This paper in a Nutshell:
- I utilize the death of a close friend as exogenous shock to an individual's mortality beliefs to establish a causal relationship between mortality beliefs and saving decisions.
- Saving response to the shock strongly depends on an individual's age, emotional involvement, risk aversion, and decays over time.
- The experience-based learning model explains how the personal experience translates into mortality beliefs.

Identification:
Death of a close friend serves as an exogenous shock to mortality beliefs (personal experience):

\[
\text{Saving Rate}_{it} = \beta \times \text{FriendDeath}_{it} + \text{HouseholdFE}_{it} + \text{AgeFE}_{it} + \epsilon_{it}
\]

Advantages of my setting:
- No material impact on a treated individual's wealth.
- No belief updating about hereditary diseases.

Data:
- Representative Panel of the Australian Population.
- 17,000 Individuals interviewed yearly from 2001 to 2019.
- Dependent Variable: Saving Rate = \(1 - \frac{\text{Total Expenditure}}{\text{Total Income}}\)
- Independent Variable: Dummy equal to 1 if a close friend died in the previous year.

Main Result:

<table>
<thead>
<tr>
<th></th>
<th>Saving Rate</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Short term</td>
<td>Long term</td>
</tr>
<tr>
<td>Death Friend</td>
<td>-0.013**</td>
<td>-0.017***</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Household FE</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Age FE</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Observations</td>
<td>92,965</td>
<td>94,115</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.454</td>
<td>0.466</td>
</tr>
</tbody>
</table>

- Death of a close friend reduces the saving rate by 1.1 pp. in the following year.
- Saving rate is reduced on average by 1.7 pp. over the following years.
- Effect is mostly driven by expenditure on leisure related items (cigarettes, alcohol, meals eaten out...) not healthcare.

Further Results:

1. Effect of exogenous shock decays over time.
2. Younger individuals most strongly affected by the personal experience.
3. Magnitude of effect moderated by individual's risk aversion.
4. Emotional sensitivity crucial for saving rate reduction.

Structural estimations based on the experienced-based learning model and the above graph reveal: Decay parameter \(\lambda\) of around 1.8 (Malmendier & Nagel, 2011: \(\lambda = 1.3\) to 1.9)

Key Predictions of the Theoretical Framework:
- Effect decays over time as the personal experience fades out of memory.
- Younger individuals are more strongly affected as new experience constitutes larger part of set of experiences.
- Emotional reaction to experience necessary for experience to become part of set of experiences.

Theoretical Framework:
- Classic life-cycle model:
- Experienced-based learning model (Malmendier et al., 2020):

\[
\text{Optimal consumption: } c_t = (\kappa)^{-1} (w^{-\lambda})^{-1}
\]

Key Predictions of the Theoretical Framework:
- Decrease in perceived survival probability \(s_t\) decreases optimal consumption (saving rate↓).
- Survival probability \(s_t\) (partially) formed by weighting past experiences.

Research question:
1. Do individuals' mortality beliefs causally affect their financial decision making?
2. How are personal experiences incorporated into the mortality belief formation process?

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