Splitting the Bill: Estimating Personal Consumption in Case of Wrongful Death

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Kathleen G. Ellis & David I. Rosenbaum, Ph.D.

Background

In the event of a loved one’s wrongful death...

- The decedent’s survivors may sue for lost financial support.
- Maximum financial support is the earnings of the deceased, less his or her personal (non-sharable) consumption of income.
- Forensic experts estimate a deceased individual’s personal consumption rate in order to separate the portion of the decedent’s income spent on him or herself, which informs the calculation of potential damages owed to survivors.

Method

- Exclude irrelevant expenditures & household types
- Using field-standard practices, calculate the personal consumption rates for husbands & wives
- Regress personal consumption rate of husband & wife on household income

Goals

- To improve the precision of personal consumption estimates
- To investigate the viability of household-level expenditure data for direct, estimate-producing regression

Tools & Sources

- Statistical Analysis Software (SAS)
- Bureau of Labor Statistics (BLS)
- BLS Consumer Expenditure Survey Public-Use Microdata, from 2011-2013
- Field Literature sources include the pioneering works of Walter K. Lierman, Robert T. Patton, David M. Nelson, and Kurt V. Krueger

Present Results

- The conclusions are preliminary
- The weighting process used will be fine-tuned prior to final publication
- Project research estimates, while suggesting a departure from the industry standard, follow similar trends with respect to household income and number of children

Example Case

- Husband and wife with two children in household, earning $70K per year
- Analyzing loss of husband: finer grained analysis performed in this research shows greater family income needs than existing, bracketed approach

Expense Distribution Estimation Example (Family of Four with $70K Income)

<table>
<thead>
<tr>
<th>Husband’s Expenses</th>
<th>Wife’s Expenses</th>
<th>Shared Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>$60,060</td>
<td>$60,900</td>
<td>$63,770</td>
</tr>
</tbody>
</table>

Estimated Lost Family Support (Family of Four with $70K Income)

- Legacy Method:
  - Husband’s Loss: $80,000
  - Wife’s Loss: $80,000
  - Shared Loss: $80,000
  - Total: $240,000

- Unweighted Method:
  - Husband’s Loss: $80,000
  - Wife’s Loss: $80,000
  - Shared Loss: $80,000
  - Total: $240,000

- Weighted Method:
  - Husband’s Loss: $81,770
  - Wife’s Loss: $80,000
  - Shared Loss: $80,000
  - Total: $241,770

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