



## Extend Your Knowledge 19-2: Using a Spreadsheet to Prepare the Cash Flow Statement

We calculate net cash inflows (outflows) from operating activities under the indirect method by using balance sheets at the beginning and end of the period, the current period's income statement, and information about selected transactions. Exhibit 19.6 shows the income statement and balance sheet information for Genesis Corp. Based on this information, Exhibit 19A.1 presented the indirect method of reconciling net income to net cash inflows from operating activities. This supplement explains how we can use a spreadsheet (work sheet) analysis to prepare the cash flow statement using the indirect method.

### Preparing the Indirect Method Spreadsheet

A spreadsheet, also called a working paper, can help us organize the information needed to prepare a cash flow statement. A spreadsheet also makes it easier to check the accuracy of our work.

To illustrate how we use this spreadsheet, we return to the comparative balance sheets and income statement shown in Exhibit 19.6. Information needed for the spreadsheet in preparing the cash flow statement is listed below along with identifying letters:



Illustrate use of a spreadsheet in preparing a cash flow statement.

- a. Net income is \$38,000.
- b. Accounts receivable increases by \$20,000.
- c. Merchandise inventory increases by \$14,000.
- d. Prepaid expenses increases by \$2,000.
- e. Accounts payable decreases by \$5,000.
- f. Interest payable decreases by \$1,000.
- g. Income taxes payable increases by \$10,000.
- h. Amortization expense is \$24,000.
- i. Capital assets costing \$30,000 with accumulated amortization of \$12,000 are sold for \$12,000 cash. Loss on sale of assets is \$6,000.
- j. Bonds with a book value of \$34,000 are retired with a cash payment of \$18,000. Gain on retirement of bonds is \$16,000.
- k. Capital assets costing \$70,000 are purchased with a cash payment of \$10,000 and an issuance of bonds payable for \$60,000.
- l. Issued 3,000 common shares for \$15,000.
- m. Paid cash dividends of \$14,000.

Exhibit CFS 19S.1 shows the indirect method spreadsheet for Genesis Corp. Both beginning and ending balance sheets are recorded on the spreadsheet. We enter information in the Analysis of Changes columns for the cash flows from operating, investing, and financing activities. We also include information about non-cash investing and financing activities near the bottom. The spreadsheet does not reconstruct the income statement. Instead, net income is entered as the first item used in calculating the amount of cash flows from operating activities.

## Exhibit CFS 19.1

## Spreadsheet for Preparing Cash Flow Statement—Indirect Method

<b>Genesis Corp.</b> <b>Spreadsheet for Cash Flow Statement—Indirect Method</b> <b>For Year Ended December 31, 2005</b>				
	December 31, 2004	Analysis of Changes		December 31, 2005
		Debit	Credit	
<b>Balance sheet—debits:</b>				
Cash .....	12,000			17,000
Accounts receivable .....	40,000	(b) 20,000		60,000
Merchandise inventory .....	70,000	(c) 14,000		84,000
Prepaid expenses .....	4,000	(d) 2,000		6,000
Capital assets .....	210,000	(k1) 70,000	(i) 30,000	250,000
	<u>336,000</u>			<u>417,000</u>
<b>Balance sheet—credits:</b>				
Accumulated amortization .....	48,000	(i) 12,000	(h) 24,000	60,000
Accounts payable .....	40,000	(e) 5,000		35,000
Interest payable .....	4,000	(f) 1,000		3,000
Income taxes payable .....	12,000		(g) 10,000	22,000
Bonds payable .....	64,000	(j) 34,000	(k2) 60,000	90,000
Common shares .....	80,000		(l) 15,000	95,000
Retained earnings .....	88,000	(m) 14,000	(a) 38,000	112,000
	<u>336,000</u>			<u>417,000</u>
<b>Cash flow statement:</b>				
Operating activities:				
Net income .....		(a) 38,000		
Increase in accounts receivable .....			(b) 20,000	
Increase in merchandise inventory .....			(c) 14,000	
Increase in prepaid expenses .....			(d) 2,000	
Decrease in accounts payable .....			(e) 5,000	
Decrease in interest payable .....			(f) 1,000	
Increase in income taxes payable .....		(g) 10,000		
Amortization expense .....		(h) 24,000		
Loss on sale of capital assets .....		(i) 6,000		
Gain on retirement of bonds .....			(j) 16,000	
Investing activities:				
Receipt from sale of capital assets .....		(i) 12,000		
Payment for purchase of capital assets .....			(k1) 10,000	
Financing activities:				
Payments to retire bonds .....			(j) 18,000	
Receipts from issuing shares .....		(l) 15,000		
Payment of dividends .....			(m) 14,000	
<b>Non-cash investing and financing activities disclosed in note:</b>				
Purchase of capital assets financed by bonds .....		(k2) 60,000	(k1) 60,000	
		<u>337,000</u>	<u>337,000</u>	

## Entering the Analysis of Changes on the Spreadsheet

The following sequence of procedures is used to complete the spreadsheet after the balance sheet accounts are entered:

1. Enter net income as an operating cash inflow (debit) and as a credit to Retained Earnings.
2. In the Cash Flow Statement section, adjustments to net income are entered as debits if they increase cash inflows and as credits if they decrease cash inflows. Applying this rule, adjust net income for the change in each non-cash current asset and current liability related to operating activities. For each adjustment to net income, the offsetting debit or credit helps reconcile the beginning and ending balances of a current asset or current liability.
3. Enter adjustments to net income for income statement items not creating cash inflows (outflows) in the period. For each adjustment, the offsetting debit or credit helps reconcile a non-cash balance sheet account.
4. Adjust net income to eliminate any gains or losses from investing and financing activities. Because the cash from a gain must be excluded from operating activities, the gain is entered as a credit in the operating activities section. Losses are entered as debits. For each of these adjustments, the related debits and/or credits help reconcile balance sheet accounts and involve entries to show the cash flow from investing or financing activities.
5. After reviewing any unreconciled balance sheet accounts and related information, enter the reconciling entries for all remaining investing and financing activities. Examples are purchases of capital assets, issuances of long-term debt, sales of share capital, and dividend payments. Some of these may require entries in the non-cash investing and financing activities section of the spreadsheet.
6. Check accuracy by totalling the Analysis of Changes columns and by determining that the change in each balance sheet account has been explained.

We illustrate these steps in Exhibit CFS 19S.1 for Genesis:

Step	Entries
1 .....	(a)
2 .....	(b) through (g)
3 .....	(h)
4 .....	(i) through (j)
5 .....	(k) through (m)

Because adjustments (i), (j), and (k) are more challenging, we show them in the debit and credit format below. These entries are for purposes of our understanding—they are not the entries actually made in the journals. The format we use is similar to the one used for General Journal entries, except that changes in the Cash account are identified as inflows and outflows of cash.

i.	Loss from Sale of Capital Assets.....	6,000	
	Accumulated Amortization.....	12,000	
	Receipt from Sale of Capital Assets (Source of cash).....	12,000	
	Capital Assets.....		30,000
	<i>To describe sale of capital assets.</i>		
j.	Bonds Payable .....	34,000	
	Payments to Retire Bonds (Use of cash) ..		18,000
	Gain on Retirement of Bonds .....		16,000
	<i>To describe retirement of bonds.</i>		
k1.	Capital Assets .....	70,000	
	Payment to Purchase Capital Assets (Use of cash).....		10,000
	Purchase of Capital Assets Financed by Bonds.....		60,000
	<i>To describe purchase of capital assets, cash payment, and use of non-cash financing.</i>		
k2.	Purchase of Capital Assets Financed by Bonds	60,000	
	Bonds Payable .....		60,000
	<i>To show issuance of bonds payable to finance purchase of capital assets.</i>		

## Summary of Extend Your Knowledge 19-2

**LO** **Illustrate use of a spreadsheet in preparing a cash flow statement.** A spreadsheet is a useful tool in preparing a cash flow statement. Six key steps (described

in the supplement) are applied when using the spreadsheet. The result is a properly classified cash flow statement.

## Quick Study

When a spreadsheet for a cash flow statement is prepared, all changes in non-cash balance sheet accounts are accounted for on the spreadsheet. Explain why this occurs.

**QS CFS19-1**

Explaining non-cash accounts on a spreadsheet

LO<sup>9</sup>

## Problems

**Required**

Refer to the information about Joseph Corporation presented in Problem 19-1A. Prepare a cash flow statement spreadsheet that follows the indirect method of calculating cash flows from operating activities. Identify the debits and credits in the Analysis of Changes columns with letters that correspond to the following list of transactions and events.

- |                                     |   |
|-------------------------------------|---|
| a. Net income is \$268,000.         | f. Amortization expense is \$72,000.              |
| b. Accounts receivable increased.   | g. Purchased equipment for \$48,000.              |
| c. Merchandise inventory increased. | h. Issued 16,000 shares at \$5 per share.         |
| d. Accounts payable decreased.      | i. Declared and paid \$148,000 of cash dividends. |
| e. Income taxes payable increased.  |   |

**Problem CFS19-1A**

Cash flows spreadsheet (indirect method)

LO<sup>2,7,8,9</sup>**Check figure:**

Analysis of Changes column totals, \$772,000

Refer to the facts about Weir Corp. presented in Problem 19-3A.

**Required**

Prepare a cash flow statement spreadsheet that follows the indirect method of calculating cash flows from operating activities. Identify the debits and credits in the Analysis of Changes columns with letters that correspond to the following list of transactions and events:

- a. Net income is \$103,250.
- b. Accounts receivable increased.
- c. Merchandise inventory increased.
- d. Prepaid expenses decreased.
- e. Accounts payable decreased.
- f. Amortization expense is \$26,250.
- g. Sold equipment costing \$65,625, with accumulated amortization of \$39,375, for \$19,075 cash.
- h. Purchased equipment costing \$134,925 by paying cash of \$35,000 and
- i. signing a long-term note payable for the balance.
- j. Borrowed \$5,250 by signing a short-term note payable.
- k. Paid \$43,925 to reduce the long-term notes payable.
- l. Issued 3,500 common shares at \$18 per share.
- m. Declared and paid cash dividends of \$86,975.

**Problem CFS19-2A**

Cash flows spreadsheet (indirect method)

LO<sup>7,8,9</sup>

## Alternate Problems

### Problem CFS19-1B

Cash flows spreadsheet  
(indirect method)

LO 5, 8, 9

**Check figure:**

Analysis of Changes column  
totals, \$402,465

Refer to the facts about Poltack Inc. presented in Problem 19-1B.

**Required**

Prepare a cash flow statement spreadsheet that follows the indirect method of calculating cash flows from operating activities. Identify the debits and credits in the Analysis of Changes columns with letters that correspond to the following list of transactions and events:

- |                                     |  |
|-------------------------------------|--|
| a. Net income is \$123,795.         | f. Amortization expense is \$24,780              |
| b. Accounts receivable decreased.   | g. Purchased equipment for \$40,530.             |
| c. Merchandise inventory increased. | h. Issued 4,200 shares at \$14 per share.        |
| d. Accounts payable increased.      | i. Declared and paid \$92,400 of cash dividends. |
| e. Income taxes payable decreased.  |  |

### Problem CFS19-2B

Cash flows spreadsheet  
(indirect method)

LO 7, 8, 9

**Check figure:**

Analysis of Changes column  
totals, \$756,420

Refer to the facts about Wolfson Inc. presented in Problem 19-3B.

**Required**

Prepare a cash flow statement spreadsheet that follows the indirect method of computing cash flows from operating activities. Identify the debits and credits in the Analysis of Changes columns with letters that correspond to the following list of transactions and events:

- a. Net income is \$79,800.
- b. Accounts receivable decreased.
- c. Merchandise inventory decreased.
- d. Prepaid expenses decreased.
- e. Accounts payable decreased.
- f. Amortization expense is \$51,240.
- g. Sold equipment costing \$71,400, with accumulated amortization of \$29,190, for \$39,270 cash.
- h. Purchased equipment costing \$158,550 by paying cash of \$53,550 and
- i. signing a long-term note payable for the balance.
- j. Borrowed \$8,400 by signing a short-term note payable.
- k. Paid \$63,000 to reduce the long-term notes payable.
- l. Issued 4,200 common shares at \$11 per share.
- m. Declared and paid cash dividends of \$88,200.