**OPTIMISM GONE BAD?**

**PERSISTENT EFFECTS OF TRAUMATIC ECONOMIC EXPERIENCES ON HOUSEHOLDS’ INVESTMENT DECISIONS**

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### BACKGROUND

**Personal experiences and investment decisions**
- Personal experiences matter for decision making of economic agents
  - Past returns in the financial markets
  - Financial and economic crises
- Will memories fade?
  - “Fading memory” (Malmendier and Nagel, 2011)
  - But not always!

**The effect of emotions**
- Emotional tagging: Brain stores a memory of an event combined with an associated emotion
- Emotions determine the importance of the event

**A German case study: The Telekom event**
- Highly emotional stock market event
- Explain investment behavior of German households today:
  - Low stock market participation rate
  - Knowledge about low interest rates does not matter
- Empirical analysis
  1. Who were affected by the event?
  2. How do they make stock market investment decisions today?

### THE TELEKOM EVENT

**Chronology of the Telekom shares**
- 1996: Deutsche Telekom goes public
  - Extensive advertisement campaign
    - High media coverage
    - Direct contact to customers
  - Popular among the German population: “People’s share (Volksaktie)”

**Table 1: Allocation of the IPOs**

<table>
<thead>
<tr>
<th>Date</th>
<th>DT1</th>
<th>DT2</th>
<th>DT3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 1996</td>
<td>714 mio</td>
<td>281 mio</td>
<td>200 mio</td>
</tr>
<tr>
<td>Retail</td>
<td>43%</td>
<td>54%</td>
<td>70%</td>
</tr>
<tr>
<td>Instit.</td>
<td>57%</td>
<td>46%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Source: Deutsche Telekom Investor Relations

- 2000: Fall of the Telekom shares
- 2002: Dotcom bubble burst
- Internal: Revealed corruptions of the executive board

Why the Telekom event of all things?

⇒ “Optimism gone bad”

- Mainstream event with high media presence
- High participation rate of unsophisticated investors
- Break in their belief of “safe and high-yield” Telekom shares
- Lawsuits against the executive board

### DATA

**Socio-economic Panel**
- Nationally representative longitudinal study of German households
- Data coverage: Yearly from 1984 to 2017
- Socio-economic characteristics and wealth
- Advantage: Track households over time
- Indication of stock ownership:
  - 1984-2000: Security papers ownership
  - 2001-2017: Stock ownership

**Table 2: Summary statistics**

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Telecom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>0.69</td>
<td>0.70</td>
</tr>
<tr>
<td>Age</td>
<td>47</td>
<td>43</td>
</tr>
<tr>
<td>Married</td>
<td>0.64</td>
<td>0.66</td>
</tr>
<tr>
<td>Household size</td>
<td>2.43</td>
<td>2.68</td>
</tr>
<tr>
<td>Abitur</td>
<td>0.32</td>
<td>0.19</td>
</tr>
<tr>
<td>Former FRG/GDR</td>
<td>0.83</td>
<td>0.76</td>
</tr>
<tr>
<td>Income</td>
<td>47588.75</td>
<td>39766.83</td>
</tr>
<tr>
<td>Riskless asset</td>
<td>0.97</td>
<td>0.99</td>
</tr>
<tr>
<td>Home ownership</td>
<td>0.57</td>
<td>0.48</td>
</tr>
<tr>
<td>Risk aversion</td>
<td>4.61</td>
<td>4.93</td>
</tr>
<tr>
<td>Fin. risk taking</td>
<td>3.13</td>
<td>2.74</td>
</tr>
<tr>
<td>Degree in Economics</td>
<td>0.02</td>
<td>0.00</td>
</tr>
</tbody>
</table>

⇒ Telekom investors more similar to the German average; younger with lower education degree and income

**Table 3: Determinants of stock market participation**

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Telecom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>0.23***</td>
<td>0.16</td>
</tr>
<tr>
<td>Fin. Risk taking</td>
<td>0.13***</td>
<td>0.21***</td>
</tr>
<tr>
<td>Past returns</td>
<td>12.6**</td>
<td>43.16**</td>
</tr>
<tr>
<td>Observations</td>
<td>7358</td>
<td>1120</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.1</td>
<td>0.17</td>
</tr>
</tbody>
</table>

- Socio-economic variables do not matter for Telekom investors’ SMP decisions
- Past asset returns are also irrelevant
- Only financial risk attitude matters for SMP

### THE TELEKOM INVESTORS

**Normal investors vs. Telekom investors**
- Normal investors: Household heads that regularly invest in security papers (among other stocks)
- Telekom investors: Household heads that entered the security papers market during the three IPOs

**Figure: Stock ownership after the Telekom event**

**Table 3: Determinants of stock market participation**

**Conclusion and further steps**

Former Telekom investors shape investment decisions differently than normal stock investors
- How strong is the emotional attachment?
  - Sentiment analysis using media coverage
  - SOEP: Survey questions with regard to the Telekom event
- Were these emotions transmitted to the next generation?
  - SOEP: Children of Telekom investors