Financial Reporting and Analysis

CHAPTER 2

Earnings Announcements

- Key summary measures (pre-audit)
- Often one to six week lag
- Informative to market
- Lacks supporting financial details
GAAP Defined

• *Statements of Financial Accounting Standards*
• *APB Opinions.*
• *Accounting Research Bulletins (ARB).*
• *AICPA pronouncements.* The AICPA issues guidelines for certain topics yet to be addressed by the FASB in its *Statements of Position (SOP)* or for those involving industry-specific matters in its *Industry Audit and Accounting Guidelines.*
• *EITF Bulletins.* *EITF Bulletins* are issued by the FASB’s Emerging Issues Task Force.
• Industry practices.
Environmental Factors

Securities and Exchange Commission

Unions
Investors
AICPA
Politicians
Lenders
Accountants
Others

Provide input to

Financial Accounting Standards Board

Help set

Generally Accepted Accounting Principles
Environmental Factors

Securities and Exchange Commission (SEC)

- Independent, quasi-judicial government agency
- Administer securities regulations & disclosures
- Can modify & set GAAP, if necessary
- Rarely directly challenges FASB
- Major player in global accounting
Environmental Factors

International Financial Reporting Standards (IFRS)

- Set by International Accounting Standards Board
- Not currently accepted in U.S.
- SEC under pressure to accept IAS
Environmental Factors

Managers of Companies

- Main responsibility for fair & accurate reports
- Applies accounting to reflect business activities
- Managerial discretion is necessary in accounting
- Major lobbyist on GAAP
Environmental Factors

Auditing

- SEC requires Audit Report
- Audit opinion can be:
  - clean (fairly presented)
  - qualified (except for)
  - disclaimer (no opinion)
- Check Auditor quality & independence
Environmental Factors

Corporate Governance

- Board of directors oversight
- Audit committee of the board
  - oversee accounting process
  - oversee internal control
  - oversee internal/external audit
- Internal Auditor
Environmental Factors

**Internal Users**
- Managers
- Officers
- Internal Auditors
- Sales Managers
- Budget Officers
- Controller

**External Users**
- Lenders
- Shareholders
- Governments
- Labor Unions
- External Auditors
- Customers
Environmental Factors

Equity Investors

- Active & Speculative Investors rely on financial reports

Creditors

- Solvency & Liquidity analysis relies on financial reports
Environmental Factors

Economic, Industry & Company News

- Impacts current & future financial condition and performance

Voluntary Disclosure

- Many factors encourage voluntary disclosure by managers

Information Intermediaries

- Industry devoted to collecting, processing, interpreting & disseminating company information
- Includes analysts, advisers, debt raters, buy- and sell-side analysts, and forecasters
- Major determinant of GAAP
Desirable Qualities of Accounting Information

- **Relevance** - the capacity of information to affect a decision
- **Reliability** - For information to be reliable it must be verifiable, representationally faithful, and neutral. *Verifiability* means the information is confirmable. *Representational faithfulness* means the information reflects reality, and *neutrality* means it is truthful and unbiased.
Financial Accounting

Important Accounting Principles

- **Historical Cost** - fair & objective values from arm’s-length transactions
- **Accrual Accounting** - recognize revenues when earned, expenses when incurred
- **Materiality** - threshold when information impacts decision making
- **Conservatism** - reporting or disclosing the least optimistic information about uncertain events and transactions
Exhibit 2.2
Relation between Accounting Numbers and Stock Prices

*Graphs depict the R-squared from a regression of stock price on earnings per share and/or book value for all firms available on the Industrial, Full Coverage, and Research Compustat databases.
Limitations of Accounting Numbers

- **Timeliness** - periodic disclosure, not real-time basis
- **Frequency** - quarterly and annually
- **Forward Looking** - limited prospective information
Accruals--The Cornerstone

Case Illustration -- Facts

- Establish company and invest $700 equity
- Purchase plain T-shirts for $5 each
- Fixed screen cost of $100
- Variable print cost of $0.75 per T-shirt
- Sold 25 T-shirts at $10 each for cash
- Sold 25 T-shirts at $10 each on credit
## Case Illustration – Cash Accounting

### Statement of Cash Flows

**Receipts**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-Shirt sales</td>
<td>$250</td>
</tr>
</tbody>
</table>

**Payments**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-Shirt purchases</td>
<td>$500</td>
</tr>
<tr>
<td>Screen purchase</td>
<td>100</td>
</tr>
<tr>
<td>Printing charges</td>
<td>75</td>
</tr>
<tr>
<td>Total payments</td>
<td>$(675)</td>
</tr>
</tbody>
</table>

Net cash outflow: $(425)

### Balance Sheet

**Assets**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$275</td>
</tr>
</tbody>
</table>

**Equity**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Equity</td>
<td>$700</td>
</tr>
<tr>
<td>Less net cash outflow</td>
<td>(425)</td>
</tr>
<tr>
<td>Total equity</td>
<td>$275</td>
</tr>
</tbody>
</table>
## Accruals—The Cornerstone

### Case Illustration – Accrual Accounting

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>Balance Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td><strong>Assets</strong></td>
</tr>
<tr>
<td>T-Shirt sales</td>
<td>Cash</td>
</tr>
<tr>
<td></td>
<td>T-Shirt inventory</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td>Receivables</td>
</tr>
<tr>
<td>T-Shirts costs</td>
<td>Total assets</td>
</tr>
<tr>
<td>50.00</td>
<td></td>
</tr>
<tr>
<td>Screen depreciation</td>
<td></td>
</tr>
<tr>
<td>Printing charges</td>
<td>Equity</td>
</tr>
<tr>
<td>37.50</td>
<td>Beginning equity</td>
</tr>
<tr>
<td>Total expenses</td>
<td>Add net income</td>
</tr>
<tr>
<td>(337.50)</td>
<td>Total equity</td>
</tr>
<tr>
<td>Net income</td>
<td></td>
</tr>
<tr>
<td>$162.50</td>
<td></td>
</tr>
</tbody>
</table>
Accruals--The Cornerstone

Net Income = Operating Cash Flow + Accruals
Revenue Recognition – recognize revenues when

(1) Earned
(2) Realized or Realizable

Expense Matching – match with corresponding revenues

-Product costs
-Period costs
Relation between Cash Flows and Accruals

Operating cash flow (OCF)

-/+ Cash investment & divestment in operating assets

= Free cash flow (FCF)

+/- Financing cash flows (including investment & divestment in financing assets)

= Net cash flow (NCF)
# Accruals--The Cornerstone

## Short-Term and Long-Term Accruals

<table>
<thead>
<tr>
<th>Short-Term Accruals: Yield current assets and current liabilities (also called <em>working capital accruals</em>)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-Term Accruals: Yield non-current assets and non-current liabilities (arise mainly from <em>capitalization</em>)</td>
</tr>
</tbody>
</table>

Note: Analysis research suggests short-term accruals are more useful in company valuation
Accruals--The Cornerstone

Relevance of Cash Flows and Income over a Company’s Life Cycle

Inception | Growth | Maturity | Decline

Financing cash flow | Operating cash flow | Income | Free cash flow

Investing cash flow
## Accruals--The Cornerstone

Comparison of Stock Price, Net Income, and Free Cash Flows

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>5.72</td>
<td>6.19</td>
<td>9.41</td>
<td>17.98</td>
<td>31.88</td>
<td>32.94</td>
<td>37.98</td>
<td>44.41</td>
<td>28.21</td>
<td>37.96</td>
</tr>
<tr>
<td>Net income</td>
<td>0.50</td>
<td>0.36</td>
<td>0.53</td>
<td>0.86</td>
<td>1.06</td>
<td>1.30</td>
<td>1.40</td>
<td>1.52</td>
<td>1.82</td>
<td>2.02</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>(0.40)</td>
<td>(0.59)</td>
<td>0.01</td>
<td>0.32</td>
<td>0.03</td>
<td>0.16</td>
<td>(0.90)</td>
<td>(1.52)</td>
<td>(2.04)</td>
<td>(0.09)</td>
</tr>
<tr>
<td><strong>Wal-Mart</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>11.44</td>
<td>10.19</td>
<td>11.88</td>
<td>19.91</td>
<td>43.00</td>
<td>54.75</td>
<td>56.80</td>
<td>59.98</td>
<td>47.80</td>
<td>53.85</td>
</tr>
<tr>
<td>Net income</td>
<td>0.58</td>
<td>0.60</td>
<td>0.67</td>
<td>0.78</td>
<td>0.99</td>
<td>1.21</td>
<td>1.41</td>
<td>1.49</td>
<td>1.82</td>
<td>2.08</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>(0.27)</td>
<td>(0.36)</td>
<td>0.61</td>
<td>0.86</td>
<td>0.71</td>
<td>0.25</td>
<td>0.11</td>
<td>0.14</td>
<td>0.42</td>
<td>0.94</td>
</tr>
</tbody>
</table>

All figures are split-adjusted dollars per share from Compustat.
Accruals--The Cornerstone

Relation between Stock Prices and Various Income and Cash Flow Measures for a Large Sample of Companies

Exhibit 2.5: Relation between Stock Prices and Various Income and Cash Flow Measures

Analysis using 7,338 firms for the period 1993–2003 from Compustat. Graph depicts R-squared of regressions between end-of-period price and various cash flow and income measures. NIBX = Net income before extraordinary items and discontinued operations; NI = Net income; OCF = Operating cash flow; FCF = Free cash flow; NCF = Net cash flow (change in cash).
Accruals--The Cornerstone

Relation between Stock Returns and both Income and Operating Cash Flows for Different Horizons of a Large Sample of Companies

Exhibit 2.6

Relation between Stock Returns and Both Income (NI) and Operating Cash Flow (OCF) for Different Time Horizons

Accruals--The Cornerstone

Accruals and Cash Flows --- Myths

• Myth: Since company value depends on future cash flows, only current cash flows are relevant for valuation.
• Myth: All cash flows are value relevant.
• Myth: All accruals accounting adjustments are value irrelevant.
• Myth: Cash flows cannot be manipulated.
• Myth: All income is manipulated.
• Myth: It is impossible to consistently manage income upwards in long run.
Accruals--The Cornerstone

Accruals and Cash Flows --- Truths

- Truth: Accrual accounting (income) is more relevant than cash flow.
- Truth: Cash flows are more reliable than accruals.
- Truth: Accrual accounting numbers are subject to accounting distortions.
- Truth: Company value can be determined by using accrual accounting numbers.
Accounting Analysis

Demand for Accounting Analysis

- Adjust for accounting distortions so financial reports better reflect economic reality
- Adjust general-purpose financial statements to meet specific analysis objectives of a particular user
Accounting Analysis

Sources of Accounting Distortions

- **Accounting Standards** – attributed to (1) political process of standard-setting, (2) accounting principles and assumptions, and (3) conservatism
- **Estimation Errors** – attributed to estimation errors inherent in accrual accounting
- **Reliability vs Relevance** – attributed to over-emphasis on reliability at the loss of relevance
- **Earnings Management** – attributed to window-dressing of financial statements by managers to achieve personal benefits
Accounting Analysis

Sources of Analysis Objectives

- Comparatives Analysis – demand for financial comparisons across companies and/or across time
- Income Measurement -- demand for (1) equity wealth changes and (2) measure of earning power. These correspond to two alternative income concepts
  (1) Economic Income (or empirically, economic profit)
  (2) Permanent Income (or empirically, sustainable profit)

Chapter 6 discusses these measures in detail
Accounting Analysis

Earnings Management – Frequent Source of Distortion

Three common strategies:

- **Increasing Income** – managers adjust accruals to increase reported income
- **Big Bath** – managers record huge write-offs in one period to relieve other periods of expenses
- **Income Smoothing** – managers decrease or increase reported income to reduce its volatility
Accounting Analysis

Earnings Management – Motivations

- **Contracting Incentives** -- managers adjust numbers used in contracts that affect their wealth (e.g., compensation contracts)
- **Stock Prices** – managers adjust numbers to influence stock prices for personal benefits (e.g., mergers, option or stock offering)
- **Other Reasons** -- managers adjust numbers to impact (1) labor demands, (2) management changes, and (3) societal views
Accounting Analysis

Earnings Management – Mechanics

- **Incoming Shifting** – Accelerate or delay recognition of revenues or expenses to shift income from one period to another

- **Classificatory Earnings Management** – Selectively classify revenues and expenses in certain parts of the income statement to affect analysis inferences regarding the recurring nature of these items
Accounting analysis involves several inter-related processes and tasks that can be grouped into two broad areas:

- **Evaluating Earning Quality** –
  - Identify and assess key accounting policies
  - Evaluate extent of accounting flexibility
  - Determine the reporting strategy
  - Identify and assess red flags

- **Adjusting Financial Statements** --
  - Identify, measure, and make necessary adjustments to financial statements to better serve one’s analysis objectives; Chapters 3-6 focus on adjusting (recasting) the statements