Chapter 2

CT

2. The recognition and matching principles in financial accounting call for revenues, and the costs associated with producing those revenues, to be “booked” when the revenue process is essentially complete, not necessarily when the cash is collected or bills are paid. Note that this way is not necessarily correct; it’s the way accountants have chosen to do it.

3. Historical costs can be objectively and precisely measured whereas market values can be difficult to estimate, and different analysts would come up with different numbers. Thus, there is a tradeoff between relevance (market values) and objectivity (book values).

7. It’s probably not a good sign for an established company, but it would be fairly ordinary for a start-up, so it depends.

Problems

2. Income Statement

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$425,000</td>
</tr>
<tr>
<td>Costs</td>
<td>210,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>63,000</td>
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<tr>
<td>EBIT</td>
<td>152,000</td>
</tr>
<tr>
<td>Interest</td>
<td>38,000</td>
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<tr>
<td>Taxable income</td>
<td>114,000</td>
</tr>
<tr>
<td>Taxes</td>
<td>39,900</td>
</tr>
<tr>
<td>Net income</td>
<td>$74,100</td>
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3. Net income = Divs + Add. to ret. earnings; Add. to ret. earnings = $74,100 – 35,000 = $39,100

4. EPS = NI / shares = $74,100 / 30,000 = $2.47 per share

   DPS = Divs / shares = $35,000 / 30,000 = $1.167 per share

6. Taxes = 0.15($50K) + 0.25($25K) + 0.34($25K) + 0.39($310K – 100K) = $104,150

10. Change in NWC = NWC\text{end} – NWC\text{beg} = (CA\text{end} – CL\text{end}) – (CA\text{beg} – CL\text{beg})
    = ($860 – 415) – (800 – 280) = $445 – 520 = –$75

12. Cash flow to stockholders = Dividends paid – Net new equity = $120K – [(\text{Common}_{\text{end}} + \text{ API}\text{S}_{\text{end}}) – (\text{Common}_{\text{beg}} + \text{ API}\text{S}_{\text{beg}})]
    = $120K – [(230K + 4.5M) – (200K + 4.2M)]
    = $120K – [4.73M – 4.4M]
    = –$210K
19. **Income Statement**

   a. Sales $2,400,000  
   Cost of goods sold 1,440,000  
   Other expenses 360,000  
   Depreciation 480,000  
   EBIT $120,000  
   Interest 180,000  
   Taxable income $(60,000)  
   Taxes (35%) 0  
   Net income $(60,000)  

   b. OCF = EBIT + D – T  
   = $120,000 + 480,000 – 0 = $600,000  

   c. Net income was negative because of the tax deductibility of depreciation and interest expense. However, the actual cash flow from operations was positive because depreciation is a non-cash expense and interest is a financing, not an operating, expense.

21. a. **Income Statement**

   Sales $10,980  
   Cost of goods sold 8,100  
   Depreciation 1,440  
   EBIT $1,440  
   Interest 180  
   Taxable income $1,260  
   Taxes (35%) 441  
   Net income $819  

   b. OCF = EBIT + Dep. – Taxes  
   = $1,440 + 1,440 – 441 = $2,439  

   c. Change in NWC = NWC\text{end} – NWC\text{beg}  
   = (CA\text{end} – CL\text{end}) – (CA\text{beg} – CL\text{beg})  
   = ($2,790 – 1,620) – (1,800 – 1,350)  
   = $1,170 – 450 = $720  

   d. Cash flow to creditors  
   = Interest – Net new LTD = $180 – 0 = $180  
   Cash flow to stockholders  
   = Cash flow from assets – Cash flow to creditors  
   = $2,439 – 720 – 1,800 = −$81  

   Net new equity = $270 + 261 = $531  

   The cash flow from assets can be positive or negative, since it represents whether the firm raised funds or distributed funds on a net basis. In this problem, even though net income and OCF are positive, the firm invested heavily in both fixed assets and net working capital; it had to raise a net $81 in funds from its stockholders and creditors to make these investments.

   The firm had positive earnings in an accounting sense (NI > 0) and had positive cash flow from operations. The firm invested $720 in new net working capital and $1,800 in new fixed assets. The firm had to raise $81 from its stakeholders to support this new investment. It accomplished this by raising $531 in the form of new equity.
After paying out $270 of this in the form of dividends to shareholders and $180 in the form of interest to creditors, $81 was left to just meet the firm’s cash flow needs for investment.