

CHAPTER SIXTEEN

FINANCIAL STATEMENT ANALYSIS

INCOME STATEMENT

- **Summarize results of operations**
 - Sources of revenue
 - Match expenses to revenues
 - Calculate net income for the period
- **Two forms**
 - Single-step
 - Multiple-step

Northern Micro
Income Statement
For Year Ended December 31, 20--

Single-Step Income Statement

Northern Micro
Income Statement
For Year Ended December 31, 20--

Revenues:		
Net Sales	\$212,800	
Interest Revenue	900	
Rent Revenue	8,000	
Subscriptions Revenue	10,000	
Total Revenues		\$231,700

All the Revenues
are listed and totaled

Northern Micro
Income Statement
For Year Ended December 31, 20--

Revenues:		
Net Sales	\$212,800	
Interest Revenue	900	
Rent Revenue	8,000	
Subscriptions Revenue	10,000	
Total Revenues		\$231,700
Expenses:		
Cost of Goods Sold	\$111,500	

Cost of Goods Sold is listed
with all other expenses

Northern Micro
Income Statement
For Year Ended December 31, 20--

Revenues:		
Net Sales	\$212,800	
Interest Revenue	900	
Rent Revenue	8,000	
Subscriptions Revenue	10,000	
Total Revenues		\$231,700
Expenses:		
Cost of Goods Sold	\$111,500	
Wages Expense	42,450	
Advertising Expense	2,500	
Bank Credit Card Expense	1,500	
Rent Expense	20,000	
Supplies Expense	1,400	
Telephone Expense	3,500	
Utilities Expense	12,000	

Bank Credit Card Expense	1,500	
Rent Expense	20,000	
Supplies Expense	1,400	
Telephone Expense	3,500	
Utilities Expense	12,000	
Insurance Expense	1,800	
Depreciation Expense - Building	4,000	
Depreciation Expense - Equipment	3,000	
Miscellaneous Expense	2,250	
Interest Expense	3,150	
Total Expenses		209,050
Net Income		\$ 22,650

Expenses totaled.
Revenues – Expenses = Net Income

Bank Credit Card Expense	1,500	
Rent Expense	20,000	
Supplies Expense	1,400	
Telephone Expense	3,500	
Utilities Expense	12,000	
Insurance Expense	1,800	
Depreciation Expense - Building	4,000	
Depreciation Expense - Equipment	3,000	
Miscellaneous Expense	2,250	
Interest Expense	3,150	
Total Expenses		209,050
Net Income		\$ 22,650

SINGLE-STEP
Revenues together
Expenses together

Northern Micro		
Income Statement		
For Year Ended December 31, 20--		
Multi-Step		
Income Statement		

Northern Micro		
Income Statement		
For Year Ended December 31, 20--		
Revenue from sales:		
Sales		\$214,000
Less Sales R & A		1,200
Net Sales		\$212,800

Calculate Net Sales first
Other revenues at end of statement

Northern Micro		
Income Statement		
For Year Ended December 31, 20--		
Revenue from a sales:		
Sales		\$214,000
Less Sales R & A		1,200
Net Sales		\$212,800
Cost of Goods Sold:		
Merch. Inv. Jan. 1, 20--		\$ 26,000
Purchases	\$105,000	
Less: Purchases R&A \$ 800		
Purchases Disc. 1,000	1,800	
Net Purchases	\$103,200	
Add Freight-In	300	
Cost of Goods Pur.		103,500
Goods Avail. for Sale		\$129,500
Less M. I. Dec. 31, 20--		18,000
Cost of Goods Sold		111,500

Goods Avail. for Sale		\$129,500
Less M. I. Dec. 31, 20--		18,000
Cost of Goods Sold		111,500
Gross Profit		\$101,300

Cost of Goods Sold computed
and subtracted from Net Sales
to arrive at Gross Profit

CURRENT LIABILITIES

- Obligations due within one year
- Require the use of current assets

Total assets			\$166,000
Liabilities			
Current liabilities:			
Notes Payable	\$ 5,000		
Accounts Payable	10,000		
Wages Payable	450		
Utilities Payable	1,500		
Unearned subscrip. revenue	2,000		
Mortgage Pay. (current portion)	500		
Total current liabilities		\$19,450	

LONG-TERM LIABILITIES

Obligations that will be paid more than one year from now

Total assets			\$166,000
Liabilities			
Current liabilities:			
Notes Payable	\$ 5,000		
Accounts Payable	10,000		
Wages Payable	450		
Utilities Payable	1,500		
Unearned subscrip. revenue	2,000		
Mortgage Pay. (current portion)	500		
Total current liabilities		\$19,450	
Long-term liabilities:			
Mortgage Payable	\$30,000		
Less current portion	500	29,500	
Total liabilities			\$ 48,950

Total assets			\$166,000
Liabilities			
Current liabilities:			
Notes Payable	\$ 5,000		
Accounts Payable	10,000		
Wages Payable	450		
Utilities Payable	1,500		
Unearned subscrip. revenue	2,000		
Mortgage Pay. (current portion)	500		
Total current liabilities		\$ 19,450	
Long-term liabilities:			
Mortgage Payable	\$30,000		
Less current portion	500	29,500	
Total liabilities			\$ 48,950
Owner's Equity			
Gary L. Fishel, capital			117,050
Total liabilities and owner's equity			\$166,000

PRACTICE HOMEWORK

Problem 2B

FINANCIAL STATEMENT ANALYSIS

Analyze financial condition

- Investors
- Managers
- Creditors

WORKING CAPITAL

Northern Micro has Current Assets of \$54,000 and Current Liabilities of \$19,450.

$$\begin{array}{r r r r r} \text{CURRENT} & - & \text{CURRENT} & = & \text{WORKING} \\ \text{ASSETS} & & \text{LIABILITIES} & & \text{CAPITAL} \\ \$54,000 & - & \$19,450 & = & \$34,550 \end{array}$$

CURRENT RATIO

Current Ratio for Northern Micro.

$$\frac{\text{CURRENT ASSETS}}{\text{CURRENT LIABILITIES}} = \frac{\$54,000}{\$19,450} = 2.76$$

QUICK RATIO

- Tougher analysis of firm's ability to pay its current liabilities
- Not all current assets can pay debts

QUICK ASSETS

- Cash and current assets that can be converted into cash quickly
- Northern Micro Quick Assets:
 - \$20,000 in Cash
 - \$15,000 in Accounts Receivable
 - \$35,000 in total quick assets

QUICK RATIO

QUICK RATIO

Quick assets are more than adequate to meet current obligations.

$$\frac{35,000}{19,450} = 1.80$$

RETURN ON OWNER'S EQUITY

Compute the return for Northern Micro.

$$\frac{\text{NET INCOME} \quad \$ 22,650}{\text{AVERAGE OWNER'S EQUITY}}$$

AVERAGE OWNER'S EQUITY

$$\frac{\text{Owner's Equity beginning of year} + \text{Owner's Equity end of year}}{2}$$

RETURN ON OWNER'S EQUITY

$$\frac{\text{NET INCOME} \quad \$ 22,650}{\text{AVERAGE OWNER'S EQUITY} \quad \$ 110,725}$$

$$(\$104,400 + \$117,050) \div 2$$

RETURN ON OWNER'S EQUITY

$$\frac{\text{NET INCOME} \quad \$ 22,650}{\text{AVERAGE OWNER'S EQUITY} \quad \$ 110,725} = 20.5\%$$

Compare with prior years and other businesses

ACCOUNTS RECEIVABLE TURNOVER

Net credit sales \$110,000
Accounts Receivable January 1, \$10,000
Accounts Receivable December 31, \$15,000

$$\frac{\text{NET CREDIT SALES FOR THE PERIOD} \quad \$ 110,000}{\text{AVERAGE ACCOUNTS RECEIVABLE} \quad \$ 12,500} = 8.8$$

$$(\$10,000 + \$15,000) \div 2$$

AVERAGE COLLECTION PERIOD

Number of days credit customers are taking to pay for their purchases

$$\frac{\text{Number of Days in the year} \quad 365}{\text{Rate of turnover} \quad 8.8} = 41.5 \text{ days}$$

Compared with credit terms to determine if customers are paying on a timely basis

INVENTORY TURNOVER

Cost of Goods Sold was \$111,500 for year and inventory balances for beginning and end of year were \$26,000 and \$18,000.

$$\frac{\text{COST OF GOODS SOLD FOR THE PERIOD } \$111,500}{\text{AVERAGE INVENTORY } \$22,000} = 5.1$$

(\$26,000 + \$18,000) ÷ 2

INVENTORY TURNOVER

- The higher the rate of turnover, the smaller the profit required on each dollar of sales to produce a satisfactory gross profit.
- Grocery stores have high turnover, low profit per item.
- Jewelry stores need higher profit per item to offset the low turnover.

AVERAGE DAYS TO SELL INVENTORY

$$\frac{\text{Number of days in year } 365}{\text{Rate of turnover } 5.1} = 71.6 \text{ days}$$

Needs to be compared with prior years, other companies or its industry

End of Chapter 16

