which leads to higher reported child care time.