Future of Financial Services
Focus on Banks, Brokers & Asset Managers
Ruchi Madan
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The Players & What They Do

• **Diversified Banks:** Citigroup, JP Morgan, Bank of America, Wachovia, (UBS, CSFB, DB)

• **Regional Banks:** Wells Fargo, Washington Mutual, US Bancorp, SunTrust

• **Diversified Investment Banks:** Morgan Stanley, Merrill Lynch

• **Investment Banks:** Goldman Sachs, Lehman

• **Asset Managers:** Capital Group, Blackrock/Merrill, Fidelity, JP Morgan, AXA, Morgan Stanley, Wellington, hedge funds, etc
Drivers of Business Models

• Retail Banking: Deposits & cross sell. Power in distribution.

• Investment Bkg: Innovation, risk taking & risk mgmt, and culture.

• Asset Mgmt: Investment performance.
## Brokers Net Revenue Mix (2005)

<table>
<thead>
<tr>
<th></th>
<th>MS</th>
<th>MER</th>
<th>GS</th>
<th>LEH</th>
<th>CAGR (3-yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cap Mkts &amp; IB</td>
<td>56%</td>
<td>53%</td>
<td>79%</td>
<td>86%</td>
<td></td>
</tr>
<tr>
<td>FI Trading</td>
<td>45%</td>
<td>46%</td>
<td>43%</td>
<td>58%</td>
<td>26%</td>
</tr>
<tr>
<td>Equity Trading</td>
<td>32%</td>
<td>32%</td>
<td>38%</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>FI U/W</td>
<td>7%</td>
<td>10%</td>
<td>5%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Equity U/W</td>
<td>6%</td>
<td>7%</td>
<td>4%</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>10%</td>
<td>6%</td>
<td>10%</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>Pvt Client and AM</td>
<td>30%</td>
<td>48%</td>
<td>12%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Private Client</td>
<td>19%</td>
<td>41%</td>
<td>na</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Asset Management</td>
<td>11%</td>
<td>7%</td>
<td>12%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Other / Card</td>
<td>14%</td>
<td>-2%</td>
<td>9%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Company Reports

Other revenues for GS includes Principal Investments revenues and Sumitomo mark-to-market

LEH's equity trading revenues exclude $160m of private equity gains
## Fixed Income Trading Revenue Growth

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>CAGR (3-yr)</th>
<th>Rev Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goldman Sachs</td>
<td>4,680</td>
<td>5,596</td>
<td>7,322</td>
<td>8,484</td>
<td>22%</td>
<td>35%</td>
</tr>
<tr>
<td>Lehman</td>
<td>2,619</td>
<td>4,391</td>
<td>5,739</td>
<td>7,334</td>
<td>41%</td>
<td>56%</td>
</tr>
<tr>
<td>Morgan Stanley</td>
<td>3,245</td>
<td>5,356</td>
<td>5,567</td>
<td>6,782</td>
<td>28%</td>
<td>46%</td>
</tr>
<tr>
<td>Merrill Lynch</td>
<td>3,783</td>
<td>5,049</td>
<td>5,213</td>
<td>6,324</td>
<td>19%</td>
<td>34%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14,327</strong></td>
<td><strong>20,392</strong></td>
<td><strong>23,841</strong></td>
<td><strong>28,924</strong></td>
<td><strong>26%</strong></td>
<td><strong>42%</strong></td>
</tr>
</tbody>
</table>
Fixed Income Capital Markets
Growth Both Cyclical & Secular

Cyclical drivers include low rates and

Tight Credit Spreads

Currency Fluctuations

Source: Citigroup Fixed Income Research
IG: Citigroup Broad Investment-Grade Index vs 10-Yr Treasury
HY: Citigroup High Yield Market Index vs 10-Yr Treasury

Source: Bloomberg
Fixed Income Capital Markets
Growth Both Cyclical and Secular

Secular Trends Include:

- Client demand for risk taking and risk mgmt.
- Europe and Asia...growth of debt markets, growth in consumer debt, and therefore, structured products, infrastructure build, etc.
- FI is the business with greatest innovation and structuring.

<table>
<thead>
<tr>
<th>Products</th>
<th>1996</th>
<th>2005</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage-related</td>
<td>1.6</td>
<td>5.8</td>
<td>15%</td>
</tr>
<tr>
<td>Corporate</td>
<td>2.0</td>
<td>5.0</td>
<td>11%</td>
</tr>
<tr>
<td>Treasury</td>
<td>3.3</td>
<td>4.1</td>
<td>2%</td>
</tr>
<tr>
<td>Money market</td>
<td>1.3</td>
<td>3.3</td>
<td>11%</td>
</tr>
<tr>
<td>Federal agency</td>
<td>0.9</td>
<td>2.6</td>
<td>13%</td>
</tr>
<tr>
<td>Municipal</td>
<td>1.3</td>
<td>2.2</td>
<td>6%</td>
</tr>
<tr>
<td>Asset-backed</td>
<td>0.3</td>
<td>1.9</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10.7</strong></td>
<td><strong>24.9</strong></td>
<td><strong>10%</strong></td>
</tr>
</tbody>
</table>

Source: Bond Market Association (Data as of November 30)

Credit Default Swap Mkt Growth

Source: International Swaps and Derivatives Association, Notional Amounts
Equities Capital Markets

- Traditional revenues secularly under pressure.

### Total NYSE Volume vs Average Commission Per Share

Source: Securities Industry Association and NYSE

2005 average commission per share as of 6/30/2005
Equity Capital Markets

- Hedge funds keeping traditional business alive.
- Model is now risk taking, prime brokerage, and electronic trading, but not all firms are prepared.
- Future:
  - Cash bus will consolidate, but less than investment banks hope.
  - Firms will bring more intelligence to the trading floors and they’ll take more risk.
  - Opportunity to innovate further to improve customers’ performance (with derivatives/structured products/new approach from research).
  - Re-equitization trade.
Investment Banking

• Only 10-15% of revenues. Lower profit margins, high ROE (but capital usage rising)
• Cyclically strong, but secularly weakening.
• Job of investment banker is changing--need to cross sell.
• Boutiques gaining share.
Asset Management

• Very attractive, high growth, high return business.
• Can’t be successful without good investment performance.
• Investors have more choices...mutual funds, hedge funds, SMAs, index, ETFs, etc.
• Changing economics for Wall St’s cash business has implications for traditional asset mgrs.
• Industry will continue to consolidate.
Hedge Funds

• Huge revenue stream for investment banks.
• Industry will shake out and fee structure will decline for all but very high performers.
• Larger hedge funds looking for new areas of investment. Blurring lines with private equity firms.
Universal Banks vs Pure Plays

• Skill, execution, and innovation is much better at pure investment banks, implying they’ll continue to prosper if they have good risk taking and risk management skills.
• Universal Bank model can be a good model, with many natural synergies, but it hasn’t been executed well.
Future Winning Business Models

- Manufacture or distribute? Better to be an asset manager or brokerage firm?
- Better to be a full service investment bank or a boutique?
- Better to be a small bank or national bank?
- Pure plays favored today. Citi/Legg, Blackrock/Merril, JPMorgan/Bank of NY.
- Future may be greater vertical integration… opportunity to marry origination and distribution.
Consolidation

• Unlikely that large investment banks will merge with one another.
• Banks will continue to merge with other banks and may buy investment banks.
• US banks will become more global, in part through acquisition.
Pick The Right Firm!

- Consolidating market share in many businesses means there will be winners and losers.
- Stock-based compensation.
- Pick the right manager, find mentors, work hard and add value.