

Course Code: ACT4050-8

Course Start Date: 08/11/2014

Section: Cash Flow and Financial Statements

Week: 6

Activity: Assess Cash Flow with Various Accounting Methods

Activity Due Date: 09/21/2014

Activity Description

Complete the following Problems:

Chapter 13: 13-1A, 13-4A, 13-5A

Chapter 14: 14-1A, 14-4A, 14-5A, and Exercise 14-4

In addition to the problem documentation, prepare a 2-3 page summary in which you analyze your results. Support your paper with minimum of one (1) scholarly resource. In addition to these specified resources, other appropriate scholarly resources, including older articles, may be included.

Length: 3-5 pages not including title and reference pages

Your paper should demonstrate thoughtful consideration of the ideas and concepts presented in the course and provide new thoughts and insights relating directly to this topic. Your response should reflect scholarly writing and current APA standards where appropriate. Be sure to adhere to Northcentral University's Academic Integrity Policy.

Upload your assignment using the Upload Assignment button below.

Learning Outcomes

- 3.0 Interpret the cost impact of activity changes on business planning and performance.
- 4.0 Analyze cost information to support operating decisions and process improvements.
- 5.0 Generate cost information to support strategic decisions regarding products, customers, technology, and divisions.

Resources

Books	
Reference	Instruction
Warren, C. S., Reeve, J. M., & Duchac, J. (2012) Managerial accounting.	Read Chapters 13 and 14

Articles	
Reference	Instruction
Raghunandan, M., Ramgulam, N., Buckmire, C., & Raghunandan-Mohammed, K. (2012). The need to build sustainable value-added reports: Seeking out ways to enhance the report's managerial accounting information. http://proxy1.ncu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=76474028&site=eds-live	Read article

OBJ. 4



EX 13-24 Free cash flow

Iglesias Enterprises, Inc. has cash flows from operating activities of \$385,000. Cash flows used for investments in property, plant, and equipment totaled \$145,000, of which 80% of this investment was used to replace existing capacity.

- Determine the free cash flow for Iglesias Enterprises, Inc.
- How might a lender use free cash flow to determine whether or not to give Iglesias Enterprises, Inc. a loan?

OBJ. 4



EX 13-25 Free cash flow

The financial statements for Nike, Inc., are provided in Appendix D at the end of the text.

- Determine the free cash flow for the year ended May 31, 2010. Assume that 90% of additions to property, plant and equipment were used to maintain productive capacity.
- How might a lender use free cash flow to determine whether or not to give Nike, Inc. a loan?
- Would you feel comfortable giving Nike a loan based on the free cash flow calculated in (a)?

OBJ. 4



EX 13-26 Free cash flow

Matthias Motors, Inc. has cash flows from operating activities of \$900,000. Cash flows used for investments in property, plant, and equipment totaled \$550,000, of which 75% of this investment was used to replace existing capacity.

Determine the free cash flow for Matthias Motors, Inc.

Problems Series A

OBJ. 2

✓ Net cash flow from operating activities, \$37,140



PR 13-1A Statement of cash flows—indirect method

The comparative balance sheet of Flack Inc. for December 31, 2013 and 2012, is shown as follows:

	Dec. 31, 2013	Dec. 31, 2012
Assets		
Cash	\$234,660	\$219,720
Accounts receivable (net)	85,440	78,360
Inventories	240,660	231,420
Investments	0	90,000
Land	123,000	0
Equipment	264,420	207,420
Accumulated depreciation—equipment	(62,400)	(55,500)
	<u>\$885,780</u>	<u>\$771,420</u>
Liabilities and Stockholders' Equity		
Accounts payable (merchandise creditors)	\$159,180	\$151,860
Accrued expenses payable (operating expenses)	15,840	19,740
Dividends payable	9,000	7,200
Common stock, \$1 par	48,000	36,000
Paid-in capital in excess of par—common stock	180,000	105,000
Retained earnings	473,760	451,620
	<u>\$885,780</u>	<u>\$771,420</u>

The following additional information was taken from the records:

- The investments were sold for \$105,000 cash.
- Equipment and land were acquired for cash.
- There were no disposals of equipment during the year.
- The common stock was issued for cash.
- There was a \$58,140 credit to Retained Earnings for net income.
- There was a \$36,000 debit to Retained Earnings for cash dividends declared.

OBJ. 4



EX 13-24 Free cash flow

Iglesias Enterprises, Inc. has cash flows from operating activities of \$385,000. Cash flows used for investments in property, plant, and equipment totaled \$145,000, of which 80% of this investment was used to replace existing capacity.

- Determine the free cash flow for Iglesias Enterprises, Inc.
- How might a lender use free cash flow to determine whether or not to give Iglesias Enterprises, Inc. a loan?

OBJ. 4



EX 13-25 Free cash flow

The financial statements for Nike, Inc., are provided in Appendix D at the end of the text.

- Determine the free cash flow for the year ended May 31, 2010. Assume that 90% of additions to property, plant and equipment were used to maintain productive capacity.
- How might a lender use free cash flow to determine whether or not to give Nike, Inc. a loan?
- Would you feel comfortable giving Nike a loan based on the free cash flow calculated in (a)?

OBJ. 4



EX 13-26 Free cash flow

Matthias Motors, Inc. has cash flows from operating activities of \$900,000. Cash flows used for investments in property, plant, and equipment totaled \$550,000, of which 75% of this investment was used to replace existing capacity.

Determine the free cash flow for Matthias Motors, Inc.

Problems Series A

OBJ. 2

✓ Net cash flow from operating activities, \$37,140



PR 13-1A Statement of cash flows—indirect method

The comparative balance sheet of Flack Inc. for December 31, 2013 and 2012, is shown as follows:

	Dec. 31, 2013	Dec. 31, 2012
Assets		
Cash	\$234,660	\$219,720
Accounts receivable (net)	85,440	78,360
Inventories	240,660	231,420
Investments	0	90,000
Land	123,000	0
Equipment	264,420	207,420
Accumulated depreciation—equipment	(62,400)	(55,500)
	<u>\$885,780</u>	<u>\$771,420</u>
Liabilities and Stockholders' Equity		
Accounts payable (merchandise creditors)	\$159,180	\$151,860
Accrued expenses payable (operating expenses)	15,840	19,740
Dividends payable	9,000	7,200
Common stock, \$1 par	48,000	36,000
Paid-in capital in excess of par—common stock	180,000	105,000
Retained earnings	473,760	451,620
	<u>\$885,780</u>	<u>\$771,420</u>

The following additional information was taken from the records:

- The investments were sold for \$105,000 cash.
- Equipment and land were acquired for cash.
- There were no disposals of equipment during the year.
- The common stock was issued for cash.

Instructions

Prepare a statement of cash flows, using the indirect method of presenting cash flows from operating activities.

OBJ. 2

✓ Net cash flow from operating activities, \$296,800



PR 13-2A Statement of cash flows—indirect method

The comparative balance sheet of Hinson Enterprises, Inc. at December 31, 2013 and 2012, is as follows:

	Dec. 31, 2013	Dec. 31, 2012
Assets		
Cash	\$ 128,275	\$ 157,325
Accounts receivable (net)	196,525	211,750
Merchandise inventory	281,400	261,800
Prepaid expenses	11,725	8,400
Equipment	573,125	469,875
Accumulated depreciation—equipment	<u>(149,450)</u>	<u>(115,675)</u>
	<u>\$1,041,600</u>	<u>\$993,475</u>
Liabilities and Stockholders' Equity		
Accounts payable (merchandise creditors)	\$ 218,925	\$ 207,900
Mortgage note payable	0	294,000
Common stock, \$1 par	91,000	21,000
Paid-in capital in excess of par—common stock	455,000	280,000
Retained earnings	<u>276,675</u>	<u>190,575</u>
	<u>\$1,041,600</u>	<u>\$993,475</u>

Additional data obtained from the income statement and from an examination of the accounts in the ledger for 2012 are as follows:

- Net income, \$220,500.
- Depreciation reported on the income statement, \$72,975.
- Equipment was purchased at a cost of \$142,450, and fully depreciated equipment costing \$39,200 was discarded, with no salvage realized.
- The mortgage note payable was not due until 2014, but the terms permitted earlier payment without penalty.
- 7,000 shares of common stock were issued at \$35 for cash.
- Cash dividends declared and paid, \$134,400.

Instructions

Prepare a statement of cash flows, using the indirect method of presenting cash flows from operating activities.

OBJ. 2

✓ Net cash flow from operating activities, \$(128,800)



PR 13-3A Statement of cash flows—indirect method

The comparative balance sheet of Mills Engine Co. at December 31, 2013 and 2012, is as follows:

	Dec. 31, 2013	Dec. 31, 2012
Assets		
Cash	\$ 714,000	\$ 750,400
Accounts receivable (net)	644,700	592,620
Inventories	986,580	904,540
Prepaid expenses	22,820	27,300
Land	245,700	373,100
Buildings	1,137,500	700,700
Accumulated depreciation—buildings	<u>(317,800)</u>	<u>(297,360)</u>
Equipment	398,440	353,640
Accumulated depreciation—equipment	<u>(109,900)</u>	<u>(123,480)</u>
	<u>\$3,722,040</u>	<u>\$3,281,460</u>

(Continued)

ACCOUNT *Bonds Payable*

ACCOUNT NO.

Date	Item	Debit	Credit	Balance	
				Debit	Credit
2013 May	1 Issued 20-year bonds		210,000		210,000

ACCOUNT *Common Stock, \$20 par*

ACCOUNT NO.

Date	Item	Debit	Credit	Balance	
				Debit	Credit
2013 Jan.	1 Balance				91,000
Dec.	7 Issued 7,700 shares of common stock for \$40 per share		154,000		245,000

ACCOUNT *Paid-In Capital in Excess of Par—Common Stock*

ACCOUNT NO.

Date	Item	Debit	Credit	Balance	
				Debit	Credit
2013 Jan.	1 Balance				434,000
Dec.	7 Issued 7,700 shares of common stock for \$40 per share		154,000		588,000

ACCOUNT *Retained Earnings*

ACCOUNT NO.

Date	Item	Debit	Credit	Balance	
				Debit	Credit
2013 Jan.	1 Balance				2,011,100
Dec.	31 Net loss	24,360			1,986,740
	31 Cash dividends	25,200			1,961,540

Instructions

Prepare a statement of cash flows, using the indirect method of presenting cash flows from operating activities.

PR 13-4A Statement of cash flows—direct method

The comparative balance sheet of Rowe Products Inc. for December 31, 2013 and 2012, is as follows:

OBJ. 3

✓ Net cash flow from operating activities, \$352,320



	Dec. 31, 2013	Dec. 31, 2012
Assets		
Cash	\$ 772,080	\$ 815,280
Accounts receivable (net)	680,160	656,880
Inventories	1,213,200	1,179,360
Investments	0	288,000
Land	624,000	0
Equipment	1,056,000	816,000
Accumulated depreciation	(293,280)	(240,480)
	<u>\$4,052,160</u>	<u>\$3,515,040</u>

(Continued)

Liabilities and Stockholders' Equity

Accounts payable (merchandise creditors)	\$ 926,160	\$ 898,080
Accrued expenses payable (operating expenses)	76,080	84,960
Dividends payable.....	10,560	7,680
Common stock, \$10 par.....	177,600	38,400
Paid-in capital in excess of par—common stock	369,600	230,400
Retained earnings	<u>2,492,160</u>	<u>2,255,520</u>
	<u>\$4,052,160</u>	<u>\$3,515,040</u>

The income statement for the year ended December 31, 2012, is as follows:

Sales		\$7,176,000
Cost of merchandise sold		<u>2,942,400</u>
Gross profit		\$4,233,600
Operating expenses:		
Depreciation expense	\$ 52,800	
Other operating expenses	<u>3,720,000</u>	
Total operating expenses		<u>3,772,800</u>
Operating income		\$ 460,800
Other expense:		
Loss on sale of investments		<u>(76,800)</u>
Income before income tax		\$ 384,000
Income tax expense		<u>123,360</u>
Net income		<u>\$ 260,640</u>

The following additional information was taken from the records:

- Equipment and land were acquired for cash.
- There were no disposals of equipment during the year.
- The investments were sold for \$211,200 cash.
- The common stock was issued for cash.
- There was a \$24,000 debit to Retained Earnings for cash dividends declared.

Instructions

Prepare a statement of cash flows, using the direct method of presenting cash flows from operating activities.

OBJ. 3

✓ Net cash flow from operating activities, \$37,140

**PR 13-5A Statement of cash flows—direct method applied to PR 13-1A**

The comparative balance sheet of Flack Inc. for December 31, 2013 and 2012, is as follows:

	Dec. 31, 2013	Dec. 31, 2012
Assets		
Cash	\$234,660	\$219,720
Accounts receivable (net)	85,440	78,360
Inventories	240,660	231,420
Investments	0	90,000
Land	123,000	0
Equipment	264,420	207,420
Accumulated depreciation—equipment	<u>(62,400)</u>	<u>(55,500)</u>
	<u>\$885,780</u>	<u>\$771,420</u>
Liabilities and Stockholders' Equity		
Accounts payable (merchandise creditors)	\$159,180	\$151,860
Accrued expenses payable (operating expenses)	15,840	19,740
Dividends payable.....	9,000	7,200
Common stock, \$1 par.....	48,000	36,000
Paid-in capital in excess of par—common stock	180,000	105,000
Retained earnings.....	<u>473,760</u>	<u>451,620</u>
	<u>\$885,780</u>	<u>\$771,420</u>

Appendix
EX 14-26 Unusual items

Discuss whether Daphne Company correctly reported the following items in the financial statements:

- a. In 2012, the company discovered a clerical error in the prior year's accounting records. As a result, the reported net income for 2011 was overstated by \$30,000. The company corrected this error by restating the prior-year financial statements.
- b. In 2012, the company voluntarily changed its method of accounting for long-term construction contracts from the percentage of completion method to the completed contract method. Both methods are acceptable under generally acceptable accounting principles. The cumulative effect of this change was reported as a separate component of income in the 2012 income statement.

Problems Series A

OBJ. 1

✓ 1. Net sales, 14.4% increase



PR 14-1A Horizontal analysis for income statement

For 2012, Eurie Company reported its most significant decline in net income in years. At the end of the year, H. Finn, the president, is presented with the following condensed comparative income statement:

Eurie Company
Comparative Income Statement
For the Years Ended December 31, 2012 and 2011

	2012	2011
Sales	\$928,000	\$800,000
Sales returns and allowances	70,000	50,000
Net sales	<u>\$858,000</u>	<u>\$750,000</u>
Cost of goods sold	640,000	500,000
Gross profit	<u>\$218,000</u>	<u>\$250,000</u>
Selling expenses	\$ 85,800	\$ 65,000
Administrative expenses	43,400	35,000
Total operating expenses	<u>\$129,200</u>	<u>\$100,000</u>
Income from operations	\$ 88,800	\$150,000
Other income	16,000	10,000
Income before income tax	\$104,800	\$160,000
Income tax expense	9,200	8,000
Net income	<u>\$ 95,600</u>	<u>\$152,000</u>

Instructions

1. Prepare a comparative income statement with horizontal analysis for the two-year period, using 2011 as the base year. Round to one decimal place.
2. ➡ To the extent the data permit, comment on the significant relationships revealed by the horizontal analysis prepared in (1).

OBJ. 1

✓ 1. Net income, 2012, 14.0%



PR 14-2A Vertical analysis for income statement

For 2012, Selene Company initiated a sales promotion campaign that included the expenditure of an additional \$25,000 for advertising. At the end of the year, Scott Brown, the president, is presented with the following condensed comparative income statement:

OBJ. 2, 3

✓ 5. Number of days' sales in receivables, 68.4

**PR 14-4A Nineteen measures of liquidity, solvency, and profitability**

The comparative financial statements of Blige Inc. are as follows. The market price of Blige Inc. common stock was \$60 on December 31, 2012.

Blige Inc.
Comparative Retained Earnings Statement
For the Years Ended December 31, 2012 and 2011

	2012	2011
Retained earnings, January 1	\$1,810,000	\$1,526,000
Add net income for year	410,750	322,000
Total	<u>\$2,220,750</u>	<u>\$1,848,000</u>
Deduct dividends:		
On preferred stock	\$ 16,000	\$ 16,000
On common stock	22,000	22,000
Total	<u>\$ 38,000</u>	<u>\$ 38,000</u>
Retained earnings, December 31	<u>\$2,182,750</u>	<u>\$1,810,000</u>

Blige Inc.
Comparative Income Statement
For the Years Ended December 31, 2012 and 2011

	2012	2011
Sales	\$2,211,000	\$2,037,200
Sales returns and allowances	11,000	7,200
Net sales	<u>\$2,200,000</u>	<u>\$2,030,000</u>
Cost of goods sold	825,000	811,200
Gross profit	<u>\$1,375,000</u>	<u>\$1,218,800</u>
Selling expenses	\$ 445,500	\$ 484,000
Administrative expenses	321,750	290,400
Total operating expenses	<u>\$ 767,250</u>	<u>\$ 774,400</u>
Income from operations	<u>\$ 607,750</u>	<u>\$ 444,400</u>
Other income	33,000	26,400
	<u>\$ 640,750</u>	<u>\$ 470,800</u>
Other expense (interest)	176,000	96,000
Income before income tax	<u>\$ 464,750</u>	<u>\$ 374,800</u>
Income tax expense	54,000	52,800
Net income	<u>\$ 410,750</u>	<u>\$ 322,000</u>

Blige Inc.
Comparative Balance Sheet
December 31, 2012 and 2011

	Dec. 31, 2012	Dec. 31, 2011
Assets		
Current assets:		
Cash	\$ 528,000	\$ 410,000
Temporary investments	800,000	725,000
Accounts receivable (net)	425,000	400,000
Inventories	310,000	240,000
Prepaid expenses	100,000	75,000
Total current assets	<u>\$2,163,000</u>	<u>\$1,850,000</u>
Long-term investments	633,000	560,000
Property, plant, and equipment (net)	<u>3,146,750</u>	<u>2,150,000</u>
Total assets	<u>\$5,942,750</u>	<u>\$4,560,000</u>
Liabilities		
Current liabilities	<u>\$ 720,000</u>	<u>\$ 710,000</u>
Long-term liabilities:		
Mortgage note payable, 8%, due 2017	\$1,000,000	\$ 0
Bonds payable, 8%, due 2021	1,200,000	1,200,000
Total long-term liabilities	<u>\$2,200,000</u>	<u>\$1,200,000</u>
Total liabilities	<u>\$2,920,000</u>	<u>\$1,910,000</u>
Stockholders' Equity		
Preferred \$0.80 stock, \$20 par	\$ 400,000	\$ 400,000
Common stock, \$10 par	440,000	440,000
Retained earnings	<u>2,182,750</u>	<u>1,810,000</u>
Total stockholders' equity	<u>\$3,022,750</u>	<u>\$2,650,000</u>
Total liabilities and stockholders' equity	<u>\$5,942,750</u>	<u>\$4,560,000</u>

Instructions

Determine the following measures for 2012, rounding to one decimal place:

1. Working capital
2. Current ratio
3. Quick ratio
4. Accounts receivable turnover
5. Number of days' sales in receivables
6. Inventory turnover
7. Number of days' sales in inventory
8. Ratio of fixed assets to long-term liabilities
9. Ratio of liabilities to stockholders' equity
10. Number of times interest charges earned
11. Number of times preferred dividends earned
12. Ratio of net sales to assets
13. Rate earned on total assets
14. Rate earned on stockholders' equity
15. Rate earned on common stockholders' equity
16. Earnings per share on common stock
17. Price-earnings ratio
18. Dividends per share of common stock
19. Dividend yield

OBJ. 2, 3

PR 14-5A Solvency and profitability trend analysis

Itzkoff Company has provided the following comparative information:

	2012	2011	2010	2009	2008
Net income	\$ 170,879	\$ 229,985	\$ 394,485	\$ 552,500	\$ 500,000
Interest expense	350,027	325,002	300,094	281,250	250,000
Income tax expense	49,492	83,179	166,358	124,800	156,000
Total assets (ending balance)	6,023,425	5,624,113	5,089,695	4,552,500	3,750,000
Total stockholders' equity (ending balance)	2,647,848	2,476,970	2,246,985	1,852,500	1,300,000
Average total assets	5,823,769	5,356,904	4,821,098	4,151,250	3,375,000
Average stockholders' equity	2,562,409	2,361,977	2,049,743	1,576,250	1,050,000

You have been asked to evaluate the historical performance of the company over the last five years.

Selected industry ratios have remained relatively steady at the following levels for the last five years:

	2008-2012
Rate earned on total assets	11%
Rate earned on stockholders' equity	16%
Number of times interest charges earned	3.1
Ratio of liabilities to stockholders' equity	1.5

Instructions

1. Prepare four line graphs with the ratio on the vertical axis and the years on the horizontal axis for the following four ratios (rounded to one decimal place):
 - a. Rate earned on total assets
 - b. Rate earned on stockholders' equity
 - c. Number of times interest charges earned
 - d. Ratio of liabilities to stockholders' equityDisplay both the company ratio and the industry benchmark on each graph. That is, each graph should have two lines.
2. Prepare an analysis of the graphs in (1).

OBJ. 1

✓ Retained earnings, Dec. 31, 2012, 33.0%



EX 14-4 Vertical analysis of balance sheet

Balance sheet data for Bryant Company on December 31, the end of the fiscal year, are shown below.

	2012	2011
Current assets	\$ 775,000	\$ 585,000
Property, plant, and equipment	1,425,000	1,597,500
Intangible assets	300,000	67,500
Current liabilities	525,000	360,000
Long-term liabilities	900,000	855,000
Common stock	250,000	270,000
Retained earnings	825,000	765,000

Prepare a comparative balance sheet for 2012 and 2011, stating each asset as a percent of total assets and each liability and stockholders' equity item as a percent of the total liabilities and stockholders' equity. Round to one decimal place.

OBJ. 1

✓ a. Net income increase, 105.0%



EX 14-5 Horizontal analysis of the income statement

Income statement data for Boone Company for the years ended December 31, 2012 and 2011, are as follows:

	2012	2011
Sales	\$446,400	\$360,000
Cost of goods sold	387,450	315,000
Gross profit	\$ 58,950	\$ 45,000
Selling expenses	\$ 27,900	\$ 22,500
Administrative expenses	21,960	18,000
Total operating expenses	\$ 49,860	\$ 40,500
Income before income tax	\$ 9,090	\$ 4,500
Income tax expenses	5,400	2,700
Net income	\$ 3,690	\$ 1,800

- Prepare a comparative income statement with horizontal analysis, indicating the increase (decrease) for 2012 when compared with 2011. Round to one decimal place.
- What conclusions can be drawn from the horizontal analysis?

OBJ. 2

✓ a. 2012 working capital, \$1,342,000

EX 14-6 Current position analysis

The following data were taken from the balance sheet of Beatty Company:

	Dec. 31, 2012	Dec. 31, 2011
Cash	\$ 330,000	\$ 238,000
Temporary investments	465,000	385,000
Accounts and notes receivable (net)	425,000	295,000
Inventories	420,000	291,000
Prepaid expenses	312,000	141,000
Total current assets	\$1,952,000	\$1,350,000
Accounts and notes payable (short-term)	\$ 420,000	\$ 400,000
Accrued liabilities	190,000	140,000
Total current liabilities	\$ 610,000	\$ 540,000

- Determine for each year (1) the working capital, (2) the current ratio, and (3) the quick ratio. Round ratios to one decimal place.
- What conclusions can be drawn from these data as to the company's ability to meet its currently maturing debts?