Rothschild’s Ten Lessons

Lesson 1: No agreement & a dominant strategy

<table>
<thead>
<tr>
<th></th>
<th>DA</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA</td>
<td>3, 3</td>
<td>1, 4</td>
</tr>
<tr>
<td>A</td>
<td>4, 1</td>
<td>2, 2</td>
</tr>
</tbody>
</table>

TABLE 1. A dominant strategy (P&G, U)

4 = Very High, 3 = High, 2 = Medium, 1 = Low

If you have a dominant strategy and no opportunity to agree on another course of action with your opponent, then play that strategy.
Lesson 2: No agreement & your rival has a dominant strategy

<table>
<thead>
<tr>
<th></th>
<th>DA</th>
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<tbody>
<tr>
<td><strong>P &amp; G</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DA</td>
<td>3, 3</td>
<td>1, 4</td>
</tr>
<tr>
<td>A</td>
<td>4, 1</td>
<td>0, 2</td>
</tr>
</tbody>
</table>

**TABLE 2.** Only one firm has a dominant strategy

4 = Very High, 3 = High, 2 = Medium, 1 = Low, 0 = Very Low

If you don’t have a dominant strategy but your opponent does, and there is no opportunity to agree on another course of action with your opponent, then expect her to play her dominant strategy and do the best you can in the circumstances.
Lesson 3: No agreement & no dominant strategies → signalling

\[ U \]

\[
\begin{array}{c|cc|c}
 & \text{Hot} & \text{Cold} \\
\hline
\text{Hot} & 1, 1 & 3, 3 \\
\text{Cold} & 3, 3 & 1, 1 \\
\end{array}
\]

TABLE 3. No dominant strategy → signalling?

3 = High, 1 = Low

If neither you nor your opponent has a dominant strategy, and there is no opportunity to agree on another course of action, then select, and signal your commitment to, a clear strategy to encourage your opponent to behave in a way you’d prefer.
Lesson 4: Your credible threat

TABLE 4. The only credible threat

5 = High, 4 = Medium, 3 = Low,
2 = Very Low, 1 = Zero, 0 = Losses

The only credible threat is the one which would be in your interest to carry out, if necessary.
Lesson 5: Credibility through commitment

Commitment to make a threat credible can pay dividends in the long run.

<table>
<thead>
<tr>
<th>P&amp;G</th>
<th>$U$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In</td>
</tr>
<tr>
<td>Hi P</td>
<td>1, 4</td>
</tr>
<tr>
<td>Lo P</td>
<td>3, 0</td>
</tr>
</tbody>
</table>

TABLE 5. Credibility through commitment
Lesson 6: Subsidies can be good ... or bad

<table>
<thead>
<tr>
<th></th>
<th>In</th>
<th>Out</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P&amp;G</strong></td>
<td>−5(20), −5</td>
<td>80(105), 0</td>
</tr>
<tr>
<td><strong>In</strong></td>
<td>0, 80</td>
<td>0, 0</td>
</tr>
</tbody>
</table>

**TABLE 6.** Subsidies as a good idea
An investment can be profit-increasing if it discourages entry, but costly if your potential competitors are lower-cost than you are.

**TABLE 7.** Subsidies as a bad idea

<table>
<thead>
<tr>
<th></th>
<th>In</th>
<th>Out</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P&amp;G</strong></td>
<td>$-5(20), 5$</td>
<td>$80(105), 0$</td>
</tr>
<tr>
<td><strong>In</strong></td>
<td>$0, 80$</td>
<td>$0, 0$</td>
</tr>
</tbody>
</table>
Lesson 10: Tying one’s hands might actually tie one’s opponent’s too

\[
\begin{array}{c|cc}
 & \text{Hi P} & \text{Lo P} \\
\hline
\text{Hi P} & 100, 100 & 80, 140 \\
\text{Lo P} & 175, 75 & 85, 80 \\
\end{array}
\]

\[U\]

**TABLE 8.** Price war as a dominant strategy
TABLE 9. Avoiding a price war by tying oneself

A firm which appears to be tying its own hands may actually be tying those of its opponent as well.
Ten Lessons from Rothschild.

(See the Reading by Rothschild in the Package.)

1. If you have a dominant strategy and no opportunity to agree on another course of action with your opponent, then play that strategy.

2. If you don’t have a dominant strategy but your opponent does, and there is no opportunity to agree on another course of action with your opponent, then expect her to play her dominant strategy and do the best you can in the circumstances.

3. If neither you nor your opponent has a dominant strategy, and there is no opportunity to agree on another course of action, then select, and signal your commitment to, a clear strategy to encourage your opponent to behave in a way you’d prefer.

4. The only credible threat is the one which would be in your interest to carry out, if necessary.
5. *Commitment* to make a threat credible can pay dividends in the long run.

6. An investment can be profit-increasing if it discourages entry, but costly if your potential competitors are lower-cost than you are.

7. Always take your opponent’s threat seriously if implementation is his dominant strategy.

8. A credible threat is not always a deterrent.

9. A threat which lacks credibility in the short run may be credible in the long run.

10. A firm which appears to be tying its own hands may actually be tying those of its opponent as well.