Lesson One: ADR

- American Depository Receipts
  - Foreign shares traded in American markets
  - Level III shares traded on NYSE/Nasdaq
    - Highest transparency levels
    - Follows GAAP standards

- Examples
  - Nokia (NOK/Finnish)
  - Teva Pharmaceuticals (TEVA/Israel)
  - Infosys (INFY/Indian)
  - AU Optronics (AUO/Taiwan)
Lesson Two: TWSE

- Taiwan Stock Exchange
  - Overweight in technology sector
  - Highly correlated to Nasdaq
  - High regulations for foreign investment
    - Forces price premiums on ADRs
- Dominant Firms
  - Taiwan Semiconductor (TSMC)
  - United Microelectronics (UMC)

Company Specifics

- Founded on September 2001
  - Merger between Acer Display + Unipac Opto
- Third largest TFT-LCD panel manufacturer
  - Samsung (#1)
  - LG.Philips (#2)
- Most fabs are located in Taiwan
  - One labor-intensive facility in China
Why LCDs?

- Flat and thin screens
- Lighter weight
- Portability
- Higher resolution
- Stable picture quality with no flickering
- Lower power consumption
- Lower radiation

Lesson Three: Fabless & Foundry

- Fabless
  - Can design, but lacks production capability
  - Example Nvidia, ATI, Novatek
- Foundry
  - Production facilities for the fabless
  - Example TSMC, UMC
- Two-in-One Combos
  - Example Intel, AMD, IBM, AUO
Lesson Four: keiretsu & chaebol

• Korean business infrastructure heavily mimics that of Japan
  – Japan:keiretsu::Korea:chaebol
  – “A grouping or family of affiliated companies that form a tight-knit alliance to work toward each other's mutual success”
  – EXAMPLE Samsung (Korea), Mitsubishi (Japan)

Primary Competitors

• Samsung Electronics
  – Already announced production of G7 facility
  – Joint venture with Sony
• LG.Philips
  – Backing from both Korea and Japan
• Chi Mei Optoelectronics
  – Primary Taiwanese competitor
  – Spending US$3.5BN to built G7 factory to make 40+ inch televisions
Current Worries

• Imbalances of supply/demand
  – TV prices not decreasing
  – TV demand not increasing
  – Demand only visible in Japan
• Inability to finance long-term CapEx
• The Koreans take over (the world)

Panel Shipment Breakdown

<table>
<thead>
<tr>
<th></th>
<th>4Q03</th>
<th>1Q04</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monitor</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15”</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>17”</td>
<td>41%</td>
<td>39%</td>
</tr>
<tr>
<td>19”</td>
<td>6%</td>
<td>13%</td>
</tr>
<tr>
<td>Total</td>
<td>63%</td>
<td>65%</td>
</tr>
<tr>
<td><strong>Notebook</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14”</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>15”</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>33%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Television</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20”</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>26” &amp; 30”</td>
<td>&lt;1%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>4%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Nepotistic Relations

- BenQ: 15% ownership
  - LCDs, handsets
  - Accounts for 19% of AUO sales
- UMC: 10% ownership
  - Second largest Taiwanese foundry
  - $15BN market capitalization (2nd in Taiwan)

Television: The New Frontier

- Generation 6 technology necessary
  - Tai Chung’s Fab L10
    - Date of completion: Q2 2005
    - 60,000 sheets
Operations Management

• Improving gross margins due to better product mix
• Downward pricing pressure as products become mainstream
• Factories take big CapEx bites
  – 7G fab costs US$3BN

Lesson Five: EM Valuations

• DCF Valuations
  – Dependent on future cashflows
  – Dependent on reliable discount rate

• Relative Valuations
  – Short-term viewpoint
  – Comparable, real-time value
Recent Developments

• Possible issuance of 500MN local shares
  – Translates to 50MN ADR shares (10:1 ratio)
  – Current shares at 450MN
• Western confusion
  – “We are cautiously optimistic.”
• Increase in capital expenditures
  – Projected $2.5BN CapEx in 2004
• Issuance/CapEx: Probably for 7G plant

The Secondary Effect

• As of February 9, 2004
  – Price: $15.50
  – Shares: 403M
  – FY04 Net Income: $647M
  – P/E: 9.65x
• As of February 12, 2004 w/ anticipated offering
  – Price: $14.00
  – Shares: 453M
  – FY04 Net Income: $647M
  – P/E: 9.80x
### P/E Valuation

- Long-term P/E multiple: 16x
  - Taiwan is becoming more stable
  - AUO is dominant in Taiwan LCD market
  - Market premium for classy product
  - Historically trading at around 16x
- P/E Valuation (w/ secondary offering)
  - FY04 EPS: $1.18
  - 16x EPS = $22.85
  - Potential Upside: 63.2%

### DCF Valuation

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount Rate</td>
<td>14.00%</td>
</tr>
<tr>
<td>Hypergrowth</td>
<td>Varies</td>
</tr>
<tr>
<td>Long-Term Profit Margin</td>
<td>10.00%</td>
</tr>
<tr>
<td>Stable Growth</td>
<td>3.50%</td>
</tr>
<tr>
<td><strong>Intrinsic Value</strong></td>
<td><strong>$17.12</strong></td>
</tr>
<tr>
<td>Upside Potential</td>
<td>27.65%</td>
</tr>
</tbody>
</table>

Proceed with cautious optimism…
### Final Note

**SHORT-TERM**  
*Strong Buy*  
- Great momentum  
- Solid niche product  
- Highly undervalued compared to competitors

**LONG-TERM**  
*Hold/Buy*  
- Uncertain future  
- Possible inability to finance CapEx  
- Smaller than Samsung and LG.Philips