CHAPTER 12

ANALYZING FINANCIAL PERFORMANCE

FINANCIAL STATEMENT ANALYSIS

Why is the company more profitable or less profitable than other companies?

Has management used assets efficiently to generate sales?

Is liquidity sufficient to satisfy claims of lenders?

Is company overextended on debt?

Does management follow aggressive or conservative credit policies?

Does company carry excessive or inadequate inventories?

INDUSTRY COMPARISONS

TRENDS ANALYSIS

INDUSTRY DATA SOURCES

  Robert Morris Associates
  Dun & Bradstreet
## KEY RATIOS

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Calculation</th>
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<tbody>
<tr>
<td>PROFITABILITY RATIOS</td>
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</table>
| Return on common equity| \[
\frac{\text{EAT}}{\text{Common Equity}}
\] |
| Return on total assets | \[
\frac{\text{EAT}}{\text{Total assets}}
\] |
| Earning power ratio    | \[
\frac{\text{EBIT}}{\text{Total assets}}
\] |
| Gross profit margin    | \[
\frac{\text{Gross profit}}{\text{Net sales}}
\] |
| EBIT margin            | \[
\frac{\text{EBIT}}{\text{Net sales}}
\] |
| Before-tax profit margin| \[
\frac{\text{EBT}}{\text{Net Sales}}
\] |
| After-tax profit margin| \[
\frac{\text{EAT}}{\text{Net Sales}}
\] |
| DEBT MANAGEMENT RATIOS |                                                  |
| Equity multiplier      | \[
\frac{\text{Total assets}}{\text{Common Equity}}
\] |
| Total debt ratio       | \[
\frac{\text{Total debt}}{\text{Total assets}}
\] |
| Current debt ratio     | \[
\frac{\text{Current liabilities}}{\text{Total assets}}
\] |
| Long-term debt ratio   | \[
\frac{\text{Long term debt}}{\text{Total assets}}
\] |
| Times interest earned  | \[
\frac{\text{EBIT}}{\text{Interest Expense}}
\] |
ASSET MANAGEMENT RATIOS

Total asset turnover = \(\frac{\text{Net sales}}{\text{Total assets}}\)

Current asset turnover = \(\frac{\text{Net sales}}{\text{Current assets}}\)

Fixed asset turnover = \(\frac{\text{Net sales}}{\text{Fixed assets}}\)

Accounts receivable turnover = \(\frac{\text{Credit sales}}{\text{Accounts receivable}}\)

Average collection period = \(\frac{\text{Accounts receivable}}{\text{Annual credit sales / 365}}\)

Inventory turnover = \(\frac{\text{Costs of goods sold}}{\text{Inventory}}\)

Days’ sales in inventory = \(\frac{365}{\text{Inventory turnover}}\)

LIQUIDITY RATIOS

Current ratio = \(\frac{\text{Current Assets}}{\text{Current Liabilities}}\)

Quick ratio = \(\frac{\text{Current Assets – Inventory}}{\text{Current Liabilities}}\)
DU PONT MODEL (ROA)

Return on After-tax Total asset
Total assets = Profit margin \times Turnover

\[
\text{Return on Total Assets} = \frac{\text{Earnings after taxes}}{\text{Net sales}} \times \frac{\text{Net sales}}{\text{Total assets}}
\]

EXTENDED DU PONT MODEL (ROE)

Return on After-tax Total asset Equity
Equity = Profit margin \times Turnover \times Multiplier

\[
\frac{\text{Earnings after taxes}}{\text{Common equity}} = \frac{\text{Earnings after taxes}}{\text{Net sales}} \times \frac{\text{Net sales}}{\text{Total assets}} \times \frac{\text{Total assets}}{\text{Common equity}}
\]