HP + Compaq = ?

A Walk-Through of a Merger Valuation

HP’s Major Concerns

- Need to attack the Enterprise market more aggressively
  - Primary engine for value creation: $800BN market in 2000 growing at 12% from 2000 to 2004
- Need to adapt more quickly the direct selling model (a la Dell) in their PC business
- Need to continue to invest in Imaging & Printing business

Source: HP
How the PC Industry Revolutionized

- Direct-selling: shifting the power of the value chain
- Dell’s ability to turnover inventory at a much faster rate dramatically changed the cost-structure necessary to survive in the PC-making industry

The numbers tell the same story:

<table>
<thead>
<tr>
<th>($BN)</th>
<th>Dell</th>
<th>HWP</th>
<th>CPQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (ttm)</td>
<td>31.2</td>
<td>44.2</td>
<td>33.6</td>
</tr>
<tr>
<td>EBITDA (ttm)</td>
<td>1.8</td>
<td>2.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Net Income (ttm)</td>
<td>1.3</td>
<td>0.7</td>
<td>-0.6</td>
</tr>
<tr>
<td>Operating Margin</td>
<td>5.7%</td>
<td>2.9%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>4.0%</td>
<td>1.6%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>ROA (ttm)</td>
<td>9.3%</td>
<td>2.2%</td>
<td>-2.4%</td>
</tr>
<tr>
<td>ROE (ttm)</td>
<td>24.4%</td>
<td>5.1%</td>
<td>-4.8%</td>
</tr>
</tbody>
</table>

Source: Yahoo! Finance

Background on Mergers
Key Questions

- Can the bidder-firm achieve objectives without merger?
  - Strategic alliances vs. mergers
- Will synergy ever be achieved?
  - Empirical studies by McKinsey & Co. say “rarely”
- Did the bidder overpay?
  - Any value created can easily be wiped out

A Dangerous Game

- McKinsey & Co.’s study of 58 acquisition programs between 1972 and 1983
  - Did return on amount invested exceed cost of capital?
  - Did acquisition help parent company outperform competition?

<table>
<thead>
<tr>
<th>Failed both tests</th>
<th>48%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failed at least one</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: Investment Valuation, 2nd Edition
Need More Evidence?

- McKinsey & Co. studied 115 merges in the UK and US in the 1990s
  - 60% earned returns on capital less than the cost of capital
  - 23% earned excess returns
- KPMG examined 700 of the most expensive deals between 1996 and 1998
  - 17% created value
  - 30% were value-neutral
  - 53% destroyed value

Source: Investment Valuation, 2nd Edition

Valuating a Merger: All About Synergy
Synergies Explained (Briefly)

Value generated from:

- Diversification: lowering the discount rate
- Operating synergy: increasing margins and growth
- Financial synergy: increasing the cash balance

\[ V(AB) > V(A) + V(B) \]

Or

\[ V(AB) = V(A) + V(B) + V(S) \]

State of the Industry
Hewlett-Packard’s Playing Markets


HP + Compaq: PCs? Not Really…

Source: HP
Enterprise Hardware Market

- Five main players
  - IBM
  - Sun
  - Dell
  - HP
  - Compaq

- Three main platforms
  - UNIX (8% growth through 2005)
  - Linux (38% growth through 2005)
  - NT (15% growth through 2005)

Source: IDC

Enterprise Storage Market

- IDC expects 6.1% growth through 2005
  - Implementation and integration due to popularity of storage area networks (SANs)
  - $13BN through 2005
  - Japan, Europe and Asia/Pacific fastest growing
  - United States still primary revenue source

Source: IDC
Network Management Market

- Annual growth of 20% over the next four years...
- Reaching $21 billion by 2005
- 100+ vendors will probably lead to consolidation

Source: Bear Stearns

HP + Compaq
Reasons for Merger

- Both HP and Compaq suffer similar risks of “standing still”
  - Ability to respond effectively to changing customer requirements inhibited by small product mix
  - Current operating model is competitively disadvantaged; cost structure is too high
  - Growth in Imaging and Printing inhibited by lower investment base and small enterprise opportunities
- HP Business/Industry is dynamic
- Merger will enhance business segments as individual and complimentary operations

Strategic Synergies

- ENTERPRISE
  - Combines leadership in separate market segments
  - Will create “End-to-End Solutions” platform and better service customers
- ACCESS (PCs)
  - Maturing/Consolidating Industry
  - Provide flexibility and innovation to meet customer demand
  - Increase profitability by cutting costs
  - Employ hybrid distribution capabilities
- IMAGING & PRINTING (IPS)
  - Increase investment base to capture higher growth
  - Highly complimentary R&D capabilities (~4bil in 2001)
  - Increase enterprise-related account opportunities
Example: Enterprise

- **Servers**
  - CPQ (Himalaya) fault-tolerance technology and growth in standard servers
  - HWP’s strength (SuperDome) in mid-high end UNIX servers

- **Storage**
  - CPQ’s leading position + HWP’s leadership in High-End and Integration

- **Operating Margins for Enterprise Systems**
  - 9.2% (up from HP’s comparable -3.2% in 2001)

**CY2000 Market Share Projections for Combined Firm**

- NT Servers: 40.5%
- UNIX Servers: 31%
- Storage: 26%
- Services: 2%

---

Top 10 Challenges

1. Challenges of integrating global operations
2. International nature of business
3. Execution of distribution model
4. Development and transition of new Product Mix
5. Exposure to increased competitive pressures
Top 10 Challenges (cont.)

6. Weak economy may inhibit merger at critical stage

7. Current and future weakening of credit rating

8. Customer / Market Uncertainties

9. Regulatory approval / restrictions

10. Fixed Ratio of 0.635

Scenario Analysis:
HP’s Case
Carly’s Big Party Plans

- 5.0% sales erosion
- 8.1% EBIT margin (resulting from $2.5BN cost savings)
- 7.0% net income margin
- 10.7% ROC
- Post-merger share price: $24.85

Synergy Calculations

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWP Intrinsic Firm Value</td>
<td>36,695,889</td>
</tr>
<tr>
<td>CPQ Intrinsic Firm Value</td>
<td>10,682,654</td>
</tr>
<tr>
<td>Value of HWP + CPQ without Synergy</td>
<td>47,378,542</td>
</tr>
<tr>
<td>Value of HWP + CPQ with Synergy</td>
<td>82,564,626</td>
</tr>
<tr>
<td>Value of Synergy</td>
<td>35,186,083</td>
</tr>
<tr>
<td>Price Paid by HWP</td>
<td>25,000,000</td>
</tr>
<tr>
<td>Increase in Value from Merger</td>
<td>10,186,083</td>
</tr>
</tbody>
</table>

Scenario Analysis:
Walter Hewlett’s Case
The Walter Hewlett Files

- The son of the co-founder of HP opposes the merger
- Suggests focusing on HP’s Imaging & Printing business
  - Focus on increasing firm value through the development of Imaging & Printing business
- Believes management’s assumptions are unrealistic

Why Walter Disapproves

- 15.0% sales erosion
- 5.2% EBIT margin
- 4.7% net income margin
- 7.2% ROC
- Post-merger share price: $15.49

Synergy Calculations

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWP Intrinsic Firm Value</td>
<td>36,695,889</td>
</tr>
<tr>
<td>CPQ Intrinsic Firm Value</td>
<td>10,682,654</td>
</tr>
<tr>
<td>Value of HWP + CPQ without Synergy</td>
<td>47,378,542</td>
</tr>
<tr>
<td>Value of HWP + CPQ with Synergy</td>
<td>54,295,049</td>
</tr>
<tr>
<td><strong>Value of Synergy</strong></td>
<td><strong>6,916,507</strong></td>
</tr>
<tr>
<td>Price Paid by HWP</td>
<td>25,000,000</td>
</tr>
<tr>
<td><strong>Increase in Value from Merger</strong></td>
<td><strong>(18,083,493)</strong></td>
</tr>
</tbody>
</table>
Execution Issues

Qualitative Issues to Note

- Competition
  - As HP and Compaq smooth out their merger, the industry – and their competitors – move on to bigger and better things
- Blending in
  - The merged company needs to be a “hybrid enterprise”
- Convincing customers
  - Customers want a clear “migration path,” especially with regards to discontinued offerings
- Meshing cultures
  - HP: “deliberative, thorough decision-making”
  - Compaq: “fast decision-making and marketing”

Will the Merger Work?