Questions

- Was the company profitable?
- Did the company generate a positive cash flow?
- How did the company generate its cash flow?

Learning Objectives

- Understand the basic difference between net profit and net cash flow
- Construct the statement of cash flows
- Use the statement of cash flows to analyze major strengths and weaknesses of a company

Net Profit vs. Net Cash Flow

<table>
<thead>
<tr>
<th>Net Profit</th>
<th>Net Cash Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm’s preferred choice under accrual method of accounting</td>
<td>Helps evaluate the firm’s ability to generate cash</td>
</tr>
<tr>
<td>Easily manipulated</td>
<td>Hard to manipulate</td>
</tr>
</tbody>
</table>

Statement of Cash Flows

- Provides information about cash inflows and outflows during an accounting period
- Focuses on CASH
- Three sections to the statement of cash Flows:
  - Cash flow from Operating Activities
  - Cash flow from Investing Activities
  - Cash flow from Financing Activities
Useful Tip

For any item on the statement of cash flows
- IF the item represents a cash INFLOW → you ADD that item
- IF an item represents a cash OUTFLOW → you SUBTRACT that item

What's Next?

We have to associate the two:

<table>
<thead>
<tr>
<th>Balance Sheet Accounts:</th>
<th>Sections of the Statement of Cash Flows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Accounts Receivable</td>
<td>1. CF from Operating Activities</td>
</tr>
<tr>
<td>- Inventories</td>
<td>2. CF from Investing Activities</td>
</tr>
<tr>
<td>- Retained Earnings</td>
<td>3. CF from Financing Activities</td>
</tr>
</tbody>
</table>

Cash Flow from Operating Activities 1

- We use the indirect method:
  - Start with the net profit (income) and "modify" until you get the net cash flow
  - Starting point: Net Income
  - Step 1: add Depreciation
  - To find CF from Operating Activities consider only cash flows that are directly related to the production and sales of goods and services

Example: page 69 in the book

Cash Flow from Operating Activities 2

- Step 2: subtract changes in Current Assets (excluding cash):
  - Accounts receivable
  - Inventories
- Step 3: add changes in Current Liabilities (excluding notes payable and current portion of LTD):
  - Accounts Payable
  - Accruals
- Result: CF from Operating Activities

Cash Flow from Investing Activities 1

Investing activities:
- Buying or selling productive long-lived assets such as plants and equipment
  - Gross Fixed Assets are cash investments
  - Depreciation is not cash investment
- Buying or selling financial securities (e.g., stocks or bonds of other companies)
Cash Flow from Investing Activities 2

- **Starting point:** zero
  - **Step 1:**
    - Subtract change in Gross Fixed Assets
    - Subtract change in Financial Assets (securities of other companies)
  - **Result:** CF from Investing Activities

<table>
<thead>
<tr>
<th>Classification</th>
<th>Balance Sheet Item</th>
<th>2005</th>
<th>2006</th>
<th>Difference (Change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td></td>
<td>10</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Operating</td>
<td>Accounts Receivable</td>
<td>30</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>Operating</td>
<td>Inventories</td>
<td>50</td>
<td>57</td>
<td>7</td>
</tr>
<tr>
<td>Investing</td>
<td>Gross Fixed Assets</td>
<td>160</td>
<td>190</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Less Acc. Depreciation</td>
<td>150</td>
<td>170</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Net Fixed Assets</td>
<td>110</td>
<td>120</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Total Assets</td>
<td>200</td>
<td>216</td>
<td></td>
</tr>
<tr>
<td>Financing</td>
<td>Notes Payable</td>
<td>40</td>
<td>29</td>
<td>-11</td>
</tr>
<tr>
<td></td>
<td>Operating Payable</td>
<td>20</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Accruals</td>
<td>28</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Current portion of LTD</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Long Term Debt (LTD)</td>
<td>52</td>
<td>56</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Common Stock</td>
<td>40</td>
<td>34</td>
<td>-6</td>
</tr>
<tr>
<td></td>
<td>Retained Earnings</td>
<td>50</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total Liabilities and Equity</td>
<td>200</td>
<td>216</td>
<td></td>
</tr>
</tbody>
</table>

Cash Flow from Investing Activities 3

- **Investing activities** refer to changes on the lower left-hand side of balance sheet
- **Warning:** we are looking for changes in **Gross** Fixed Assets, not **Net** Fixed Assets!
- What if Gross Fixed Assets are not reported in balance sheet?

Useful Relations

- Change in Gross Fixed Assets = 
  - Change in Net Fixed Assets 
  - Depreciation (on the income statement)

Depreciation (on the income statement) = 
Change in Accumulated Depreciation (on the balance sheet)

Cash Flow from Financing Activities 1

- **Financing activities:**
  - New loans (long-term, short-term debt)
  - Repayment of principal
  - Sale or repurchase of stock (common or preferred)
  - Payment of dividends
Cash Flow from Financing Activities 2

Financing activities refer to:
- Items on lower right-hand side of the balance sheet
- Changes in long-term Debt
- Changes in Equity
- Short-term loans
- Changes in Notes Payable
- Changes in the Current Portion of long-term Debt
- Dividends paid to shareholders

Cash Flow from Financing Activities 3

○ Starting point: zero
○ Step 1:
  - add change in Notes Payable
  - add change in Current Portion of LT Debt
  - add change in Long Term Debt
  - add change in Common Stock
○ Step 2:
  - subtract Dividend Payout
    Dividends Paid = Net Income - change in Retained Earnings
  - Result: Net CF from Financing Activities

Useful Relation:

Net cash flow from Operating Activities + Net cash flow from Investing Activities + Net cash flow from Financing Activities = CHANGE in the cash account (balance sheet)

Balance Sheet

Analyzing the Statement of Cash Flows 1

Compare the Net Income and the Net Cash Flow from Operations. If

Net Income > 0 but CF from Operations < 0
- The company could be experiencing rapid growth (book example: golf ball company, Ch. 2)
- This could be an indicator of financial mismanagement (book example: Bennie’s Auto Parts and Services Center, Ch. 1)
Analyzing the Statement of Cash Flows 2

Net Cash Flow from Investing activities:
- If **negative**, the company is investing in:
  - Plant & equipment (improve efficiency)
  - Stock of other companies (strategic reasons, e.g., joint venture)
- If **positive**, the company is liquidating assets - Why? Could be an indicator of financial distress!

Analyzing the Statement of Cash Flows 3

Where did the company get cash to pay dividends? It is a good sign if:
- **CF from operations > Dividend payout**
If not, did the company:
- Liquidated assets
- Issue new equity or borrow money
To pay dividends?

Analyzing the Statement of Cash Flows 4

Examine the CF from Financing activities:
- Big increases in debt (either short-term or long-term) are not a good sign
- Using internal financing rather than debt to finance growth is usually a good sign
- Substitution of short-term debt for long-term debt might indicate a worsening of financial conditions

Summary

- Net income vs. net cash flows
- Statement of Cash flows
  - Operating activities
  - Investing activities
  - Financing activities
- **Add** CFs that represent inflows
- **Subtract** CFs that represent outflows
- Use the Statement of Cash Flows to analyze the company