Financial Statements, Cash Flow and Taxes

1. The concept of financial statements
2. Accounting profit and cash flow
3. Modifying accounting data for managerial decisions

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Financial Statements

• Annual report:
  A report issued annually by a corporation to its stockholders.

• Two types of information given in this report:
  1) The verbal section, often presented as a letter from the director, that describes the firm’s operating results during the past year and discusses new developments that will affect the future operations.
  2) Four basic financial statements-the balance sheet, the income statement, the statement of retained earnings and the statement of cash flows.

• Financial statements are utilized by investor, creditor, supplier, banks etc.

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The Balance Sheet

• A statement of the firm’s financial position at a specific point in time
• The left-hand side shows the firm’s assets, while the right-hand side shows the liabilities and equity, or the claims against the assets.
• These assets are listed in order of their liquidity or the length of time it typically takes to convert them to cash.
• The claims are listed in the order in which they must be paid.
# Balance Sheet

**PT Mandiri Sejahtera**  
**December 31, 20xx**

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>LIABILITIES AND EQUITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td><strong>Current Liabilities</strong></td>
</tr>
<tr>
<td>• Cash and marketable securities</td>
<td>• Accounts payable</td>
</tr>
<tr>
<td>• Accounts receivable</td>
<td>• Notes payable</td>
</tr>
<tr>
<td>• Inventories</td>
<td>• Accruals</td>
</tr>
<tr>
<td></td>
<td>Total Current Liabilities</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td><strong>Long-term bonds</strong></td>
</tr>
<tr>
<td></td>
<td>Total Liabilities</td>
</tr>
<tr>
<td><strong>Fixed Assets</strong></td>
<td></td>
</tr>
<tr>
<td>• Net plant and equipment</td>
<td>• Preferred stock</td>
</tr>
<tr>
<td>• Net machine</td>
<td>• Common stock</td>
</tr>
<tr>
<td></td>
<td>• Retained earnings</td>
</tr>
<tr>
<td><strong>Total net fixed assets</strong></td>
<td><strong>Total Common Equity</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>TOTAL ASSETS</strong></th>
<th><strong>TOTAL LIABILITIES AND EQUITY</strong></th>
</tr>
</thead>
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</tbody>
</table>
The Income Statement

- A statement summarizing the firm’s revenues and expenses over an accounting period, generally a quarter or a year.
- A report of earnings and dividend per share is given at the bottom of the income statement. Earnings per share (EPS) is called the bottom line, denoting that of all the items on the income statement, EPS is the most important.
<table>
<thead>
<tr>
<th>Financial Item</th>
<th>xxx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td></td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>XXX-</td>
</tr>
<tr>
<td>Gross Profit</td>
<td></td>
</tr>
<tr>
<td>Operating costs</td>
<td>XXX-</td>
</tr>
<tr>
<td>EBITDA</td>
<td></td>
</tr>
<tr>
<td>Depreciation &amp; Amortization</td>
<td>XXX-</td>
</tr>
<tr>
<td>EBIT (Operating income)</td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>XXX-</td>
</tr>
<tr>
<td>EBT</td>
<td></td>
</tr>
<tr>
<td>Taxes</td>
<td>XXX-</td>
</tr>
<tr>
<td>Net income before preferred dividends</td>
<td></td>
</tr>
<tr>
<td>Preferred dividends</td>
<td>XXX-</td>
</tr>
<tr>
<td>Net income (EAT)</td>
<td></td>
</tr>
<tr>
<td>Per share data</td>
<td></td>
</tr>
<tr>
<td>Common Stock price</td>
<td></td>
</tr>
<tr>
<td>Earnings Per Share (EPS)</td>
<td></td>
</tr>
<tr>
<td>Dividends Per Share (DPS)</td>
<td></td>
</tr>
</tbody>
</table>

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Statement of Retained Earnings

- A statement reporting how much of the firm’s earnings were retained in the business rather than paid out in dividends.
- Retained earnings represent a claim against assets, not assets per se.
- Retained earnings do not represent cash and are not “available” for the payment of dividends or anything else.
Statements of Retained Earnings

PT Mandiri Sejahtera
December 31, 20xx

Balance of retained earnings, December 31, 20xx xxx
(Add) Net income 20xx xxx
(Less) Dividends to common stockholders xxx
Balance of retained earnings, December 31, 20xx xxx

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Statement of Cash Flows

- The company’s cash position as reported on the balance sheet is affected by a great many factors, including the following:
  1. Cash Flow
  2. Changes in working capital
  3. Fixed assets

- Each of these factors is reflected in the statement of cash flows, which summarizes the changes in a company’s cash position.
Statement of Cash Flows

- The statement separates activities into three categories:
  1. Operating activities, which includes net income, depreciation, and changes in current assets and current liabilities other than cash and short-term debt.
  2. Investing activities, which includes investments in or sales of fixed assets.
  3. Financing activities, which includes cash raised during the year by issuing short-term debt, long-term debt, or stock. Also, since dividends paid or cash used to buy back outstanding stock or bonds reduces the company’s cash, such transactions are included here.
# Statements of Cash Flows

## Operating activities
- **Net income before preferred dividends** XXXX
- **Additions (sources of cash)**
  - Depreciation and amortization XXXX
  - Increase in accounts payable XXXX
  - Increase in accruals XXXX
- **Subtractions (uses of cash)**
  - Increase in accounts receivable (XXXX)
  - Increase in inventories (XXXX)
- **Net cash provided by operating activities** XXXX

## Long-term investing activities
- **Cash used to acquire fixed assets** (XXXX)

## Financing activities
- **Increase in notes payable** XXXX
- **Increase in bonds** XXXX
- **Payment of common and preferred dividends** XXXX
- **Net cash provided by financing activities** XXXX

## Net increase (decrease) in cash
- XXXX

Cash and securities at beginning of year
- XXXX

Cash and securities at end of year
- XXXX

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Accounting Profit vs Net Cash Flow

- When we studied income statements in accounting, our emphasis was probably on the firm’s net income.
- In finance, however, we focus on net cash flow. The value of an asset (or a whole firm) is determined by the cash flow it generates.
- Net cash flow is the actual net cash, as opposed to accounting net income, that a firm generates during some specified period.
- A business’s net cash flow generally differs from its accounting profit because some of the revenues and expenses listed on the income statement were not paid in cash during the year.

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Accounting Profit vs Net Cash Flow

- The relationship between net cash flow and net income can be expressed as follows:

  \[ \text{Net cash flow} = \text{Net income} - \text{Noncash revenues} + \text{Noncash charges} \]

- Typically, depreciation and amortization are the largest noncash items and in many cases the other noncash items roughly net out to zero. For this reason, those relationship can be expressed like this:

  \[ \text{Net cash flow} = \text{Net income}^* + \text{Depreciation} & \text{ amortization} \]
1. Divide total assets into two categories:
   - Operating assets consist of the cash and marketable securities, accounts receivables, inventories and fixed assets necessary to operate the business. Operating assets are further divided into working capital and fixed assets such as plant and equipment.
   - Non operating assets which would include cash and marketable securities above the level required for normal operations, investment in subsidiaries, land held for future use and the like.
Modifying Accounting Data for Managerial Decision

- Operating working capital is current assets used in operations.
- Net operating working capital is the working capital acquired with investor-supplied funds.
- Net operating working capital = all current assets - all current liabilities that do not charge interest.

\[
\text{Net operating working capital} = (\text{Cash and marketable securities } + \text{accounts receivables } + \text{inventory}) - (\text{accounts payable } + \text{accruals}).
\]
Modifying Accounting Data for Managerial Decision

2. Calculating Net Operating Profit After Tax (NOPAT)
   - If two companies have different amount of debt, hence different interest charges, they could have identical operating performances but different net income- the one with more debt would have a lower net income.
   - A better measurement for comparing managers’ performance is net operating profit after taxes (NOPAT)
   - NOPAT is the amount of profit a company would generate if it had no debt and held no nonoperating assets.

NOPAT = EBIT (1-Tax rate)
3. Calculating Free Cash Flow (FCF)

- Free cash flow is the cash flow actually available for distribution to all investors after the company has made all the investments in fixed assets, new products and working capital necessary to sustain ongoing operations.

\[
\text{FCF} = \text{Operating cash flow - Gross investment in operating capital.}
\]

\[
\text{Operating cash flow} = \text{NOPAT} + \text{Depreciation \\ & amortization.}
\]

\[
\text{Gross investment in operating capital} = \text{Net investment + Depreciation \\ & amortization.}
\]
Modifying Accounting Data for Managerial Decision

- If we subtract depreciation and amortization from both operating cash flow and gross investment in operating capital, we obtain the following equivalent expression for free cash flow:

\[ FCF = NOPAT - \text{Net investment in operating capital} \]
Market Value Added (MVA)

- MVA measures the managerial effectiveness since the very inception of a company.
- MVA is the difference between the market value of the firm’s stock and amount of equity capital investors have supplied.
- Those can be formulated as follows:

\[
\text{MVA} = (\text{Shares outstanding}) (\text{Stock price}) - \text{Total common equity}
\]
Economic Value Added (EVA)

- EVA focuses on managerial effectiveness in a given year.
- In order to generate positive EVA, a firm has to more than just cover operating costs. It must also provide a return to those who have provided the firm with capital.
- EVA takes into account the total cost of capital, which includes the cost of equity.

EVA = NOPAT - after tax dollar cost of operating capital
EVA = EBIT (1 - tax rate) - (total investor-supplied operating capital) x (after-tax percentage cost of capital)