15.963 Managerial Accounting and Control

Spring 2007

Prof. Mozaffar Khan

MIT Sloan School of Management
Main Line vs. Basinger

Selected Filmography

Kim Basinger
- The Sentinel (2006)
- 8 Mile (2002)
- L.A. Confidential (1997)
- The Getaway (1994)
- Batman (1989)

Sherilyn Fenn
- Novel Romance (2006)
- Dream Warrior (2004)
- Darkness Falls (1999)
- Outside Ozona (1998)
- Boxing Helena (1993)
- Backstreet Dreams (1990)
Main Line vs. Basinger

- Evaluate the defense argument that Mazzoccoe “has a duty under the law to minimize his loss, and this does not include going out and making a picture knowing you are $2m short.
- At what stage in the negotiations did Basinger withdraw?
  - If late, it is possible some costs were contractual obligations (such as rights to script) at the time, and these obligations were assumed with the presumption of Basinger participating.
Main Line vs. Basinger

- What were Mazzocone’s options following Basinger’s withdrawal?
  - Do not make movie – this assumes all costs sunk.
  - Make with another actress – this assumes some cost recoverability.

- How does this relate to example in previous class about airline pricing?

- Evaluate the following claim: “at the time of Basinger’s withdrawal, Mazzocone was faced with a short run decision.”

- Does loss minimization imply not making the movie, as suggested by the defense?
Main Line vs. Basinger

- Evaluate the net profit differential idea used by the plaintiff’s attorney.
  - Idea is that even if movie with Fenn does better than expected, movie with Basinger would have done proportionately better.
  - How movie with Fenn will do will become observable at some point.
    - Assume waiting is costless.
    - Why can Main Line not wait to sue Basinger till this uncertainty is resolved?
    - This should reduce estimation errors.
Main Line vs. Basinger

- Suppose movie with Fenn ends up making $10m profit for Main Line, and at this time studio sues Basinger. Evaluate the strength of their case.
- Now what do you think of the profit differential idea?
  - Basinger’s attorney probably should have stalled for time.

- How are the “net profit” in tables 1 and 2, and the “gross profit” in table 3, related?
  - They are essentially the same: revenues to producer, minus production costs.
  - So plaintiff’s expert actually seems to be using conservative revenue figures.
Main Line vs. Basinger

- Is the comparison of revenues for other Basinger vs. Fenn films relevant?
  - It allows an assessment of revenues with and without.
  - Be careful to only include movies in which both were leads.
  - Revenue attribution much less reliable for movies in which they play supporting roles.
    - E.g., plaintiff’s expert did not exclude Never Say Never Again and The Natural, in which Basinger had supporting roles.
Main Line vs. Basinger

- Is the $1.7m advance by a Main Line partner against domestic sales relevant?
  - Suggests that domestic sales were not expected to be zero for Fenn, as assumed in Plaintiff expert’s testimony.
  - What is a reasonable amount to include as domestic sales for Fenn?
  - Probably one-to-one with foreign pre-sales.
Main Line vs. Basinger

- Is the $3m domestic sales for Basinger relevant, given that the deal had not been finalized when Basinger withdrew?
- What about the $800k of “probable” foreign pre-sales?
  - Both are probably reliable.
  - What is probably important is that these were likely, rather than that they were not contractually agreed on.
Main Line vs. Basinger

- Should revenues beyond pre-sales amounts have been included by plaintiff’s expert?
  - Predictability, even at short horizons, is notoriously poor, so these figures would be too unreliable.
  - Fact that plaintiff uses only pre-sale figures reinforces this point – they likely suspected that unreliable figures would impair their overall credibility.
Main Line vs. Basinger

- Is Basinger’s salary of $3m for Final Analysis relevant?
  - Salary can used as measure of box office drawing power.
    - If so, then ratio of Basinger to Fenn salaries might be used as one input in assessing ratio of revenues with Basinger and Fenn.
  - This may be a very noisy assumption, given that Basinger’s salary jumped from $1m to $3m.
Main Line vs. Basinger

- Are there other factors that drive salaries, such as joint star power with leading men?
  - E.g., if $3m is because of star power synergies with leading man in Final Analysis, then $3m may not be a representative salary for Basinger.

- Broader point here is again one of revenue attribution.
Main Line vs. Basinger

- What is missing from the information regarding production costs? What would you ask for if you were in the jury box, or an expert witness for the defense?

- The nature of the costs –
  - Variable vs. fixed?
    - What are the incremental production costs of a movie for MainLine?
Main Line vs. Basinger

- Discretionary vs. non-discretionary?
  - Would this be reliable, since plaintiff is likely expert in this regard?
- Committed vs. avoidable?
  - This seems to get at the notion discussed above.

This information could have swayed the jury, but apparently defense expert thought profit sharing argument was stronger.
Main Line vs. Basinger

- Are the profit sharing rules relevant?
  - Yes, Main Line is asking for damages based on its lost profits. The profit sharing rules suggest that Main Line would need impossibly high revenues to earn what its expert claims.
Main Line vs. Basinger

- Is SFAS 53 relevant?
  - No. It relates to the timing of profit recognition in the financial reports.
  - Eventually the accounting profits will equal the economic profits, and timing of accounting profits is not an issue here.

- What are reasonable numbers for maximum and minimum damages?
Main Line vs. Basinger

- Takeaways from this case:
  - Minimizing losses does not necessarily imply not undertaking projects with expected losses.
    - If the losses are expected after some costs become unavoidable, it might make sense to proceed and recover some of these costs.
  - Contractual disputes over significant revenues and costs are common, but revenue and cost estimates (especially the latter) are rife with assumptions.
Main Line vs. Basinger

- It is important to understand the nature of the costs involved – variable or fixed, committed or avoidable – in order to assess their relevance.
  - This case could have gone the other way had this information been made available.
Precision Worldwide
What are the alternatives?

Stay out of plastic rings?
- More a question of timing – when to sell plastic rings. Never selling plastic rings does not seem like a viable option.

Stop selling steel rings?
- What is the earliest stop date?

Sell steel rings until plastic rings available. Dispose of remaining steel rings and steel inventory?

Stay out of plastic rings until all steel ring inventory is sold? Dispose of steel inventory.
Manufacture more steel rings with excess labor in the Summer?

Continue to manufacture more steel rings in the Fall until all steel inventory converted.

Sell plastic rings only in France. Continue to sell steel rings in other markets?
Precision Worldwide

What are the relevant costs in Table A?

Is the allocated fixed overhead relevant?
Elimination of Applied Fixed Overhead

<table>
<thead>
<tr>
<th>Item</th>
<th>Plastic Rings</th>
<th>Steel Rings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling Price</td>
<td>1350</td>
<td>1350</td>
</tr>
<tr>
<td>Material</td>
<td>$17.65</td>
<td>$321.90</td>
</tr>
<tr>
<td>Direct Labor</td>
<td>$65.50</td>
<td>$196.50</td>
</tr>
<tr>
<td>Direct Overhead</td>
<td>$52.40</td>
<td>$157.20</td>
</tr>
<tr>
<td>Administrative Overhead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Cost</td>
<td>$135.55</td>
<td>$675.60</td>
</tr>
<tr>
<td>Contribution Margin</td>
<td>$1,214.45</td>
<td>$674.40</td>
</tr>
</tbody>
</table>
Are materials costs relevant in calculating the production cost of steel rings?

If the rings are produced in the summer, what is the relevant labor cost?
## Precision Worldwide

<table>
<thead>
<tr>
<th>Item</th>
<th>Plastic Rings</th>
<th>Steel Rings No Labor Savings</th>
<th>Steel Rings Labor Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling Price</td>
<td>1350</td>
<td>1350</td>
<td>1350</td>
</tr>
<tr>
<td>Material</td>
<td>$17.65</td>
<td>$196.50</td>
<td>$58.95</td>
</tr>
<tr>
<td>Direct Labor</td>
<td>$65.50</td>
<td>$157.20</td>
<td>$47.16</td>
</tr>
<tr>
<td>Direct Overhead</td>
<td>$52.40</td>
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<td></td>
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<tr>
<td>Administrative Overhead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incremental costs</td>
<td>$135.55</td>
<td>$353.70</td>
<td>$106.11</td>
</tr>
<tr>
<td>Contribution</td>
<td>$1,214.45</td>
<td>$996.30</td>
<td>$1,243.89</td>
</tr>
</tbody>
</table>
What is the effect of unequal lives on relative contributions?
## Difference in Lives of Rings

<table>
<thead>
<tr>
<th>Item</th>
<th>Plastic Rings</th>
<th>Steel Rings</th>
<th>Steel Rings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Variable Cost</td>
<td>Opportunity Cost</td>
</tr>
<tr>
<td>Selling Price</td>
<td>$1,350.00</td>
<td>$1,350.00</td>
<td>$1,350.00</td>
</tr>
<tr>
<td>Differential Costs</td>
<td>$135.55</td>
<td>$675.60</td>
<td>$106.11</td>
</tr>
<tr>
<td>Contribution (per 100)</td>
<td>$1,214.45</td>
<td>$674.40</td>
<td>$1,243.89</td>
</tr>
<tr>
<td>Replacement Frequency</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Equivalent Contribution</td>
<td>$1,214.45</td>
<td>$2,697.60</td>
<td>$4,975.56</td>
</tr>
</tbody>
</table>
But the price of steel rings should drop.

What is the minimum price at which selling the existing steel rings still makes sense?
Assume Plastic Rings Sell for $1,350.00

<table>
<thead>
<tr>
<th>Item</th>
<th>Plastic Rings</th>
<th>Steel Rings</th>
<th>Steel Rings</th>
<th>Plastic Rings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Variable Cost</td>
<td>Opportunity Cost</td>
<td></td>
</tr>
<tr>
<td><strong>Selling Price</strong></td>
<td>$1,350.00</td>
<td>$979.21</td>
<td>$409.72</td>
<td>$1,350.00</td>
</tr>
<tr>
<td>Differential Costs</td>
<td>$135.55</td>
<td>$675.60</td>
<td>$106.11</td>
<td>$135.55</td>
</tr>
<tr>
<td>Contribution (per 100)</td>
<td>$1,214.45</td>
<td>$303.61</td>
<td>$303.61</td>
<td>$1,214.45</td>
</tr>
<tr>
<td>Replacement Frequency</td>
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<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Equivalent Contribution</td>
<td>$1,214.45</td>
<td>$1,214.44</td>
<td>$1,214.44</td>
<td>$1,214.45</td>
</tr>
</tbody>
</table>
How much steel ring inventory will be on hand by mid-September?
## Precision Worldwide

<table>
<thead>
<tr>
<th>Item</th>
<th>Rings</th>
<th>Cost</th>
<th>Months of inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previously Finished Rings</td>
<td>15,100</td>
<td>$167,293.00</td>
<td>5.5</td>
</tr>
<tr>
<td>Raw Steel</td>
<td>34,500</td>
<td>$110,900.00</td>
<td>12.5</td>
</tr>
<tr>
<td>Total</td>
<td>49,600</td>
<td>$278,193.00</td>
<td>18.0</td>
</tr>
</tbody>
</table>
What is the maximum potential loss to PWI if all steel rings are scrapped in September?
Maximum Loss if All Steel Rings Scrapped in September

<table>
<thead>
<tr>
<th></th>
<th>Steel Rings</th>
<th>Plastic Rings</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Rings Sold</td>
<td>49,600</td>
<td>12,400</td>
<td>-</td>
</tr>
<tr>
<td>At $1,350.00</td>
<td>$669,600.00</td>
<td>$167,400.00</td>
<td>$502,200.00</td>
</tr>
<tr>
<td><strong>Cost:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convert 34,500 at $106.11</td>
<td>$36,607.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Manufacture 12,400 at $135.55</td>
<td>-</td>
<td>$16,808.00</td>
<td>$19,799.00</td>
</tr>
<tr>
<td><strong>Contribution</strong></td>
<td>$632,993.00</td>
<td>$150,592.00</td>
<td>$482,401.00</td>
</tr>
</tbody>
</table>
Should these be sold in markets other than France?

How long is this strategy sustainable, given economic integration (EU)?

Will customers resent being sold steel rings when plastic rings are available elsewhere?

What is the competitive environment
One solution might be as follows:

- Continue selling steel rings till mid-September, then introduce plastic rings in France at least.
- Assess how long steel rings can be sold in all markets, keeping in mind competitive pressures and potential loss of customer goodwill.
- It seems likely that they can continue to sell steel rings for six months after mid-September, so this will allow them to deplete existing inventory of finished rings.
If they can sell steel rings for about 18 months (unlikely) after mid-September, then use Summer labor (at incremental cost of 30%) to convert.

Convert in two stages: some this Summer, to get to next Summer, and then re-evaluate strategy next Summer.

Otherwise dispose of raw steel inventory. It is a sunk cost.
Takeaways:

- Determining the relevant cost is not always easy because it depends on the decision horizon and the opportunity set.
- Sunk costs are irrelevant for decision making.