Monitoring the Monitors:
How Social Factors Influence Supply Chain Auditors

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Have you ever...

- Conducted a social audit of your suppliers or subsidiaries?
- Conducted a social audit on behalf of a client?
- Hired a social auditor to audit your company’s suppliers?
- Hired a social auditor to audit your own facilities?
- Managed a social audit team?
What influences social auditors?

• Companies hire supply chain auditors to learn about working conditions at their suppliers because knowing these facts on the ground is key to managing brand risk.

• But do auditors really find and document all the problems at these factories?

Our research investigates what influences auditors’ ability to identify and report dangerous, illegal, and unethical behavior at factories.

What do you think are the most important influences on a social auditor’s ability to identify and report issues?

- Auditors’ education
- Auditors’ on-the-job experience
- Auditors’ skills training
- Audit team’s gender composition
- Whether an audit was paid by the factory or brand
Widespread evidence that economic conflicts of interest influence monitors

Prior Research in Other Domains

- Bond issuers pay → Higher bond ratings
- Auditors earn consultancy fees → Lax financial auditing
- Factory pays → Lax environmental inspection

We find: Factory pays → Lax social auditing

Data

Code-of-conduct audits from one anonymous major social auditor (100s of employees)

16,795 audits of 5,819 factories in 66 countries conducted in 2004 -2009

- Factory identifier & country
- Audit date (thus sequence), number of auditors, who paid
- Auditors’ average age, training, tenure, gender mix
- Labor violations recorded
Number of code of conduct violations
Coded by the social auditor

- Child labor (8 items)
- Forced or compulsory labor (5 items)
- Working hours (7 items)
- Occupational health & safety (31 items)
- Minimum wage (15 items)
- Disciplinary practices (6 items)
- Treatment of foreign workers and subcontractors (4 items)
- Subcontracting (3 items)

We exclude: canteen, dorms, freedom of association

Audits by industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Audits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Garments</td>
<td>6,188</td>
<td>37%</td>
</tr>
<tr>
<td>Accessories</td>
<td>1,740</td>
<td>10%</td>
</tr>
<tr>
<td>Electronics</td>
<td>590</td>
<td>4%</td>
</tr>
<tr>
<td>Toys</td>
<td>463</td>
<td>3%</td>
</tr>
<tr>
<td>Furniture</td>
<td>383</td>
<td>2%</td>
</tr>
<tr>
<td>Footwear</td>
<td>356</td>
<td>2%</td>
</tr>
<tr>
<td>Building materials</td>
<td>260</td>
<td>2%</td>
</tr>
<tr>
<td>Paper, printing, publishing</td>
<td>183</td>
<td>1%</td>
</tr>
<tr>
<td>Metal products</td>
<td>156</td>
<td>1%</td>
</tr>
<tr>
<td>Food, agriculture, beverage</td>
<td>138</td>
<td>1%</td>
</tr>
<tr>
<td>Chemicals and plastics</td>
<td>97</td>
<td>1%</td>
</tr>
<tr>
<td>Services</td>
<td>50</td>
<td>0%</td>
</tr>
<tr>
<td>Other/unknown</td>
<td>6,191</td>
<td>37%</td>
</tr>
<tr>
<td>Total</td>
<td>16,795</td>
<td>100%</td>
</tr>
</tbody>
</table>
Audits by geography

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of audits</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>100</td>
<td>1%</td>
</tr>
<tr>
<td>Americas</td>
<td>1,509</td>
<td>9%</td>
</tr>
<tr>
<td>United States</td>
<td>949</td>
<td></td>
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<tr>
<td>Mexico</td>
<td>172</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Elsewhere in Americas</td>
<td>304</td>
<td></td>
</tr>
<tr>
<td>Asia and Australia</td>
<td>14,773</td>
<td>88%</td>
</tr>
<tr>
<td>China (incl. Macao and Hong Kong)</td>
<td>11,746</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>708</td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td>424</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>377</td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>321</td>
<td></td>
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<tr>
<td>Philippines</td>
<td>270</td>
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<tr>
<td>Pakistan</td>
<td>184</td>
<td></td>
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<tr>
<td>Sri Lanka</td>
<td>159</td>
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<tr>
<td>Taiwan</td>
<td>131</td>
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<tr>
<td>Korea</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Elsewhere in Asia &amp; Australia</td>
<td>333</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>413</td>
<td>2%</td>
</tr>
<tr>
<td>Turkey</td>
<td>186</td>
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</tr>
<tr>
<td>Italy</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>Elsewhere in Europe</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16,795</td>
<td>100%</td>
</tr>
</tbody>
</table>

Our analysis controls for many other aspects that might influence the number of code-of-conduct violations

- Factory vintage
- Factory industry
- Factory size
- Factory country attributes
- Factory’s distance to capital
- Year audit conducted
- Audit paid for by factory or agent (vs. brand)
- Unannounced audit
- Full audit or re-audit
- Number of auditors
- Audit team’s average age
- Factory’s 1st, 2nd, 3rd ... audit
- Buyer’s country
H1: Ongoing relationships

*Will auditors who return to the same factory cite fewer violations?*

1. Socialization: sympathetic to company’s perspective (“go native”)
2. Cognitive: bounded rationality vs. fresh eyes
3. Corruption: side payments?

**Finding:** Audits yield fewer violations when conducted by an audit team containing a member of the factory's previous audit team.

H2: Auditor experience

*Are more experienced auditors are better able to identify violations?*

- Individual experience curve:
  - Learn “tricks of the trade”
  - Identify more violations
- Marginal gains decline over time
  - Only so many tricks
  - Battle fatigue

**Finding:** Audits conducted by audit teams containing auditors with more experience yield more violations but at a decreasing rate.
Graph of Auditor Experience Results

As the audit team’s maximum tenure increases, labor violations recorded increase at a decreasing rate.

H3: Professionalization

Will professionalism constrain auditor discretion and deter temptations to succumb to conflicts of interest?

- Education inculcates ethics and norms of the profession
- Professionalism an “island of virtue”
- Professionalism improves efficacy of government labor inspections

✓ Finding A: Audits conducted by auditors with more in-house audit skills training yield more violations but at a decreasing rate.

✗ Finding B: Audits conducted by auditors with a graduate degree yield no more violations than audits conducted by auditors with less formal education.
H4: Gender

Prior literature on female (vs. male) work style & cognitive approach:

- ♀ more persistent at pursuing assigned tasks → diligence
- ♀ more perceptive of emotional content in expressions → detection
- ♀ more likely to be strict rule-followers → recording

Interpersonal dynamics of gender-diverse teams:

- Access more information from team members
- Consider a broader range of issues
- Studies show mix of male and female operating, decision-making and leadership styles led to better performance

Information access:

- ♀ better able to access information from female workers
- ♂ better able to access information from male factory managers

Gender Findings: The Importance of Women on Audit Teams

✓ All-Female Teams: Audits conducted by all-female teams yield more violations than those conducted by all-male teams.

✓ Gender-Diverse Teams: Audits conducted by gender-diverse audit teams yield more violations than audits conducted by all-male teams (but not more than all-female teams).
Monitoring the Monitors

Summary of our results
Audits yield more violations when conducted by audit teams...
1. new to the factory
2. with more auditing experience
3. with more in-house audit skills training
4. that include at least one female

Questions for you
a. Which findings resonate with you?
b. Which findings surprise you?
c. What else do you think leads to more accurate auditing?

Study #2: How can audits improve working conditions?

What audit features lead to fewer violations in the future?

Controlling for factors associated with auditor bias, our preliminary results suggest more rapid improvement occurs when:
✓ The prior audit team had more audit skills training (quality)
✓ The prior audit team was onsite longer (quantity)
✓ The prior audit was announced (vs. unannounced)

Question for you
• What other audit or auditor attributes do you think lead to improved working conditions?
Future directions

Please help us orient our future research to the most relevant managerial questions:

- What are the most important questions and issues surrounding supplier codes-of-conduct that you think should be researched?
- In other words: What questions do you want answered?

For more information...


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