SESSION 10: VALUE ENHANCEMENT
Price Enhancement versus Value Enhancement

Aswath Damodaran

Figure 1: Cumulative abnormal returns earned around the announcement date by firms changing their names to .com names.

NAME THAT STOCK

New Markets, New Names
In the bull market, adding dot-com to a company name made a stock soar. Lately those zippy new monikers are disappointing.

New Name, Higher Price
But the stocks still get a bounce when dot-com goes away. Chart shows returns in the days before and after the name change.

Sources: Thomson Datastream; P. Feigenson, J. B. Cooper, I. M. Ochs, and J. E. Cary; Ajay Kheerasa, Virginia Univ.; Ajay Patel, Wake Forest Univ.
The Paths to Value Creation.. Back to the determinants of value..

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Value Creation 1: Increase Cash Flows from Assets in Place

- More efficient operations and cost cutting: Higher Margins
- Divest assets that have negative EBIT
- Reduce tax rate
  - moving income to lower tax locales
  - transfer pricing
  - risk management

Revenues
  * Operating Margin
  = EBIT
- Tax Rate * EBIT
  = EBIT (1-t)
+ Depreciation
- Capital Expenditures
- Chg in Working Capital
  = FCFF

- Live off past over-investment
- Better inventory management and tighter credit policies

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Value Creation 2: Increase Expected Growth

*Price Leader versus Volume Leader Strategies*

Return on Capital = Operating Margin * Capital Turnover Ratio

- Reinvest more in projects
- Increase operating margins
- Do acquisitions
- Increase capital turnover ratio

Reinvestment Rate

* Return on Capital

= Expected Growth Rate
Value Creating Growth... Evaluating the Alternatives..

Modes of organic growth vary in value creation intensity—consumer goods industry

<table>
<thead>
<tr>
<th>Category of growth</th>
<th>Shareholder value created for incremental $1 million of growth/ target acquisition size</th>
<th>Revenue growth/ acquisition size necessary to double typical company’s share price, $ billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>New-product market development</td>
<td>1.75–2.00</td>
<td>5–6</td>
</tr>
<tr>
<td>Expanding an existing market</td>
<td>0.30–0.75</td>
<td>13–33</td>
</tr>
<tr>
<td>Maintaining/growing share in a growing market</td>
<td>0.10–0.50</td>
<td>20–100</td>
</tr>
<tr>
<td>Competing for share in a stable market</td>
<td>−0.25–0.40</td>
<td>n/m–25</td>
</tr>
<tr>
<td>Acquisition (25th to 75th percentile result)</td>
<td>−0.5–0.20</td>
<td>n/m–50</td>
</tr>
</tbody>
</table>
III. Building Competitive Advantages: Increase length of the growth period

*Increase length of growth period*

Build on existing competitive advantages

Find new competitive advantages

- Brand name
- Legal Protection
- Switching Costs
- Cost advantages
IV. Reduce Cost of Capital

- Outsourcing
- Flexible wage contracts & cost structure
- Reduce operating leverage
- Change financing mix
- Cost of Equity \( \frac{E}{D+E} \) + Pre-tax Cost of Debt \( \frac{D}{D+E} \) = Cost of Capital

- Make product or service less discretionary to customers
- Changing product characteristics
- More effective advertising
- Match debt to assets, reducing default risk
- Swaps
- Derivatives
- Hybrids

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**SAP: Status Quo**

**Current Cashflow to Firm**
- EBIT(1-t): 1414
- - Nt CpX: 831
- - Chg WC: -19
  - = FCFF: 602
  - Reinvestment Rate = 812/1414 = 57.42%

**Expected Growth in EBIT (1-t)**
- .5742*.1993 = 11.44%

**Expected Growth**
- .5742*.1993 = 11.44%

**Stable Growth**
- g = 3.41%; Beta = 1.00;
- Debt Ratio = 20%
- Cost of capital = 6.62%
- ROC = 6.62%; Tax rate = 35%
- Reinvestment Rate = 51.54%

**Terminal Value**
- 10 = 1717/(.0662-.0341) = 53546

**Cost of Capital (WACC)**
- 8.77% (0.986) + 2.39% (0.014) = 8.68%

**Op. Assets** 31,615
- + Cash: 3,018
- - Debt: 558
- - Pension Lian: 305
- - Minor. Int.: 55
- = Equity: 34,656
- - Options: 180
- Value/Share: 106.12

**Debt ratio increases to 20%**
- Beta decreases to 1.00

On May 5, 2005, SAP was trading at 122 Euros/share
## SAP: Optimal Capital Structure

<table>
<thead>
<tr>
<th>Debt Ratio</th>
<th>Beta</th>
<th>Cost of Equity</th>
<th>Bond Rating</th>
<th>Interest rate on debt</th>
<th>Tax Rate</th>
<th>Cost of Debt (after-tax)</th>
<th>WACC</th>
<th>Firm Value (G)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>1.25</td>
<td>8.72%</td>
<td>AAA</td>
<td>3.76%</td>
<td>36.54%</td>
<td>2.39%</td>
<td>8.72%</td>
<td>$39,088</td>
</tr>
<tr>
<td>10%</td>
<td>1.34</td>
<td>9.09%</td>
<td>AAA</td>
<td>3.76%</td>
<td>36.54%</td>
<td>2.39%</td>
<td>8.42%</td>
<td>$41,480</td>
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<tr>
<td>20%</td>
<td>1.45</td>
<td>9.56%</td>
<td>A</td>
<td>4.26%</td>
<td>36.54%</td>
<td>2.70%</td>
<td>8.19%</td>
<td>$43,567</td>
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<tr>
<td>30%</td>
<td>1.59</td>
<td>10.16%</td>
<td>A-</td>
<td>4.41%</td>
<td>36.54%</td>
<td>2.80%</td>
<td>7.95%</td>
<td>$45,900</td>
</tr>
<tr>
<td>40%</td>
<td>1.78</td>
<td>10.96%</td>
<td>CCC</td>
<td>11.41%</td>
<td>36.54%</td>
<td>7.24%</td>
<td>9.47%</td>
<td>$34,043</td>
</tr>
<tr>
<td>50%</td>
<td>2.22</td>
<td>12.85%</td>
<td>C</td>
<td>15.41%</td>
<td>22.08%</td>
<td>12.01%</td>
<td>12.43%</td>
<td>$22,444</td>
</tr>
<tr>
<td>60%</td>
<td>2.78</td>
<td>15.21%</td>
<td>C</td>
<td>15.41%</td>
<td>18.40%</td>
<td>12.58%</td>
<td>13.63%</td>
<td>$19,650</td>
</tr>
<tr>
<td>70%</td>
<td>3.70</td>
<td>19.15%</td>
<td>C</td>
<td>15.41%</td>
<td>15.77%</td>
<td>12.98%</td>
<td>14.83%</td>
<td>$17,444</td>
</tr>
<tr>
<td>80%</td>
<td>5.55</td>
<td>27.01%</td>
<td>C</td>
<td>15.41%</td>
<td>13.80%</td>
<td>13.28%</td>
<td>16.03%</td>
<td>$15,658</td>
</tr>
<tr>
<td>90%</td>
<td>11.11</td>
<td>50.62%</td>
<td>C</td>
<td>15.41%</td>
<td>12.26%</td>
<td>13.52%</td>
<td>17.23%</td>
<td>$14,181</td>
</tr>
</tbody>
</table>
SAP: Restructured

Current Cashflow to Firm

- EBIT(1-t): 1414
- Net CPX: 831
- Chg WC: -19
= FCFF: 602
Reinvestment Rate = 812/1414 = 57.42%

Expected Growth in EBIT (1-t)

- EBIT(1-t): 1414
= FCFF: 602
Reinvestment Rate = 812/1414 = 57.42%

Expected Growth:

- EBIT: 2,543
= FCFF: 552

Growth decreases gradually to 3.41%

Terminal Value:

10 = 1898/(.0627-.0341) = 66367

Cost of Capital (WACC) = 10.57% (0.70) + 2.80% (0.30) = 8.24%

Cost of Equity: 10.57%

Riskfree Rate: Euro riskfree rate = 3.41%

Beta: 1.59

Cost of Debt: (3.41% + 1.00%) (1 - .3654) = 2.80%

Return on Capital: 19.93%

Expected Growth:

- EBIT: 2,543
= FCFF: 552

Reinvest more in emerging markets

- Cash: 3,018
- Debt: 558
- Pension Lian: 305
- Minor. Int.: 55
= Equity: 40157
- Options: 180
Value/Share: 126.51

On May 5, 2005, SAP was trading at 122 Euros/share

Use more debt financing.

Stable Growth:

- EBIT: 2,543
= FCFF: 552

Reinvest more in emerging markets

Use more debt financing.