Financial Statement Analysis
The Interrelationships of the 4 Financial Statements

### Statement of Cash Flows
For the year ended December 31, 20x2

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net cash flows from operating activities</td>
<td>$ 1,470</td>
</tr>
<tr>
<td>Net cash used by investing activities</td>
<td>$(4,100)</td>
</tr>
<tr>
<td>Net cash provided by financing activities</td>
<td>$ 2,750</td>
</tr>
<tr>
<td>Increase in cash balance</td>
<td>$ 120</td>
</tr>
<tr>
<td>Beginning cash balance (12/31/x1)</td>
<td>$ 100</td>
</tr>
<tr>
<td>Ending cash balance (12/31/x2)</td>
<td>$ 220</td>
</tr>
</tbody>
</table>

### Balance Sheet
As of December 31, 20x1

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>$ 16,000</td>
</tr>
<tr>
<td>Cash</td>
<td>$ 100</td>
</tr>
<tr>
<td>Other Current Assets</td>
<td>$ 1,300</td>
</tr>
<tr>
<td>Long-term Investments</td>
<td>$ 3,000</td>
</tr>
<tr>
<td>Long-term Assets</td>
<td>$ 10,000</td>
</tr>
<tr>
<td>Intangible Assets</td>
<td>$ 1,600</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>$ 16,000</strong></td>
</tr>
<tr>
<td>Liabilities and Owner's Equity</td>
<td></td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>$ 1,000</td>
</tr>
<tr>
<td>Long-term Liabilities</td>
<td>$ 4,950</td>
</tr>
<tr>
<td>Joe Owner, Capital</td>
<td>$ 10,050</td>
</tr>
<tr>
<td><strong>Total Liabilities and Equity</strong></td>
<td><strong>$ 16,000</strong></td>
</tr>
</tbody>
</table>

As of December 31, 20x2

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>$ 18,615</td>
</tr>
<tr>
<td>Cash</td>
<td>$ 220</td>
</tr>
<tr>
<td>Other Current Assets</td>
<td>$ 1,195</td>
</tr>
<tr>
<td>Long-term Investments</td>
<td>$ 4,000</td>
</tr>
<tr>
<td>Long-term Assets</td>
<td>$ 11,500</td>
</tr>
<tr>
<td>Intangible Assets</td>
<td>$ 1,700</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>$ 18,615</strong></td>
</tr>
<tr>
<td>Liabilities and Owner's Equity</td>
<td></td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>$ 740</td>
</tr>
<tr>
<td>Long-term Liabilities</td>
<td>$ 6,940</td>
</tr>
<tr>
<td>Joe Owner, Capital</td>
<td>$ 10,935</td>
</tr>
<tr>
<td><strong>Total Liabilities and Equity</strong></td>
<td><strong>$ 18,615</strong></td>
</tr>
</tbody>
</table>

### Income Statement
For the year ended December 31, 20x2

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$ 5,880</td>
</tr>
<tr>
<td>Expenses</td>
<td>$ 4,795</td>
</tr>
<tr>
<td>Net Income</td>
<td>$ 1,085</td>
</tr>
</tbody>
</table>

### Statement of Changes in Owner's Equity
For the year ended December 31, 20x2

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joe Owner, capital, 1/1/x2</td>
<td>$ 10,050</td>
</tr>
<tr>
<td>Plus: Investments by owner</td>
<td>$ -</td>
</tr>
<tr>
<td>Plus: Net Income</td>
<td>$ 1,085</td>
</tr>
<tr>
<td>Less: Withdrawals by owner</td>
<td>$ 200</td>
</tr>
<tr>
<td>Joe Owner, capital, 12/31/x2</td>
<td>$ 10,935</td>
</tr>
</tbody>
</table>
The Interrelationships of the 4 Financial Statements

**Statement of Cash Flows**
- Net Cash Flows, Operating
- +/- Net Cash Flows, Investing
- +/- Net Cash Flows, Financing
- Total Change in Cash

**Balance Sheet** (snapshot of one day)

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>LIABILITIES</th>
<th>OE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>Accounts Payable</td>
<td>Paid-in Capital, end</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>Notes Payable</td>
<td>+ Retained Earnings, end</td>
</tr>
<tr>
<td>- AFDA</td>
<td>- Unearned Revenues</td>
<td>RE, beg</td>
</tr>
<tr>
<td>Inventory</td>
<td></td>
<td>+ Net Income</td>
</tr>
<tr>
<td>Equipment (cost)</td>
<td></td>
<td>- Dividends</td>
</tr>
<tr>
<td></td>
<td></td>
<td>= RE, end</td>
</tr>
<tr>
<td>Land</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Income Statement**
- Revenues
  - CGS (e.g., depreciation expense) (product costs)
  - Gross Profit (Margin)
  - S & A expenses (period costs)
  = Operating Income
- Other expenses (non-operating)
- Net Income
  - EPS
ANALYSIS TOOLS

HORIZONTAL (TREND) ANALYSIS
evaluates a series of financial statement
data over a period of time.

VERTICAL ANALYSIS
expresses each item
in a financial statement
as a percent of a base amount

RATIO ANALYSIS
expresses the relationship among
selected items of financial statement data.
Changes are measured against a base year with the following formula.

\[
\frac{\text{Current year amount} - \text{Base year amount}}{\text{Base year amount}}
\]
# Horizontal Analysis of Balance Sheet

**Quality Department Store Inc.**  
Condensed Balance Sheets  
December 31

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2002</th>
<th>Increase or (Decrease) during 2003</th>
<th>Amount</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>$1,020,000</td>
<td>$945,000</td>
<td>$75,000</td>
<td>7.9%</td>
<td></td>
</tr>
<tr>
<td>Plant assets (net)</td>
<td>800,000</td>
<td>632,500</td>
<td>167,500</td>
<td>26.5%</td>
<td></td>
</tr>
<tr>
<td>Intangible assets</td>
<td>15,000</td>
<td>17,500</td>
<td>(2,500)</td>
<td>(14.3%)</td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>$1,835,000</td>
<td>$1,595,000</td>
<td>$240,000</td>
<td>15.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>$344,500</td>
<td>$303,000</td>
<td>$41,500</td>
<td>13.7%</td>
<td></td>
</tr>
<tr>
<td>Long-term liabilities</td>
<td>487,500</td>
<td>497,000</td>
<td>(9,500)</td>
<td>(1.9%)</td>
<td></td>
</tr>
<tr>
<td>Total liabilities</td>
<td>832,000</td>
<td>800,000</td>
<td>32,000</td>
<td>4.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Stockholders’ Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock, $1 par</td>
<td>275,400</td>
<td>270,000</td>
<td>5,400</td>
<td>2.0%</td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>727,600</td>
<td>525,000</td>
<td>202,600</td>
<td>38.6%</td>
<td></td>
</tr>
<tr>
<td>Total stockholders’ equity</td>
<td>1,003,000</td>
<td>795,000</td>
<td>208,000</td>
<td>26.2%</td>
<td></td>
</tr>
<tr>
<td>Total liabilities and stockholders’ equity</td>
<td>$1,835,000</td>
<td>$1,595,000</td>
<td>$240,000</td>
<td>15.0%</td>
<td></td>
</tr>
</tbody>
</table>
## HORIZONTAL ANALYSIS OF INCOME STATEMENT

**Quality Department Store Inc.**
Condensed Income Statements
For the Years Ended December 31

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2002</th>
<th>Increase or (Decrease) during 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>$2,195,000</td>
<td>$1,960,000</td>
<td>$235,000 12.0%</td>
</tr>
<tr>
<td>Sales returns and allowances</td>
<td>98,000</td>
<td>123,000</td>
<td>$25,000 (20.3%)</td>
</tr>
<tr>
<td>Net sales</td>
<td>2,097,000</td>
<td>1,837,000</td>
<td>$260,000 14.2%</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>1,281,000</td>
<td>1,140,000</td>
<td>$141,000 12.4%</td>
</tr>
<tr>
<td>Gross profit</td>
<td>816,000</td>
<td>697,000</td>
<td>$119,000 17.1%</td>
</tr>
<tr>
<td>Selling expenses</td>
<td>253,000</td>
<td>211,500</td>
<td>$41,500 19.6%</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>104,000</td>
<td>108,500</td>
<td>(4,500) (4.1%)</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>357,000</td>
<td>320,000</td>
<td>$37,000 11.6%</td>
</tr>
<tr>
<td>Income from operations</td>
<td>459,000</td>
<td>377,000</td>
<td>$82,000 21.8%</td>
</tr>
<tr>
<td>Other revenues and gains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest and dividends</td>
<td>9,000</td>
<td>11,000</td>
<td>(2,000) (18.2%)</td>
</tr>
<tr>
<td>Other expenses and losses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>36,000</td>
<td>40,500</td>
<td>(4,500) (11.1%)</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>432,000</td>
<td>347,500</td>
<td>$84,500 24.3%</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>168,200</td>
<td>139,000</td>
<td>$29,200 21.0%</td>
</tr>
<tr>
<td>Net income</td>
<td>$ 263,800</td>
<td>$ 208,500</td>
<td>$ 55,300 26.5%</td>
</tr>
</tbody>
</table>
HORIZONTAL ANALYSIS OF RETAINED EARNINGS STATEMENT

QUALITY DEPARTMENT STORE INC.
Retained Earnings Statement
For the Years Ended December 31

<table>
<thead>
<tr>
<th>Description</th>
<th>2003</th>
<th>2002</th>
<th>Increase or (Decrease) during 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings, January 1</td>
<td>$ 525,000</td>
<td>$ 376,500</td>
<td>$ 148,500</td>
</tr>
<tr>
<td>Add: Net income</td>
<td>$ 263,800</td>
<td>$ 208,500</td>
<td>$ 55,300</td>
</tr>
<tr>
<td></td>
<td>$ 788,800</td>
<td>$ 585,000</td>
<td>$ 203,800</td>
</tr>
<tr>
<td>Deduct: Dividends</td>
<td>$ 61,200</td>
<td>$ 60,000</td>
<td>$ 1,200</td>
</tr>
<tr>
<td>Retained earnings, December 31</td>
<td>$ 727,600</td>
<td>$ 525,000</td>
<td>$ 202,600</td>
</tr>
</tbody>
</table>

The change in January 1 retained earnings is calculated as follows:

\[ \frac{525,000 - 376,500}{376,500} = 39.4\% \]
VERTICAL ANALYSIS

Financial statement elements are measured as a percent of the total.

<table>
<thead>
<tr>
<th>Balance Sheet</th>
<th>Income Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elements are a percent of total assets</td>
<td>Elements are a percent of total sales</td>
</tr>
</tbody>
</table>
QUALITY DEPARTMENT STORE INC.
Condensed Balance Sheets
December 31

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>Percent</th>
<th>2002</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>$1,020,000</td>
<td>55.6%</td>
<td>$ 945,000</td>
<td>59.2%</td>
</tr>
<tr>
<td>Plant assets (net)</td>
<td>800,000</td>
<td>43.6%</td>
<td>632,500</td>
<td>39.7%</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>15,000</td>
<td>0.8%</td>
<td>17,500</td>
<td>1.1%</td>
</tr>
<tr>
<td>Total assets</td>
<td>$1,835,000</td>
<td>100.0%</td>
<td>$1,595,000</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th></th>
<th>2002</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>$ 344,500</td>
<td>18.8%</td>
<td>$ 303,000</td>
<td>19.0%</td>
</tr>
<tr>
<td>Long-term liabilities</td>
<td>487,500</td>
<td>26.5%</td>
<td>497,000</td>
<td>31.2%</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>832,000</td>
<td>45.3%</td>
<td>800,000</td>
<td>50.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th></th>
<th>2002</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stockholders’ Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock, $1 par</td>
<td>275,400</td>
<td>15.0%</td>
<td>270,000</td>
<td>16.9%</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>727,600</td>
<td>39.7%</td>
<td>525,000</td>
<td>32.9%</td>
</tr>
<tr>
<td>Total stockholders’ equity</td>
<td>1,003,000</td>
<td>54.7%</td>
<td>795,000</td>
<td>49.8%</td>
</tr>
<tr>
<td>Total liabilities and stockholders’ equity</td>
<td>$1,835,000</td>
<td>100.0%</td>
<td>$1,595,000</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

VERTICAL ANALYSIS OF BALANCE SHEET
### QUALITY DEPARTMENT STORE INC.  
**Condensed Income Statements**  
**For the Years Ended December 31**

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Percent</td>
</tr>
<tr>
<td>Sales</td>
<td>$ 2,195,000</td>
<td>104.7%</td>
</tr>
<tr>
<td>Sales returns and allowances</td>
<td>98,000</td>
<td>4.7%</td>
</tr>
<tr>
<td><strong>Net sales</strong></td>
<td>$ 2,097,000</td>
<td>100.0%</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>1,281,000</td>
<td>61.1%</td>
</tr>
<tr>
<td>Gross profit</td>
<td>816,000</td>
<td>38.9%</td>
</tr>
<tr>
<td>Selling expenses</td>
<td>253,000</td>
<td>12.0%</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>104,000</td>
<td>5.0%</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>357,000</td>
<td>17.0%</td>
</tr>
<tr>
<td>Income from operations</td>
<td>459,000</td>
<td>21.9%</td>
</tr>
<tr>
<td>Other revenues and gains</td>
<td>9,000</td>
<td>0.4%</td>
</tr>
<tr>
<td>Interest and dividends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other expenses and losses</td>
<td>36,000</td>
<td>1.7%</td>
</tr>
<tr>
<td>Interest expense</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income before income taxes</strong></td>
<td>432,000</td>
<td>20.6%</td>
</tr>
<tr>
<td><strong>Income tax expense</strong></td>
<td>168,200</td>
<td>8.0%</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>$ 263,800</td>
<td>12.6%</td>
</tr>
</tbody>
</table>
RATIO ANALYSIS

Liquidity Ratios
Measures of short-term ability of the enterprise to pay its maturing obligations and to meet unexpected needs for cash

Profitability Ratios
Measures of the income or operating success of an enterprise for a given period of time

Solvency Ratios
Measures of the ability of the enterprise to survive over a long period of time
Ratio Analysis

- **Profitability Ratios**
  - Reveals a company’s ability to generate profits

- **Turnover Ratios**
  - Reveals the company’s efficiency with regard to the use of its assets

- **Debt-Related Ratios**
  - Reveals a company’s ability to re-pay its obligations
Profitability Ratios

• Earnings Per Share (EPS)
  – Measures the earnings per each share of common stock outstanding

• Price-Earnings Ratio (PE)
  – Measures an investor’s expectations of future profitability

• Gross Margin Percentage
  – Estimates the incremental profit generated by each dollar of sales

• Return on Total Assets
  – Measures the net income generated for each dollar invested in assets

• Return on Common Stockholders’ Equity
  – Measures the net income generated for each dollar invested by the shareholders
Profitability Ratio Formulas

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Formula / Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings per share</td>
<td>((\text{Net income} - \text{Preferred dividends}) \div \text{Number of common shares outstanding})</td>
</tr>
<tr>
<td>Price–earnings ratio</td>
<td>(\text{Market price per share} \div \text{Earnings per share})</td>
</tr>
<tr>
<td>Gross margin percentage</td>
<td>(\text{Gross margin} \div \text{Net sales})</td>
</tr>
<tr>
<td>Return on total assets</td>
<td>[\text{Net income} \div (\text{Interest expense} \times (1 - \text{Tax rate}))] \div \text{Total assets}</td>
</tr>
<tr>
<td>Return on common stockholders’ equity</td>
<td>((\text{Net income} - \text{Preferred dividends}) \div \text{Common stockholders’ equity})</td>
</tr>
</tbody>
</table>
Turnover Ratios

• Asset Turnover
  – Measures how efficiently assets are utilized

• Accounts Receivable Turnover
  – Measures the number of times each year receivables are collected

• Days’ Sales in Receivables
  – Measures the average number of days necessary to collect credit sales

• Inventory Turnover
  – Measures the number of times each year inventory is sold

• Days’ Sales in Inventory
  – Measures the average number of days necessary to sell all inventory
## Turnover Ratio Formulas

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset turnover</td>
<td>Net sales ÷ Total assets</td>
</tr>
<tr>
<td>Accounts receivable turnover</td>
<td>Net credit sales ÷ Accounts receivable</td>
</tr>
<tr>
<td>Days’ sales in receivables</td>
<td>365 ÷ Accounts receivable turnover</td>
</tr>
<tr>
<td>Inventory turnover</td>
<td>Cost of goods sold ÷ Inventory</td>
</tr>
<tr>
<td>Days’ sales in inventory</td>
<td>365 ÷ Inventory turnover</td>
</tr>
</tbody>
</table>
Debt-Related Ratios

• Current Ratio
  – Measures a company’s ability to meet short-term obligations

• Acid-Test Ratio (Quick Ratio)
  – More stringent measure of the current ratio

• Debt-to-Equity Ratio
  – Assesses the company’s debt position

• Times Interest Earned
  – Measures a company’s ability to re-pay long-term debt
## Debt-Related Ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio</td>
<td>Current assets $\div$ Current liabilities</td>
</tr>
<tr>
<td>Acid test (Quick ratio)</td>
<td>$[(\text{Cash} + \text{Marketable securities}) + \text{Short-term receivables}] \div \text{Current liabilities}$</td>
</tr>
<tr>
<td>Debt-to-equity ratio</td>
<td>Total liabilities $\div$ Stockholders’ equity</td>
</tr>
<tr>
<td>Times interest earned</td>
<td>Operating income $\div$ Interest expense</td>
</tr>
</tbody>
</table>
# Summary of Ratio Formulas

## Profitability Ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Earnings per share</strong></td>
<td>(Net income − Preferred dividends) ÷ Number of common shares outstanding</td>
</tr>
<tr>
<td><strong>Price–earnings ratio</strong></td>
<td>Market price per share ÷ Earnings per share</td>
</tr>
<tr>
<td><strong>Gross margin percentage</strong></td>
<td>Gross margin ÷ Net sales</td>
</tr>
<tr>
<td><strong>Return on total assets</strong></td>
<td>[Net income + (Interest expense × (1 − Tax rate))] ÷ Total assets</td>
</tr>
<tr>
<td><strong>Return on common stockholders’ equity</strong></td>
<td>(Net income − Preferred dividends) ÷ Common stockholders’ equity</td>
</tr>
</tbody>
</table>

## Turnover Ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asset turnover</strong></td>
<td>Net sales ÷ Total assets</td>
</tr>
<tr>
<td><strong>Accounts receivable turnover</strong></td>
<td>Net credit sales ÷ Accounts receivable</td>
</tr>
<tr>
<td><strong>Days’ sales in receivables</strong></td>
<td>365 ÷ Accounts receivable turnover</td>
</tr>
<tr>
<td><strong>Inventory turnover</strong></td>
<td>Cost of goods sold ÷ Inventory</td>
</tr>
<tr>
<td><strong>Days’ sales in inventory</strong></td>
<td>365 ÷ Inventory turnover</td>
</tr>
</tbody>
</table>

## Debt Related Ratios

<table>
<thead>
<tr>
<th>Ratio</th>
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</tr>
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<tbody>
<tr>
<td><strong>Current ratio</strong></td>
<td>Current assets ÷ Current liabilities</td>
</tr>
<tr>
<td><strong>Acid test (Quick ratio)</strong></td>
<td>[(Cash + Marketable securities) + Short-term receivables] ÷ Current liabilities</td>
</tr>
<tr>
<td><strong>Debt-to-equity ratio</strong></td>
<td>Total liabilities ÷ Stockholders’ equity</td>
</tr>
<tr>
<td><strong>Times interest earned</strong></td>
<td>Operating income ÷ Interest expense</td>
</tr>
</tbody>
</table>
## LIMITATIONS OF F/S ANALYSIS

<table>
<thead>
<tr>
<th>Estimates</th>
<th>Depreciation, allowances, contingencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>Historical data not adjusted for inflation/deflation</td>
</tr>
<tr>
<td>Alternative methods</td>
<td>FIFO, LIFO, Average Cost. Completed contract, percentage of completion</td>
</tr>
<tr>
<td>Atypical data</td>
<td>Seasonal accounting data may not be representative</td>
</tr>
<tr>
<td>Firm diversification</td>
<td>Conglomerates hard to identify with single industry.</td>
</tr>
</tbody>
</table>