

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.

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

ASSETS

Current Assets

- Cash and marketable securities
- Accounts receivable
- Inventories

Total Current Assets

Fixed Assets

- Net plant and equipment
- Net machine

Total net fixed assets

TOTAL ASSETS

LIABILITIES AND EQUITY

Current Liabilities

- Accounts payable
- Notes payable
- Accruals

Total Current Liabilities

Long-term bonds

Total Liabilities

- Preferred stock

- Common stock

- Retained earnings

Total Common Equity

TOTAL LIABILITIES AND EQUITY

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.

INCOME STATEMENT

+ Sales		XXX
+ Cost of Goods Sold	<u>XXX</u> -	
+ Gross Profit		XXX
+ Operating costs	<u>XXX</u> -	
+ EBITDA		XXX
+ Depreciation & Amotization	<u>XXX</u> -	
+ EBIT (Operating income)		XXX
Interest	<u>XXX</u> -	
+ EBT		XXX
Taxes	<u>XXX</u> -	
+ Net income before preferred dividends		XXX
+ Preferred dividends	<u>XXX</u> -	
+ Net income (EAT)		<u>XXX</u>
Per share data		
+ Common Stock price		XXX
+ Earnings Per Share (EPS)		XXX
+ Dividends Per Share (DPS)		XXX

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	<u>xxx</u>
✚ Balance of retained earnings, December 31,20xx	xxx

Statement of Cash Flows

- The company's cash position as reported on the balance sheet is affected by a greatmany factors, including the following:
 1. Cash Flow
 2. Changes in working capital
 3. Fixed assets
 4. Security transactions and dividends payments.
- Each of above 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

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.

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:

$$\text{Net cash flow} = \text{Net income}^* + \text{Depreciation \& amortization}$$

Modifying Accounting Data for Managerial Decision

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.

Net operating working capital = (Cash and marketable securities + accounts receivables + inventory) – (accounts payable+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.

$$\text{NOPAT} = \text{EBIT} (1 - \text{Tax rate})$$

Modifying Accounting Data for Managerial Decision

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.

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

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

$$\text{Gross investment in operating capital} = \text{Net investment} + \text{Depreciation \& amortization.}$$

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:

$$\text{FCF} = \text{NOPAT} - \text{Net investment in operating capital}$$

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)