Internal Auditing and Voluntary Cooperation in Firms: Across-Cultural Experiment

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Conclusions

- Organizational agents will act in an opportunistic, self-interested manner in the absence of controls.
- This assumption may be sensitive to cultural values.
  - Wealth level
  - Education
  - Reaction to rumors
- Organizational goals in some societies are achieved more by trust and teamwork than by monitoring and confrontation.
Conflicts of literatures

- Choi and Mueller (1992, 480)
  - The systems employed by a number of multinational enterprises to control their foreign operations are identical in many respects to those used domestically.

- Ittner et al. (1996) and Ueno and Wu (1993)
  - International control systems may indeed be sensitive to cultural values.
Individual versus Collective Values

- Full revelation maximizes the firm’s profit
- Individuals with the firm can privately benefit more from withholding information.
- The behavioral premise underlying the use of control systems is that opportunistic incentives will prevail otherwise.
  - Canada
  - Hong Kong
  - China
Elements of Accounting Communication

- Information asymmetry
  - Divisions may be able to benefit more by withholding information than by sharing it with the firm.
- Degree of Anonymity in Internal Reporting
  - A cooperative response is possible if internal reporting feedback allows all divisions to observe such actions and reciprocate.
- Audit-Based Monitoring
  - Internal auditing is a costly investigation to bridge information asymmetry and induce a more complete revelation of private information
Hypotheses

- Participants in Hong Kong and the PRC will reveal valuable information more fully than will participants in Canada in a setting with a low degree of anonymity.
- The degree of increased revelation attributable to the introduction of a costly audit mechanism will be lower among participants in Hong Kong and the PRC than among participants in Canada in a setting with a low degree of anonymity.
- The frequency with which participants elect a costly audit option will be significantly lower in Hong Kong and the PRC than in Canada in a setting with a low degree of anonymity.
Experiment

- Four subjects transfer values; No audits
  - High anonymity
- Three subjects transfer values; No audits
  - Low anonymity
- Three subjects transfer values; Discretionary Audits
  - Internal auditing
Average Transfers in Low ...
Average Transfers in High ...

**FIGURE 1**

Average Transfers of Endowed Values in the High-Anonymity Condition

- **Phase 1:** 4 transfers; no audits
- **Phase 2:** 3 transfers; no audits
- **Phase 3:** 3 transfers; audit option

Legend:
- Canada
- Hong Kong
- PRC

T*: Benchmark self-interest prediction in the presence of auditing (phase 3).
High vs Low Anonymity

### TABLE 3
Analysis of Variance for Changes from Phase 2 to Phase 3

**Dependent Variable: Difference Between Average Transfers in Phases 2 and 3**

<table>
<thead>
<tr>
<th>Effect</th>
<th>df</th>
<th>Sum of Squares</th>
<th>F-Ratio</th>
<th>p-Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: Between-Groups Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>2</td>
<td>5,581</td>
<td>6.82</td>
<td>.002</td>
</tr>
<tr>
<td>Anonymity</td>
<td>1</td>
<td>2,199</td>
<td>5.37</td>
<td>.024</td>
</tr>
<tr>
<td>Country × Anonymity</td>
<td>2</td>
<td>975</td>
<td>1.19</td>
<td>.312</td>
</tr>
<tr>
<td><strong>Error: Groups</strong></td>
<td>54</td>
<td>22,102</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Panel B: Simple Effects and Pairwise Comparisons</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>High Anonymity:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada vs. average of Hong Kong and PRC</td>
<td>1</td>
<td>1,265</td>
<td>3.09</td>
<td>.084</td>
</tr>
<tr>
<td>Hong Kong vs. PRC</td>
<td>1</td>
<td>32</td>
<td>0.08</td>
<td>&gt; .500</td>
</tr>
<tr>
<td>Effect of Country with anonymity maintained</td>
<td>2</td>
<td>1,927</td>
<td>1.66</td>
<td>.215</td>
</tr>
<tr>
<td><strong>Low Anonymity:</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Canada vs. average of Hong Kong and PRC</td>
<td>1</td>
<td>3,342</td>
<td>8.16</td>
<td>.006</td>
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<tr>
<td>Hong Kong vs. PRC</td>
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<td>1,918</td>
<td>4.69</td>
<td>.035</td>
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<tr>
<td>Effect of Country with anonymity not maintained</td>
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<td>5,260</td>
<td>6.43</td>
<td>.003</td>
</tr>
</tbody>
</table>

*All reported p-values are two-tailed.
Frequencies of Audit Choices

FIGURE 3
Percentage Frequencies of Audit Choices in Phase 3

Percentage of Phase 3 Trials in Which an Audit Was Chosen

Canada
Hong Kong
PRC

High Degree of Anonymity  Low Degree of Anonymity