

Example 1: Managerial measures of shareholder's wealth

The financial statements of Win Hom Industries for the year ended December 31, 2013, follow.

Win Hom Industries' Balance Sheet December 31, 2013

Assets	
Cash	500
Marketable securities	1,000
Account receivable	25,000
Inventories	45,500
Total current assets	72,000
Land	26,000
Buildings and equipment	90,000
Less: Accumulated depreciation	38,000
Net fixed assets	78,000
Total assets	150,000
Liabilities and Stockholders' Equity	
Account payable	22,000
Notes payable	47,000
Total current liabilities	69,000
Long-term debt	22,950
Common stock ^a	31,500
Retained earnings	26,550
Total liabilities and stockholders' equity	150,000

^a The firm's 3,000 outstanding shares of common stocks closed 2013 at a price of \$25 per share.

Win Hom Industries' Income Statement for the Year Ended December 31, 2013

Sale revenue	160,000
Less: Cost of goods sold	106,000
Gross profit	54,000
Less Operating expenses	
Selling expense	16,000
General and administrative expenses	10,000
Lease expense	1,000
Depreciation expense	10,000
Total operating expense	37,000
Operating profits	17,000
Less: Interest expense	6,100
Net profits before taxes	10,900
Less: Taxes	4,360
Net profit after taxes	6,540

According to the above Balance Sheet and Income Statement, find the following managerial measures of shareholder's wealth when the company's weighted-average cost of capital was about 10%, and tax rate was at 35%.

- a. Market value added.

$$\begin{aligned}\text{MVA} &= \text{MV} - \text{BV} \\ &= [\text{Market Price of Common Stock}] \times [\text{\#Shares}] - \text{Total Equity} \\ &= [25 \times 3,000] - [31,500 + 26,550] \\ &= 16,950\end{aligned}$$

- b. Market-to-book ratio.

$$\begin{aligned}\text{Market-to-book ratio} &= \text{MV} / \text{BV} \\ &= [25 \times 3,000] / [31,500 + 26,550] \\ &= 1.2920\end{aligned}$$

- c. Economic value added.

$$\begin{aligned}\text{EVA} &= \text{EBIT} \times (1-t) - [\text{Cost of Capital}] \times [\text{Capital}] \\ &= 17,000 \times (1-35\%) - 10\% \times (22,950 + 31,500 + 26,550) \\ &= 2,950\end{aligned}$$

- d. Return on capital.

$$\begin{aligned}\text{Return on Capital} &= [\text{EBIT} \times (1-t)] / \text{Capital} \\ &= [17,000 \times (1-35\%)] / [22,950 + 31,500 + 26,550] \\ &= 0.1364 \text{ or } 13.64\%\end{aligned}$$

Example 2: Statement of Cash Flow

Win Hom Corp. wants to identify cash change during 2013 according to the following information.

1. It allowed accounts receivable to expand by \$25 million.
2. It paid a \$30 million dividend.
3. It repaid \$25 million of short-term bank debt.
4. It earned \$60 million of net income.
5. It reduced inventory, releasing \$5 million.
6. It invested \$30 million.
7. It purchased \$25 million of marketable securities.
8. It issued \$30 million of long-term debt.
9. It set aside \$20 million as depreciation.
10. It increased its accounts payable – borrowing an additional \$25 million from its suppliers.

(1) Complete below table to get cash change position for Win Hom in 2013.

Cash flows from operating activities:	
Net Income	+60
Depreciation	+20
A/R	-25
Inventory	+5
A/P	+25
<i>Net cash flow from operating activities</i>	+85
Cash flows from investing activities:	
Investment	-30

Cash flows from financing activities:	
Dividend	-30
Short-term Bank Debt	-25
Long-term Debt	+30
Marketable securities	-25
<i>Net cash flow from financing activities</i>	-50

Net change in cash	+5
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(2) Given cash changes above, explain company's strategic operations, including operating, investing, and financing matters in 2013.

Example 3: Statement of Cash Flow

Balance Sheet of WINNIE Inc. at the end of 2010 are presented below. It was found that during 2010, the company paid dividends of \$2,500, and paid \$46,000 in cash to acquire new fixed assets. No debt was retired during 2010.

1) Use the following data from Balance Sheet of Winie Inc. to identify key accounting entry whether it is source of cash or use of cash. **(10 Points)**

	2010	2009	Source of Cash	Use of Cash
ASSETS				
Cash	4,000	14,000		
Accounts receivable	30,000	39,500	9,500	
Inventory	37,000	34,000		3,000
Fixed assets	316,000	270,000		46,000
Accumulated Depreciation	(45,000)	(30,000)		
Total assets	342,000	327,500		
LIABILITIES & EQUITY				
Accounts payable	18,000	16,000	2,000	
Wages payable	4,000	7,000		3,000
Note payable	173,000	160,000	13,000	
Capital stock	88,000	84,000	4,000	
Retained earnings	59,000	60,500		
Total Liabilities & Equity	342,000	327,500		

2) From information obtained in (1.1) and Income Statement below, classify each item as cash flow from operating activity, investing activity, or financing activity, and summarize cash flow position in below table. **(10 Points)**

Income Statement	2010
Sales	200,000
Cost of goods sold	(123,000)
Depreciation expense	(15,000)
Insurance expense	(11,000)
Wage Expense	(50,000)
Net Income	<u>1,000</u>

<i>Items</i>	<i>Cash inflow / outflow</i>
<i>Cash Flow from Operations:</i>	
Net Income	1,000
Depreciation Expense	15,000
Accounts receivable	9,500
Inventory	(3,000)
Accounts payable	2,000
Wages payable	(3,000)
<i>Net Cash Inflow or Outflow</i>	21,500

<i>Cash Flow from Investments:</i>	
New fixed assets	(46,000)
<i>Net Cash Inflow or Outflow</i>	(46,000)

<i>Cash flow from financing activities:</i>	
Dividend payout	(2,500)
Note payable	13,000
Capital stock	4,000
<i>Net Cash Inflow or Outflow</i>	14,500

Net Cash Flow	(10,000)
Beginning Cash Balance	14,000
Ending Cash Balance	4,000

Example 4: Statement of Cash Flows

The following financial statements are from the 2019 Annual Report of the MWH Company.

1) According to the following information, identify key accounting entry whether it is source of cash inflow or source of cash outflow, and by how much.

Balance Sheets at December 31, 2018 and 2019 (Unit: \$Million)

	2018	2019	Cash Inflow	Cash Outflow
Assets				
Cash	\$50	\$60		
Accounts receivable	500	520		20
Inventory	750	770		20
Current assets	\$1,300	\$1,350		
Fixed assets (net)	\$500	\$550		
Total assets	\$1,800	\$1,900		
Liabilities and equity				
Notes payable to banks	\$100	\$75		25
Accounts payable	590.00	615.00	25	
Interest payable	10.00	20.00	10	
Current liabilities	\$700	\$710		
Long-term debt	300.00	350.00	50	
Deferred income tax	300.00	310.00	10	
Capital stock	400.00	400.00		
Retained earnings	100.00	130.00		
Total liabilities & equity	\$1,800	\$1,900		

Note: It is OK whether to identify “cash” or “fixed assets” in the above form. But the point is that we will not include them in the statement of cash flow on page 2. Other items, if filled, are not necessary and may be incorrect.

2) The company just paid out dividends \$30 million. Given the following Income Statement, summarize cash flow position of MWH Company for the year ended 2019 in the table below.

Income Statement for Year Ended December 31, 2019 (Unit: \$Million)

Sales	1,000
Cost of goods sold	-650
Depreciation expense	-100
Sales and general expense	-100
Interest expense	-50
Income tax expense	-40
Net income	<u>60</u>

<i>Items</i>	<i>Cash inflow / outflow</i>
<i>Cash Flow from Operations:</i>	
Net Income	60
Depreciation	100
Deferred taxes	10
A/R	-20
Inventory	-20
Interest payable	10
A/P	25
<i>Net Cash Inflow or Outflow</i>	<u>165</u>
<i>Cash Flow from Investments:</i>	
Capital Expenditures	-150
<i>Cash flow from financing activities:</i>	
Dividends	-30
ST Debt repayment	-25
LT Debt borrowing	50
<i>Net Cash Inflow or Outflow</i>	<u>-5</u>
Change in Cash	<u>10</u>