Abstract

We employ a regression discontinuity design (RDD) to identify the causal effects of unionization of a customer on its supplier’s payout policies. We find that dependent suppliers respond by reducing their total dividends (common dividends) by 0.7% (0.9%) of total assets and decreasing their dividend yields by 1.9 percentage points. These effects are even larger when either a customer (1) is more important to its supplier, (2) has greater market power, and (3) has had a long-term business relationship with the supplier, or the supplier has (1) low market power, (2) high specific investments, and (3) high ex ante cost stickiness. We also find direct evidence of an increase in cost-stickiness for dependent suppliers after labor unionization at their major customers. This increase may be due to a decrease in the operating flexibility of their newly unionized customers. Overall, the increase in supplier’s cost stickiness explains why customer unionization decreases supplier’s dividend payout.

Motivation

We estimate local linear regressions within a small window around the voting cutoff point of 0.5 using the optimal bandwidths selected by the data-driven method of Calonico et al. (2020).

Hypothesis: Cost Stickiness Effect

Hypothesis: Suppliers respond to unionization at a major customer firm by reducing their dividend payouts.

- In the supply chain, customers can help suppliers manage costs by reducing both SG&A expenses and inventory costs.
- Following labor unionization, unionized customer firms face greater cost stickiness and higher operating inflexibility.
- As a result, suppliers also face an increase in cost stickiness regarding both the SG&A costs and operating costs.
- Therefore, suppliers reduce their dividend payouts in the current period because they may be unable to sustain the higher dividend payouts in the future (He et al. 2020).

Results

- We find that suppliers reduce their dividend yields by 1.9 percent, and total dividends (common dividends) by 0.7 and 0.9 percent of total assets.
- These results are robust to an alternative method of optimal bandwidth selection and the exclusion of financial crises.
- The effects are larger for more important customers,
- customers with greater market power,
- customers with longer relationship with the supplier,
- suppliers with lower market power,
- suppliers with higher specific investment, and
- suppliers with higher ex ante cost stickiness.

Data and Methods

- We construct a dataset that consists of 1,203 union elections in 308 firms, affecting 1,975 dependent supplier firms, i.e., suppliers that depend on at least 10% of their sales on the unionizing customers.
- A union wins if the vote share for the union is at least 50 percent of the total vote cast, which enables a sharp RDD approach.

\[
\text{Union} = \begin{cases} 
1, & \text{if Vote share} \geq 0.5 \\
0, & \text{if Vote share} < 0.5
\end{cases}
\]

- Using RDD, we compare the dividend payouts of suppliers with unionizing customers to suppliers without unionizing customers.
- We estimate local linear regressions within a small window around the voting cutoff point of 0.5 using the optimal bandwidths selected by the data-driven method of Calonico et al. (2020).
- We use three different measures of payout policies including dividend yield (dividend per share / stock price), total dividend (total dividend / total assets), and common dividend (common dividend / total assets).

Table 1. Local Linear RDD Estimates of Supplier Dividend Payout

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dividend Yield</th>
<th>Total Dividend</th>
<th>Common Dividend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union</td>
<td>-0.019**</td>
<td>-0.007***</td>
<td>-0.009***</td>
</tr>
<tr>
<td>Observations</td>
<td>3,292</td>
<td>1,767</td>
<td>2,609</td>
</tr>
<tr>
<td>Kernel Distribution</td>
<td>Triangular</td>
<td>Triangular</td>
<td>Triangular</td>
</tr>
<tr>
<td>Optimal Bandwidth</td>
<td>0.170</td>
<td>0.131</td>
<td>0.141</td>
</tr>
</tbody>
</table>

Mechanism

- If suppliers have a sticky cost function even before a union election at their major customer, they may be affected more by such events.
- We only observe a negative and significant effect of customer unionization on supplier dividend payouts in the group of suppliers with higher cost-stickiness.
- We estimate local linear regressions in which the dependent variables are the three measures (SG&A, operating cost, and total cost) of cost stickiness one year after customer unionization.
- We find that customer unionization increases ex post cost stickiness of suppliers.

Table 2. Local Linear RDD Estimates of Ex Post Cost-Stickiness of Supplier

<table>
<thead>
<tr>
<th>Variable</th>
<th>SG&amp;A Cost Stickiness</th>
<th>Operating Cost Stickiness</th>
<th>Total Cost Stickiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union</td>
<td>0.283*</td>
<td>0.136***</td>
<td>0.272***</td>
</tr>
<tr>
<td>Observations</td>
<td>1853</td>
<td>1393</td>
<td>1189</td>
</tr>
<tr>
<td>Kernel Distribution</td>
<td>Triangular</td>
<td>Triangular</td>
<td>Triangular</td>
</tr>
<tr>
<td>Optimal Bandwidth</td>
<td>0.111</td>
<td>0.089</td>
<td>0.076</td>
</tr>
</tbody>
</table>

Conclusions

- This paper examines the causal effect of labor unionization of customer firms on their dependent suppliers’ dividend payouts using a sharp RDD approach.
- Dependent suppliers reduce their dividend payouts due to their increased cost stickiness.

References