Today’s Content

- Earnings quality
  - Net earnings = Revenues - Expenses
  - Where to look:
    - Sales & services
    - Cost of goods sold
    - Operating expenses
    - Non-operating items
    - Other issues
  - Some examples

Earnings Quality

- Net earnings = Revenues - Expenses
  - Improving net earnings means either more revenue or less expenses!
- Earnings quality is affected by:
  - Non-consistent calculations
  - Unusual & non-recurring revenues & expenses
  - Illogical choices, changes & estimates
  - Aggressive vs. conservative accounting
Revenues

- Net earnings = Revenues - Expenses
  - Improving net earnings means either more revenue or less expenses
  - More revenue can be generated in a variety of ways:
    - Selling more products & services
    - Raising prices on items sold
    - Selling assets & investments
    - Counting unusual items as revenue
    - Extraordinary items

Expenses

- Net earnings = Revenues - Expenses
  - Improving net earnings means either more revenue or less expenses
  - Lower expenses can be engineered in a variety of ways:
    - Cutting back on expenses & more effectively managing costs
    - Changing the way COGS is calculated
    - Capitalizing costs instead of expensing them
    - Extraordinary items

Earnings Management

- Earnings can also be “managed”
  - Transferring additional costs to bountiful years
  - Transferring additional funds to lean years
  - “Cleaning up the Balance sheet”
Earnings Quality
(\textit{where to look})

- Sales & services:
  - Allowance for doubtful accounts
  - Reasons for sales changes
  - Real vs. nominal growth
- Cost of goods sold:
  - Inventory cost flow assumptions
  - Base LIFO layer reductions
  - Loss recognition on write-downs

Earnings Quality
(\textit{where to look})

- Operating expenses:
  - Discretionary expenses:
    - Repair & maintenance
    - Research & development
    - Selling & administrative
  - Depreciation & amortization expenses
    - Methods, estimates & changes
  - Pension expenses & changes in interest rate assumptions

Earnings Quality
(\textit{where to look})

- Non-operating revenue & expenses
  - Gains & losses from the sale of assets
  - Interest income
  - Equity income
  - Loss recognition on write-downs
  - Accounting changes
  - Extraordinary items
Earnings Quality
(where to look)

- Other issues
  - Material changes in the number of shares outstanding
  - Acquisitions and dispositions
  - Reserves

Dell’s Earnings

- How are Dell’s revenues calculated?
  - “Product revenue is recognized when both title and risk of loss transfers to the customer, provided that no significant obligations remain. Provision is made for an estimate of product returns and doubtful accounts, based on historical experience.” (Notes)
  - Therefore, there should be a consistent relationship between rising revenues, accounts receivable, and allowance for doubtful accounts?

Dell’s Revenue Relationships

- Calculation requires obtaining numbers from the Notes to the financial statements (Note 9)
- Vertical analysis:
  - Item: 2001 2000
  - AR as a % of revenue 9% 10%
  - Doubtful acts as a % of accounts receivable 2% 1.6%
  - Reasonably consistent with Dell’s footnote
Dell’s Revenue Relationships
(continued)

• Calculation requires obtaining numbers from the Income stmt., the Balance sheet, and the Notes to the statements
• Horizontal analysis:

<table>
<thead>
<tr>
<th>Item</th>
<th>2001</th>
<th>2000</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue, net</td>
<td>31,888</td>
<td>25,265</td>
<td>26%</td>
</tr>
<tr>
<td>Accts recv (note 9)</td>
<td>2,964</td>
<td>2,652</td>
<td>12%</td>
</tr>
<tr>
<td>Doubtful accts (9)</td>
<td>69</td>
<td>44</td>
<td>7%</td>
</tr>
</tbody>
</table>
• At least all moving in the same direction!

Revenue Changes

• Are revenues increasing because of higher prices or more units sold or both?
  – It depends on the state of the economy, characteristics of the industry, and the company itself
    • During inflation, prices generally rise in relation to the overall rate of inflation?
    • In the computer sales & services industry, however hardware prices tend to fall
    • In the computer sales & services industry, revenue per unit tends to decline
    • Companies continually make changes and adjustments to improve and stay competitive

Dell’s Revenues

• Analyzing Dell’s revenues
  – Requires a knowledge of the industry
  – Requires careful reading of the MD&A
    • “Strong growth in net unit shipments across all regions and products drove revenue increases”
    • “Enterprise systems shipments … grew 47%”
    • “Notebook shipments … grew 52%”
    • “Desktop shipments … grew 22%”
    • “Average revenue per unit sold … decreased 2% … primarily due to price reductions resulting from component cost declines.” (MD&A)
Real vs. Nominal Growth

- A question that often arises is whether revenue is growing in “real” terms after an inflation adjustment or in “nominal” terms as reported
  - Obviously much more important in times of higher inflation

Cost of Revenues

- Remember:
  - The calculation of the Cost of revenues (COGS) is dependent on the cost flow assumption used by the company to match current costs with current revenue
  - Generally, LIFO produces more accurate, higher costs during inflation and therefore lower Net income
    - A more conservative approach considered to produce higher quality earnings!

Costs Related to Inventory

- Base layer LIFO reductions occur when companies are shrinking inventories below a base layer … and since older, lower priced items are used in calculating COGS, the result is higher earnings from operations
- Loss recognition on inventory occurs when a company must write down inventory to the “lower of cost or market”
- Both reduce “earnings quality”
Operating Expenses

- Operating expenses fall into discretionary and other expenses:
  - Discretionary expenses, including Selling & general administrative, Research & development, and Repair & maintenance, can be reduced to improve earnings
  - Other expenses, including Depreciation & amortization and Pension, can be manipulated by changes in methods & estimates and interest rate assumptions

Operating Expenses Analysis

- Operating expenses (overall) should be relatively stable and consistent:
  - Dell:
    - Operating expenses/Net revenue = 11.8%
    - Check the notes for explanations of inconsistency … do they make sense?
    - Companies have been known to capitalize expenses to get them off of the Income stmt.
  - Watch out for "aggressive" accounting for intangible assets … amortization expense

Restructuring & Special Charges

- Restructuring changes usually include:
  - Workforce reductions
  - Closing or consolidation of facilities
  - Lease & agreement terminations
  - Disposal of property & equipment
- Special charges can be anything
  - Charge for impairment of goodwill
- Should be one-time events
  - Be suspicious of frequent charges
Non-Operating Items

- Non-operating revenue & expenses are usually explained in the Notes, but can confuse the financial picture
  - Gains or losses from the sale of assets
  - Interest income
  - Equity income
  - Asset write-downs
  - Accounting changes
  - Extraordinary items

Asset Write-downs

- Write-down of Property, plant & equipment occurs when a fixed asset’s value is impaired in some way
  - Reduces earnings because the write-down is a non-operating expense
  - In future years, the lower valued asset will produce lower depreciation charges thus improving earnings
- The result is lower earnings quality

Extraordinary Items

- Extraordinary items are defined as gains & losses that are both unusual and infrequent
  - In-substance defeasance … is sometimes used to get debt off of the balance sheet and recognize a gain on the transaction
  - Riskless bonds are purchased & put in an irrevocable trust to cover interest & principal payments on an outstanding debt
  - Be suspicious of extraordinary items appearing frequently
Other Issues

- Other issues, usually explained in the Notes, cause problems in comparability of earnings
  - Changes in the number of shares outstanding
  - Acquisitions & dispositions of other companies
    - Watch out for tricks with Goodwill
    - Large restructuring charges
  - Reserve accounts
    - Often used to pad income in lean times
  - Be suspicious!

Summary

- Earnings quality
  - Net earnings = Revenues - Expenses
  - Where to look:
    - Sales & services
    - Cost of goods sold
    - Operating expenses
    - Non-operating items
    - Other issues
  - Understand the industry, read the Notes, do calculations, and be suspicious