Poison Pills and Their Effect on Shareholder Return

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Methodology
To construct my sample of 22 companies, I utilized Bloomberg to identify companies from the S&P 500, the NASDAQ, and the Russell 1000 that currently had a poison pill in place. I then supplemented my data with several companies from Hurt (2016) to complete my sample. To then determine whether or not the event generated cumulative abnormal returns (CARs), I compared the returns of my companies to the returns of the S&P 500, CRSP value-weighted returns, and CRSP equally-weighted returns for the same time period. To calculate, I utilized the Eventus software via Wharton Research Data Services (WRDS). Eventus is an event study program that utilizes stock data found within the Center for Research in Security Prices (CRSP) databases. Using this data, I found statistically significant CARs for the equally-weighted and value-weighted market model, and the equally-weighted market adjusted model listed below. Ten short-term event windows were studied for statistical significance.

<table>
<thead>
<tr>
<th>Model</th>
<th>Index</th>
<th>Market Model</th>
<th>Equal Weighted</th>
<th>Market Model</th>
<th>Value Weighted</th>
<th>Market Adjusted</th>
<th>Equal Weighted</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Event Window</th>
<th>Event Adjusted Returns, Equally-Weighted Index using Estimation Window</th>
<th>[0,+1]</th>
<th>[1,+2]</th>
<th>[2,+3]</th>
<th>[3,+4]</th>
<th>[0,+10]</th>
<th>[0,+30]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean CAR</td>
<td>-1.75%</td>
<td>4.77%</td>
<td>-1.95%</td>
<td>-1.84%</td>
<td>-0.78%</td>
<td>-0.49%</td>
<td>-1.54%</td>
</tr>
<tr>
<td>Std Csect 2</td>
<td>-0.663 (0.507)</td>
<td>1.548</td>
<td>-1.835</td>
<td>-2.044</td>
<td>-0.295</td>
<td>-0.183</td>
<td>-1.252</td>
</tr>
<tr>
<td>Generalized</td>
<td>-0.260 (0.795)</td>
<td>1.020</td>
<td>-0.260</td>
<td>-0.673</td>
<td>1.020</td>
<td>-0.687</td>
<td>-1.540</td>
</tr>
<tr>
<td>Sign G2</td>
<td>-23.500 (0.458)</td>
<td>44.500</td>
<td>-31.500</td>
<td>-27.500</td>
<td>8.500</td>
<td>-10.500</td>
<td>-41.500</td>
</tr>
</tbody>
</table>

Conclusions
The purpose of this event study was to further progress the research on shareholders rights plans and their effects on stock price. Some of the results of this study are in line with prior research, notably Hitzelberger’s (2017) “What Effect do Poison Pills Have on Shareholders Value?”. My study found positive mean cumulative abnormal return for the periods (0, +30) and (+4, +15) of roughly 7.10% and 4.72%.

Areas for Future Research
1. Delve deeper into the event window (-2, +2) since the findings differed from some prior literature.
2. Perhaps the findings were skewed due to the addition of the NOL poison pills from Hurt (2016). Dividing the sample into subsets based on the type of shareholder rights plans might lead to some fascinating results.
3. Examine wider event windows. The event window (0, +30) produced statistically significant returns of 6.32% and 7.89%. What would an even wider event window’s returns look like?

References

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