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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net plant and equipment</td>
<td>$9,544</td>
<td>$10,033</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total assets</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   |

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

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**  
   \[
   \frac{\text{Total asset turnover}}{\text{Sales}} = \frac{\text{Sales}}{\text{Total assets}}
   \]
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 = \[ \frac{\text{Net Income/Sales}}{\text{Sales/Assets}} \times \frac{\text{Sales/Assets}}{\text{Assets/Total Equity}} \]

3.5 USING FINANCIAL STATEMENT INFORMATION

A. Why Evaluate Financial Statements?

B. Choosing a Benchmark

C. Problems with Financial Statement Analysis