The Effects of Individual Horizon Preferences and Project Horizon on Managers’ Resource Allocation Decisions Under a Subordinate-Superior Framework

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Individual Horizon Preferences

- We use the term horizon preference to refer to an organizational decision maker’s general individual preference for long-term versus short-term results.
  - A manager with short-term (or long-term) preferences

- Project horizon is the period it takes to realize substantially all the benefits from a project.
  - A short-term (long-term) project.
  - A project mix refers to a mix of a short-term and a long-term project.
Practical Motivations

- Managers’ choices of project mix can have important implications toward organizations’ strategic performance.
  - E.g. managerial short-term orientation may lead to short-run profit maximization at the expense of long-run profitability (Bhojraj and Libby 2005).

- Knowledge about managers’ preferences can help their superiors to make informed decisions regarding control and incentive systems to influence managers’ choices.
Theoretical Motivation

• Existing literature mixes the effect of organizational factors with individual factors regarding horizon issues.
  ◦ Managerial time orientation
  ◦ Managerial myopia

• Antecedents of managerial time orientation
  ◦ Capital market pressures / control system / incentive system
  ◦ Frequency of information disclosures
  ◦ Types of information disclosures (non-financial vs. financial)
Theoretical Motivation

- This study introduces the effect of individual behavioral factors, such as individuals’ cognition, motivation or pre-existing attitudes under accountability.
  - Sunk cost literature
  - Directional preference literature
  - Salience literature

- This study suggests the influences of other social factors that can affect individual motivations and cognitions, e.g., cultures.
The Role of Individual Preferences in an Organizational Context

Organizational Goal (incentive system and control system)

Individual Preferences (sunk cost effect and motivated reasoning)

Judgment & Choices
Theoretical Framework

Organizational Goal (messages about superior’s preferences)

Managers’ Perceptions of Superior’s Preferences

Individual Preferences (subordinates’ horizon preferences)

Choices of Project Mix

H1

H2
Data Collection in the 2x2 Experiment

1. Participants assume roles as project managers in a fictitious firm who need to spend unexpected budget surplus between a short-term project and a long-term project.

2. They receive messages about their superior’s potential horizon preferences (IV 1 - org level).

3. They report their perceptions of superiors’ horizon preferences (process variable).

4. They make budget allocation decision (DV).

5. They report their own horizon preferences (IV2 – individual level).
Messages Used in the Instrument

- As you think about how to spend the budget surplus, you recall that your superior, the manager of the floor mat division, consistently invests **significantly less (more)** than the average of industry peers in
  - research and development projects
  - continued professional education for employees, and
  - socially and environmentally friendly projects for local communities.

- In addition, you learn from a reliable source that your superior regularly exercises all stock options that are part of a division manager’s compensation as they become available and **sells (retains)** the stocks. As a result, your division manager owns a **negligible (substantial)** amount of stock in GLW *(note: the fictitious firm)*.
Profile of Participants

We recruited 63 upper-level undergraduate and graduate business students who have completed fundamental course work in accounting, economics, finance, marketing and management. 52% of them are male.

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th># of ACCT and FNCE Courses Taken</th>
<th>Years of Work Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>26</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Median</td>
<td>24</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>5.83</td>
<td>3.39</td>
<td>5.69</td>
</tr>
<tr>
<td>Min.</td>
<td>20</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Max.</td>
<td>42</td>
<td>17</td>
<td>23</td>
</tr>
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Regression Test of H1

- Expectancy-value theory proposes that individuals’ choice of goals is a function of the algebraic product of two parameters: the expectancy and the value (or valence).
  - A match of short-term (long-term) preferences will increase likelihood of investment in short-term (long-term) project mix.

- The result shows that managers’ choices over project mix are influenced by the interaction form of their perceptions and their own horizon preferences ($\beta = 0.207^*$).
Contribution Related to H1

- This result provides corroborating evidence to the effect of organizational variables on judgment and decision-making related to managerial myopia.

- This result extends this literature by separating the effect of individual dispositional dimension from the effect of the organizational dimension on managerial myopia.

- The result shows that decision makers engage in deliberate reasoning process to infer the superior’s horizon preference and to integrate this information into their choices.
Regression Test of H2

- Literature on motivated reasoning and direction preferences propose that managers’ horizon preferences will influence their judgment.

- The result shows that managers’ horizon preferences influence their processing of messages and their formation of perceptions of their superior’s preferences ($\beta = 0.711^{***}$).
Contribution Related to H2

- The result suggests that decision makers can arrive at biased judgments and decisions even when they try to be accurate and engage in elaborate information processing.

- The result extends the literature of directional preference with measurement of preferences having more external validity and arguably more persistency than that created through experimental manipulations.
### H3 – an Ordinal Interaction

<table>
<thead>
<tr>
<th>Managers’ Horizon Preference</th>
<th>Perceptions of Superior’s Horizon Preference</th>
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<tbody>
<tr>
<td></td>
<td>Short-term</td>
</tr>
<tr>
<td></td>
<td>Long-term</td>
</tr>
<tr>
<td>Short-term</td>
<td>Short-term Project Mix</td>
</tr>
<tr>
<td></td>
<td>Long-term Project Mix</td>
</tr>
<tr>
<td>Long-term</td>
<td>Long-term Project Mix</td>
</tr>
</tbody>
</table>

- Salience means only one preference is processed.
- Salience is determined by motivational processes and cognitive processes.
Planned Contrast Test of H3

- The result shows that when exposed to the effects of perceived superior’s preferences, managers with long-term preferences are more committed to their pre-existing preferences ($t_{29} = 0.383$ ns) than managers with short-term preferences ($t_{30} = 2.847^{**}$).
Figure 1: Plot of Estimated Marginal Mean

Budget Allocation

X

Manager with ST
Preference

Manager with LT
Preference

Superior perceived as ST
Superior perceived as LT
Take-away from H3

- The result demonstrates the persistent effect of individual horizon preferences.

- The commitment to individual horizon preferences may be functions of individuals’ past experiences, their information processing abilities, and some motivational processes.

- The result suggests that managers’ commitment to their preferences competes against their commitment to organizational goals.
Practical Implications

- The results suggest that an organization with a long-term strategic goal can set up long-term oriented financial targets and the corresponding management control system for middle managers.

- The subsequent long-term oriented mindsets of middle managers will become a change-resistant mechanism that will continue working towards the initial strategic goals despite that environmental factors may indicate otherwise.

- Their long-term oriented mindsets and behaviors can help guide the behaviors of low-level employees.
Thanks!