CHAPTER 3
WORKING WITH FINANCIAL STATEMENTS

We will use the financial statements of Paglia Pasta, Inc. to illustrate the concepts in this chapter.

Paglia Pasta, Inc.
Balance Sheets as of December 31, 2001 and 2002

<table>
<thead>
<tr>
<th>Assets</th>
<th>2001</th>
<th>2002</th>
<th>Liabilities and Owner’s Equity</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
<td>Current Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$520</td>
<td>$322</td>
<td>Accounts payable</td>
<td>$852</td>
<td>$936</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>1,452</td>
<td>1,906</td>
<td>Notes payable</td>
<td>413</td>
<td>429</td>
</tr>
<tr>
<td>Inventory</td>
<td>3,109</td>
<td>2,955</td>
<td>Other</td>
<td>30</td>
<td>209</td>
</tr>
<tr>
<td>Total</td>
<td>$5,081</td>
<td>$5,183</td>
<td>Total</td>
<td>$1,295</td>
<td>$1,574</td>
</tr>
<tr>
<td>Fixed assets</td>
<td></td>
<td></td>
<td>Long-term debt</td>
<td>$3,117</td>
<td>$2,500</td>
</tr>
<tr>
<td>Net plant and equipment</td>
<td>$9,544</td>
<td>$10,033</td>
<td>Owners’ Equity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Common stock</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Retained earnings</td>
<td>213</td>
<td>1,142</td>
</tr>
<tr>
<td>Total</td>
<td>$14,625</td>
<td>$15,216</td>
<td>Total</td>
<td>$14,625</td>
<td>$15,216</td>
</tr>
</tbody>
</table>

Paglia Pasta, Inc.
2002 Income Statement

Sales                          $11,200
Cost of goods sold             3,900
Depreciation                   650
Earnings before interest and taxes $6,650
Interest paid                  585
Taxable income                 $6,065
Taxes (34%)                     2,062
Net income                     $4,003
Dividends                      $3,074
Addition to retained earnings  929

3.1 CASH FLOW STATEMENT

A. Sources and Uses of Cash
B. The Statement of Cash Flows

Construct a statement of cash flows by grouping cash flows into one of three categories: 
operating activities, investment activities, and financing activities
3.3 RATIO ANALYSIS

Categories of Financial Ratios

A. Short-Term Solvency, or Liquidity, Measures

1. Current ratio
   \[ \frac{\text{Current assets}}{\text{Current liabilities}} \]

2. Quick ratio
   \[ \frac{(\text{Current assets} - \text{inventory})}{\text{Current liabilities}} \]

3. Cash ratio
   \[ \frac{\text{Cash}}{\text{Current liabilities}} \]

4. NWC/Total assets

5. Interval measure
   \[ \frac{\text{Current assets}}{\text{Average daily operating costs}} \]

B. Long-Term Solvency Measures

1. Total Debt Ratio
   \[ \frac{(\text{Total assets} - \text{Total equity})}{\text{Total assets}} \]
   Variations:
   \[ \frac{\text{Debt}}{\text{Equity}} = \frac{(\text{Total assets} - \text{Total equity})}{\text{Total equity}} \]
   \[ \text{Equity multiplier} = \frac{\text{Total assets}}{\text{Total equity}} = 1 + \frac{\text{Debt}}{\text{Equity}} \]

2. Times Interest Earned (TIE)
   \[ \frac{\text{EBIT}}{\text{Interest}} \]

3. Cash Coverage
   \[ \frac{(\text{EBIT} + \text{Depreciation})}{\text{Interest}} \]

C. Asset Management, or Turnover, Ratios

1. Inventory Turnover
   \[ \frac{\text{COGS}}{\text{Inventory}} \]
   Days’ sales in inventory: \( \frac{365}{\text{Inventory turnover}} \)

2. Receivables Turnover
   \[ \frac{\text{Sales}}{\text{Accounts receivable}} \]
   Days’ sales in receivables (days’ sales outstanding): \( \frac{365}{\text{Receivables turnover}} \)

3. Total Asset Turnover
   \[ \frac{\text{Total asset turnover}}{\text{Sales}/\text{Total assets}} \]
D. Profitability Measures

1. **Profit margin**
   \[
   \text{Net income/Sales}
   \]

2. **Return on Assets**
   \[
   \text{Net income/Total assets}
   \]

3. **Return on Equity**
   \[
   \text{Net income/Total equity}
   \]

E. Market Value Measures

Paglia Pasta has 500 shares of common stock outstanding, and the market price for a share at the end of 1999 was $63.

1. **Price-Earnings ratio**
   \[
   \text{Price per share/Earnings per share}
   \]

2. **Market-to-book ratio**
   \[
   \text{Market value per share/Book value per share}
   \]

3.4 THE DU PONT IDENTITY

Return on Equity = \([\text{Net Income/Sales}] \times [\text{Sales/Assets}] \times [\text{Assets/Total Equity}]\)

3.5 USING FINANCIAL STATEMENT INFORMATION

A. Why Evaluate Financial Statements?

B. Choosing a Benchmark

C. Problems with Financial Statement Analysis