Incomplete Disclosure: Evidence of Signaling and Countersignaling

Online Appendix

Benjamin B. Bederson, Ginger Zhe Jin, Phillip Leslie,
Alexander J. Quinn, Ben Zou
Appendix Figures and Tables

Figure A: Examples of Offline Posting

Note: Pictures were taken in October 2013.
Figure B: Mean Number of Violations by Year-Quarter

Mean violation by year–season

Note: Each line represents the mean number of violations for inspections that took place in a specific year-quarter for each letter grade.

Figure C: Average Disclosure Status by Year-Quarter and Imputed Grade

Note: Each line represents the average disclosure rate for inspections with a specific imputed grade.
Table A: Disclosure by Imputed Grade - Half Grades Defined within ZIP Code

<table>
<thead>
<tr>
<th>depvar = disclosure in current inspection</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( A^+ ) in current inspection (( \beta_{A^+} ))</td>
<td>0.335***</td>
<td>0.254***</td>
<td>0.227***</td>
<td>0.265***</td>
<td>0.298***</td>
<td>0.321***</td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.050)</td>
<td>(0.037)</td>
<td>(0.036)</td>
<td>(0.037)</td>
<td>(0.034)</td>
<td>(0.032)</td>
</tr>
<tr>
<td>( A^- ) in current inspection (( \beta_{A^-} ))</td>
<td>0.380***</td>
<td>0.293***</td>
<td>0.250***</td>
<td>0.307***</td>
<td>0.326***</td>
<td>0.363***</td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.027)</td>
<td>(0.040)</td>
<td>(0.038)</td>
<td>(0.039)</td>
<td>(0.037)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>( B^+ ) in current inspection (( \beta_{B^+} ))</td>
<td>0.193***</td>
<td>0.116***</td>
<td>0.084**</td>
<td>0.131***</td>
<td>0.169***</td>
<td>0.185***</td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.028)</td>
<td>(0.038)</td>
<td>(0.036)</td>
<td>(0.037)</td>
<td>(0.036)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>( B^- ) in current inspection (( \beta_{B^-} ))</td>
<td>0.139***</td>
<td>0.076**</td>
<td>0.044</td>
<td>0.089**</td>
<td>0.124***</td>
<td>0.138***</td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.025)</td>
<td>(0.035)</td>
<td>(0.033)</td>
<td>(0.034)</td>
<td>(0.035)</td>
<td>(0.024)</td>
</tr>
<tr>
<td>( C/D^+ ) in current inspection</td>
<td>0.087***</td>
<td>0.039</td>
<td>0.033</td>
<td>0.054*</td>
<td>0.086***</td>
<td>0.077***</td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.021)</td>
<td>(0.030)</td>
<td>(0.029)</td>
<td>(0.029)</td>
<td>(0.029)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>mean WSUMVIOL of own past inspections</td>
<td>-0.015***</td>
<td>-0.010**</td>
<td>-0.011***</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.002)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>stdev WSUMVIOL of own past inspections</td>
<td>0.003</td>
<td>-0.001</td>
<td>0.009</td>
<td>0.015***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.007)</td>
<td>(0.003)</td>
<td>(0.006)</td>
<td>(0.005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mean WSUMVIOL of ZIP restaurants</td>
<td>-0.043***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.010)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fraction of ZIP restaurants in first batch</td>
<td>0.050</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.105)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of restaurants in ZIP (( \times 1,000 ))</td>
<td>-0.304***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.019)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( A ) in previous inspection</td>
<td>0.107***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.020)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( B ) in previous inspection</td>
<td>0.040**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.016)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>latest disclosing grade is ( A )</td>
<td>0.417***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.011)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( A^+ ) in previous inspection (( \phi_{A^+} ))</td>
<td>0.137***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.037)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( A^- ) in previous inspection (( \phi_{A^-} ))</td>
<td>0.151***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.027)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( B^+ ) in previous inspection (( \phi_{B^+} ))</td>
<td>0.085***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.026)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( B^- ) in previous inspection (( \phi_{B^-} ))</td>
<td>0.048*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.026)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C/D^+ ) in previous inspection</td>
<td>0.061**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \text{SE} )</td>
<td>(0.030)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The sample includes last observed inspections in the post-GC period. Half grades are defined relative to the median WSUMVIOL of all the disclosed inspections in the same letter grade in the same ZIP code. All columns also include a dummy indicating whether the restaurant belongs to the first batch, a dummy indicating whether the restaurant is listed on Yelp, and a dummy indicating whether it belongs to a restaurant chain, and the number of consumer observable violations. Observations for restaurants in ZIP codes that contain fewer than 3 disclosed inspections in any letter grade are dropped. Standard errors reported in parentheses are clustered at the ZIP code level. * \( p < 0.1 \), ** \( p < 0.05 \), *** \( p < 0.01 \).
<table>
<thead>
<tr>
<th>OBSVIOL</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food-contact surfaces: cleaned and sanitized</td>
</tr>
<tr>
<td>1</td>
<td>Consumer advisory provided for raw or undercooked foods</td>
</tr>
<tr>
<td>1</td>
<td>Food properly labeled; original container</td>
</tr>
<tr>
<td>1</td>
<td>Insects, rodents and animals not present; no unauthorized persons</td>
</tr>
<tr>
<td>1</td>
<td>Personal cleanliness</td>
</tr>
<tr>
<td>1</td>
<td>Food and non-food contact surfaces cleanable, properly designed, constructed and used</td>
</tr>
<tr>
<td>1</td>
<td>Warewashing facilities: installed, maintained and used; test strips</td>
</tr>
<tr>
<td>1</td>
<td>Non-food contact surfaces clean</td>
</tr>
<tr>
<td>1</td>
<td>Toilet facilities: properly constructed, supplied, and cleaned</td>
</tr>
<tr>
<td>1</td>
<td>Garbage and refuse properly disposed; facilities maintained</td>
</tr>
<tr>
<td>1</td>
<td>Physical facilities installed, maintained, and clean</td>
</tr>
<tr>
<td>1</td>
<td>Adequate ventilation and lighting; designated areas used</td>
</tr>
<tr>
<td>0</td>
<td>Food received at proper temperature</td>
</tr>
<tr>
<td>0</td>
<td>Food in good condition, safe, and unadulterated</td>
</tr>
<tr>
<td>0</td>
<td>Required records available: shellstock tags, parasite destruction</td>
</tr>
<tr>
<td>0</td>
<td>Food separated and protected</td>
</tr>
<tr>
<td>0</td>
<td>Proper disposition of returned, previously served, reconditioned, and unsafe food</td>
</tr>
<tr>
<td>0</td>
<td>Proper cooking time and temperature</td>
</tr>
<tr>
<td>0</td>
<td>Proper reheating procedures for hot holding</td>
</tr>
<tr>
<td>0</td>
<td>Proper cooling time and temperature</td>
</tr>
<tr>
<td>0</td>
<td>Proper hot holding temperatures</td>
</tr>
<tr>
<td>0</td>
<td>Proper cold holding temperatures</td>
</tr>
<tr>
<td>0</td>
<td>Proper cold holding temperatures</td>
</tr>
<tr>
<td>0</td>
<td>Proper date marking and disposition</td>
</tr>
<tr>
<td>0</td>
<td>Time as a public health control: procedures and record</td>
</tr>
<tr>
<td>0</td>
<td>Pasteurized foods used; prohibited foods not offered</td>
</tr>
<tr>
<td>0</td>
<td>Food additives: approved and properly used</td>
</tr>
<tr>
<td>0</td>
<td>Toxic substances properly identified, stored, and used</td>
</tr>
<tr>
<td>0</td>
<td>Compliance with variance, specialized process, and HACCP plan</td>
</tr>
<tr>
<td>0</td>
<td>Pasteurized eggs used where required</td>
</tr>
<tr>
<td>0</td>
<td>Water and ice from approved source</td>
</tr>
<tr>
<td>0</td>
<td>Variance obtained for specialized processing methods</td>
</tr>
<tr>
<td>0</td>
<td>Proper cooling methods used; adequate equipment for temperature control</td>
</tr>
<tr>
<td>0</td>
<td>Plant food properly cooked for hot holding</td>
</tr>
<tr>
<td>0</td>
<td>Approved thawing methods used</td>
</tr>
<tr>
<td>0</td>
<td>Thermometers provided and accurate</td>
</tr>
<tr>
<td>0</td>
<td>Contamination prevented during food preparation, storage, and display</td>
</tr>
<tr>
<td>0</td>
<td>Wiping cloths: properly used and stored</td>
</tr>
<tr>
<td>0</td>
<td>Washing fruits and vegetables</td>
</tr>
<tr>
<td>0</td>
<td>In-use utensils: properly stored</td>
</tr>
<tr>
<td>0</td>
<td>Utensils, equipment, and linens: proper stored, dried, and handled</td>
</tr>
<tr>
<td>0</td>
<td>Single-use and single-service articles: properly stored and used</td>
</tr>
<tr>
<td>0</td>
<td>Gloves used properly</td>
</tr>
<tr>
<td>0</td>
<td>Hot and cold water available; adequate pressure</td>
</tr>
<tr>
<td>0</td>
<td>Plumbing installed; proper backflow devices</td>
</tr>
<tr>
<td>0</td>
<td>Sewage and waste water properly disposed</td>
</tr>
</tbody>
</table>