CHAPTER 23
Statement of Cash Flows

LEARNING OBJECTIVES

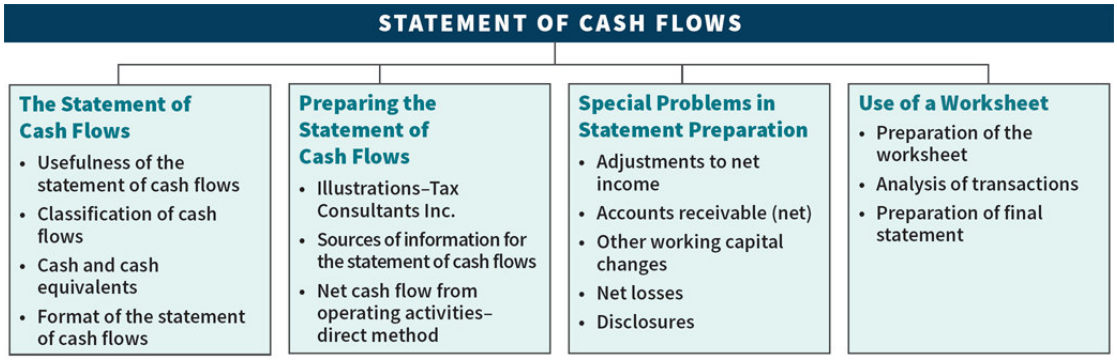
After studying this chapter, you should be able to:

1. Describe the usefulness and format of the statement of cash flows.
2. Prepare a statement of cash flows.
3. Contrast the direct and indirect methods of calculating net cash flow from operating activities.
4. Discuss special problems in preparing a statement of cash flows.
5. Explain the use of a worksheet in preparing a statement of cash flows.

This chapter also includes numerous conceptual discussions that are integral to the topics presented here.

PREVIEW OF CHAPTER 23

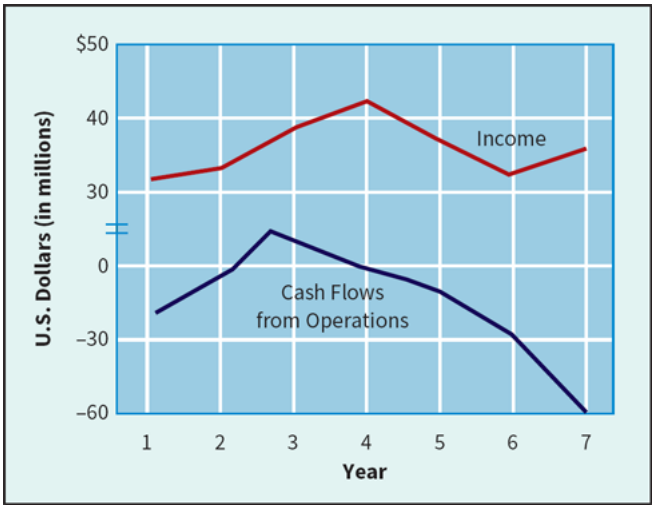
As the following opening story indicates, information on cash flows from operations could show financial inflexibility that sometimes leads to a company's bankruptcy. This chapter explains the main components of a statement of cash flows and the types of information it provides. The content and organization of the chapter are as follows.



Show Me the Money!

Investors usually look to net income as a key indicator of a company's financial health and future prospects. The following graph shows the net income of one company over a seven-year period.

The company showed a pattern of consistent profitability and even some periods of income growth. Between years 1 and 4, net income for this company grew by 32 percent, from $31 million to $41 million. Would you expect its profitability to continue? The company had consistently paid dividends and interest. Would you expect it to continue to do so? Investors answered these questions by buying the company's shares. Eighteen months later, this company—**W. T. Grant** (USA)—filed for bankruptcy, in what was then the largest bankruptcy filing in the United States.



How did this happen? As indicated by the bottom line in the graph, the company had experienced several years of declining cash flows from its operations even though it reported profits. How can a company have negative cash flows while reporting profits? The answer lies partly in the fact that W. T. Grant was having trouble collecting the receivables from its credit sales, causing cash flow to be less than net income. Investors who analyzed the cash flows would have likely found an early warning signal of W. T. Grant's operating problems.

Investors can also look to cash flow information to sniff out companies that can be good buys. As one analyst stated when it comes to valuing shares: "Show me the money!" Here's the thinking behind that statement. Start with the "cash flows from operations" reported in the statement of cash flows, which (as you will learn in this chapter) consists of net income with non-cash charges (like depreciation and deferred taxes) added back and cash-draining events (like an inventory pile-up) taken out. Now subtract capital expenditures and dividends. What you're left with is free cash flow (as discussed in Chapter 5).

Many analysts like companies trading at low multiples of their free cash flow—low, that is, in relation to rivals today or the same company in past years. Why? They know that reported earnings can be misleading. Case in point: Computer-game maker **Activision Blizzard** (USA) reported net income of $113 million in a recent year. But it did better than that. It took in an additional $300 million, mostly for subscriptions to online multiplayer games. It gets the cash now but records the revenue only over time, as the subscriptions run out. A couple of investment houses put these shares on their buy list on the strength of its cash flows. In contrast, **Moody's Investors Service** downgraded the debt issued by **Tesla** (USA), citing persistently negative cash flow and continued production issues with the Model 3 mass-market sedan. Moody's continues to view the company's credit skeptically, due to "the likelihood that Tesla will have to undertake a large, near-term capital raise in order to refund maturing obligations and avoid a liquidity shortfall." So watch cash flow—to get an indicator of companies headed for trouble, as well as companies that may be undervalued.

Review and Practice

Go to the **Review and Practice** section at the end of the chapter for a targeted summary review and practice problem with solution. Multiple-choice questions with annotated solutions, as well as additional exercises and practice problem with solutions, are also available online.

The Statement of Cash Flows

LEARNING OBJECTIVE 1

Describe the usefulness and format of the statement of cash flows.

The primary purpose of the **statement of cash flows** is to provide information about a company's cash receipts and cash payments during a period. A secondary objective is to provide cash-basis information about the company's operating, investing, and financing activities. [1] (See the Authoritative Literature References section near the end of the chapter.) The statement of cash flows therefore reports cash receipts, cash payments, and net change in cash resulting from a company's operating, investing, and financing activities during a period. Its format reconciles the beginning and ending cash balances for the period.

Usefulness of the Statement of Cash Flows

The statement of cash flows provides information to help investors, creditors, and others assess the following (see **Underlying Concepts**):

1. **The entity's ability to generate future cash flows.** A primary objective of financial reporting is to provide information which helps to predict the amounts, timing, and uncertainty of future cash flows. By examining relationships between items such as sales and net cash flow from operating activities, or net cash flow from operating activities and increases or decreases in cash, it is possible to better predict the future cash flows than is possible using accrual-basis data alone.
2. **The entity's ability to pay dividends and meet obligations.** Simply put, cash is essential. Without adequate cash, a company cannot pay employees, settle debts, pay out dividends, or acquire equipment. A statement of cash flows indicates where the company's cash comes from and how the company uses its cash. Employees, creditors, shareholders, and customers should be particularly interested in this statement because it alone shows the flows of cash in a business.
3. **The reasons for the difference between net income and net cash flow from operating activities.** The net income number is important: It provides information on the performance of a company from one period to another. But some people are critical of accrual-basis net income because companies must make estimates to arrive at it. Such is not the case with cash. Thus, as the opening story showed, financial statement readers can benefit from knowing why a company's net income and net cash flow from operating activities differ and can assess for themselves the reliability of the income number.
4. **The cash and non-cash investing and financing transactions during the period.** Besides operating activities, companies undertake investing and financing transactions. *Investing* activities include the purchase and sale of assets other than a company's products or services. *Financing* activities include borrowings and repayments of borrowings, investments by owners, and distributions to owners. By examining a company's investing and financing activities, a financial statement reader can better understand why assets and liabilities increased or decreased during the period. For example, by reading the statement of cash flows, the reader might find answers to following questions:
    - Why did cash decrease for **Aixtron Aktiengesellschaft** (DEU) when it reported net income for the year?
    - How much did **Telefónica, S.A.** (ESP) spend on property, plant, and equipment, and intangible assets last year?
    - Did dividends paid by **BP plc** (GBR) increase last year?
    - How much money did **Coca-Cola** (USA) borrow last year?
    - How much cash did **Ahold Delhaize Group** (NLD/BEL) use to repurchase ordinary shares?

Underlying Concepts

Reporting information in the statement of cash flows contributes to meeting the objective of financial reporting.

Classification of Cash Flows

The statement of cash flows classifies cash receipts and cash payments by operating, investing, and financing activities. Transactions and other events characteristic of each kind of activity are as follows. [2]

1. **Operating activities** involve the cash effects of transactions that enter into the determination of net income, such as cash receipts from sales of goods and services, and cash payments to suppliers and employees for acquisitions of inventory and expenses. The amount of cash flows arising from operating activities is a key indicator of the extent to which the operations of the entity have generated sufficient cash flows to repay loans, maintain the operating capability of the entity, pay dividends, and make new investments without recourse to external sources of financing.
2. **Investing activities** generally involve non-current assets and include (a) making and collecting loans, and (b) acquiring and disposing of investments and productive long-lived assets. The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditures have been made for resources intended to generate future income and cash flows.
3. **Financing activities** involve liability and equity items and include (a) obtaining cash from creditors and repaying the amounts borrowed, and (b) obtaining capital from owners and providing them with a return on, and a return of, their investment. The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of capital to a company.

Illustration 23.1 classifies the typical cash receipts and payments of a company according to operating, investing, and financing activities.

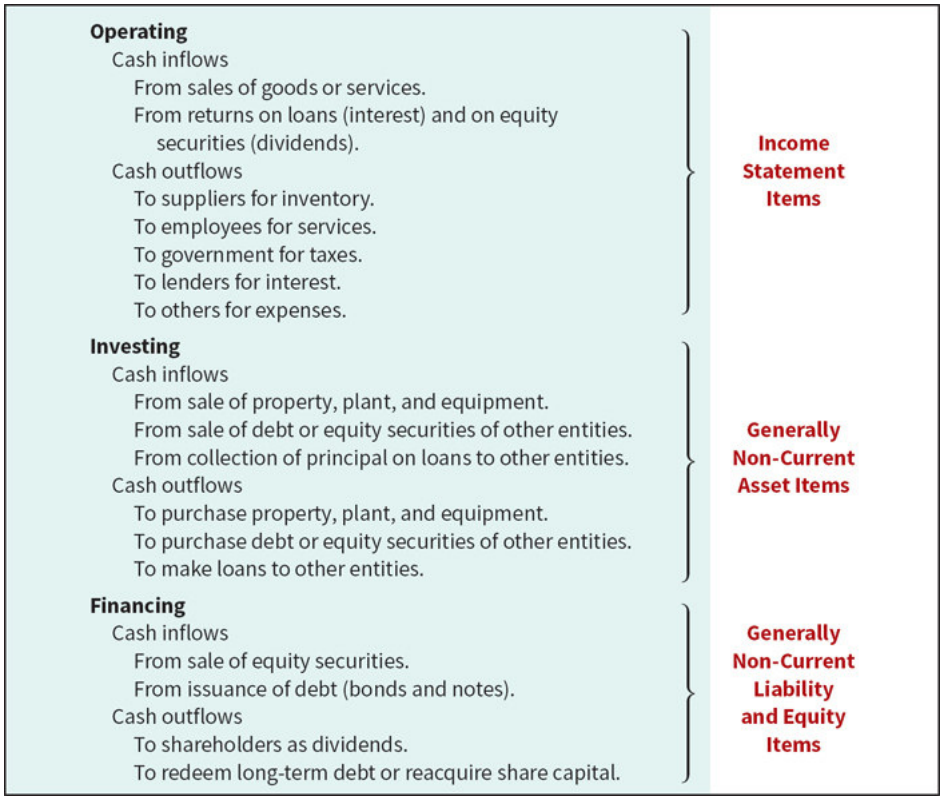


ILLUSTRATION 23.1 Classification of Typical Cash Inflows and Outflows

The operating activities category is the most important. It shows the cash provided by company operations. This source of cash is generally considered to be the best measure of a company's ability to generate enough cash to continue as a going concern.

Note the following general guidelines about the classification of cash flows.

1. Operating activities involve income statement items.
2. Investing activities involve cash flows resulting from changes in investments and other non-current asset items.
3. Financing activities involve cash flows resulting from changes in equity and non-current liability items.

IFRS allows some flexibility regarding the classification of certain items. Interest and dividends paid can be classified as either operating or financing, depending on what treatment the company thinks is most appropriate. Similarly, interest and dividends received can be classified as either operating or investing. Taxes paid are classified as operating except in circumstances where they can be identified with specific investing or financing activities. In order to limit the complexity of our presentation and to avoid ambiguity in assignment material, in Illustration 23.1 we have identified specific treatment for each of these items rather than allowing choices. *All assignment material is based on this treatment.*[1]

Also, companies classify some cash flows relating to operating activities as investing or financing activities. For example, a company classifies the total cash received from the sale of property, plant, and equipment as an investing activity. Therefore, sales of those assets are not considered operating activities. Because of this (as is discussed more fully later in the chapter), companies must eliminate any gains or losses arising from the disposal of these assets to arrive at net cash flow from operating activities. Likewise, the payment to extinguish debt is a financing cash flow and should be classified as

such. Any gain or loss related to the extinguishment is eliminated from net cash provided by operating activities.

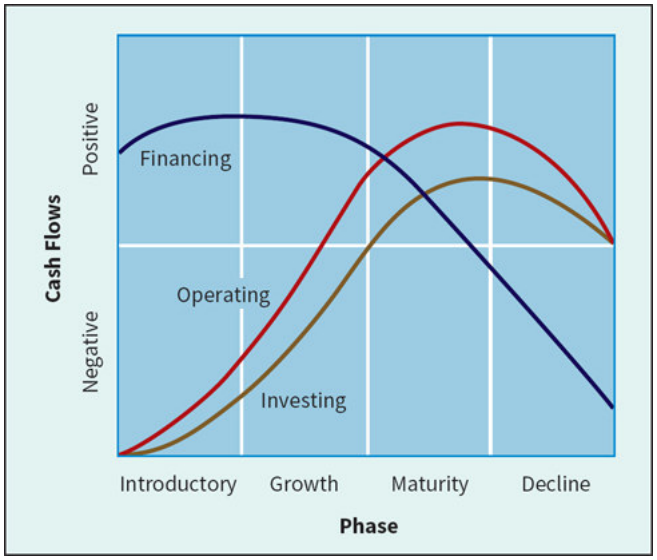
What Do the Numbers Mean?

How's My Cash Flow?

To evaluate overall cash flows, it is useful to understand where in the product life cycle a company is. Generally, companies move through several stages of development, which have implications for cash flows. As the graph shows, the pattern of cash flows from operating, financing, and investing activities will vary depending on the stage of the product life cycle.

In the introductory phase, the product is likely not generating much revenue (net operating cash flow is negative). Because the company is making heavy investments to get a product off the ground, cash flow from investing is negative, and financing cash flows are positive.

As the product moves to the growth and maturity phases, these cash flow relationships reverse. The product generates more cash flows from operations, which can be used to cover investments needed to support the product, and less cash is needed from financing. So are negative operating cash flows bad? Not always. It depends on the product life cycle.



Source: Adapted from Paul D. Kimmel, Jerry J. Weygandt, and Donald E. Kieso, *Financial Accounting: Tools for Business Decision Making*, 9th ed. (New York: John Wiley & Sons, 2019), p. 12-18.

Cash and Cash Equivalents

The basis recommended by the IASB for the statement of cash flows is actually "cash and cash equivalents." IFRS requires that the components of cash and cash equivalents are reported each period. **[3] Cash equivalents** are short-term, highly liquid investments that are both:

- Readily convertible to known amounts of cash, and
- So near their maturity that they present insignificant risk of changes in value (e.g., due to changes in interest rates).

Generally, only investments with original maturities of three months or less qualify under this definition. Examples of cash equivalents are Treasury bills, commercial paper, and money market funds purchased with cash that is in excess of immediate needs. Equity investments are excluded from cash equivalents unless they are, in substance, cash equivalents. Although we use the term "cash"

throughout our discussion and illustrations, we mean cash and cash equivalents when reporting the cash flows and the net increase or decrease in cash. [4]

Format of the Statement of Cash Flows

The three activities we discussed above constitute the general format of the statement of cash flows. The operating activities section always appears first. It is followed by the investing activities section and then the financing activities section.

A company reports the individual inflows and outflows from investing and financing activities separately. That is, a company reports them gross, not netted against one another. Thus, a cash outflow from the purchase of property is reported separately from the cash inflow from the sale of property. Similarly, a cash inflow from the issuance of debt is reported separately from the cash outflow from its retirement.

The net increase or decrease in cash reported during the period should reconcile the beginning and ending cash balances as reported in the comparative statements of financial position.[2] The general format of the statement of cash flows presents the results of the three activities discussed previously—operating, investing, and financing. Illustration 23.2 shows a widely used form of the statement of cash flows.

Company Name Statement of Cash Flows Period Covered		
Cash flows from operating activities		
Net income		XXX
Adjustments to reconcile net income to net cash provided (used) by operating activities: (List of individual items)	XX	XX
Net cash provided (used) by operating activities		XXX
Cash flows from investing activities (List of individual inflows and outflows)	XX	
Net cash provided (used) by investing activities		XXX
Cash flows from financing activities (List of individual inflows and outflows)	XX	
Net cash provided (used) by financing activities		XXX
Net increase (decrease) in cash		XXX
Cash at beginning of period		XXX
Cash at end of period		XXX

ILLUSTRATION 23.2 Format of the Statement of Cash Flows

Preparing the Statement of Cash Flows

LEARNING OBJECTIVE 2

Prepare a statement of cash flows.

Companies prepare the statement of cash flows differently from the three other basic financial statements. For one thing, it is not prepared from an adjusted trial balance. The cash flow statement requires detailed information concerning the changes in account balances that occurred between two points in time. An adjusted trial balance will not provide the necessary data. Second, the statement of cash flows deals with cash receipts and payments. As a result, the company must adjust the effects of the use of accrual accounting to determine cash flows. The information to prepare this statement usually comes from three sources:

1. **Comparative statements of financial position** provide the amount of the changes in assets, liabilities, and equities from the beginning to the end of the period.
2. **Current income statement** data help determine the amount of net cash provided by or used by operations during the period.
3. **Selected transaction data** from the general ledger provide additional detailed information needed to determine how the company provided or used cash during the period.

Preparing the statement of cash flows from the data sources above involves three major steps:

Step 1. Determine the change in cash. This procedure is straightforward. A company can easily compute the difference between the beginning and the ending cash balance from examining its comparative statements of financial position.

Step 2. Determine the net cash flow from operating activities. This procedure is complex. It involves analyzing not only the current year's income statement but also comparative statements of financial position as well as selected transaction data.

Step 3. Determine net cash flows from investing and financing activities. A company must analyze all other changes in the statement of financial position accounts to determine their effects on cash.

On the following pages, we work through these three steps in the process of preparing the statement of cash flows for Tax Consultants Inc. over several years.

Illustrations—Tax Consultants Inc.

We show the steps in preparing the statement of cash flows using data for Tax Consultants Inc. To begin, we use the **first year of operations** for Tax Consultants Inc. The company started on January 1, 2022, when it issued 60,000 ordinary shares of $1 par value for $60,000 cash. The company rented its office space, furniture, and equipment, and performed tax consulting services throughout the first year. The comparative statements of financial position at the beginning and end of the year 2022 appear in Illustration 23.3.

Tax Consultants Inc. Comparative Statements of Financial Position			
Assets	Dec. 31, 2022	Jan. 1, 2022	Change Increase/Decrease
Accounts receivable	$36,000	$–0–	$36,000 Increase
Cash	49,000	–0–	49,000 Increase
Total	$85,000	$–0–	
Equity and Liabilities			
Ordinary shares ($1 par)	$60,000	$–0–	$60,000 Increase
Retained earnings	20,000	–0–	20,000 Increase
Accounts payable	5,000	–0–	5,000 Increase
Total	$85,000	$–0–	

ILLUSTRATION 23.3 Comparative Statements of Financial Position, Tax Consultants Inc., Year 1

Illustration 23.4 shows the income statement and additional information for Tax Consultants.

Tax Consultants Inc. Income Statement For the Year Ended December 31, 2022	
Revenues	$125,000
Operating expenses	85,000
Income before income taxes	40,000
Income tax expense	6,000
Net income	$ 34,000
Additional Information: Examination of selected data indicates that a dividend of $14,000 was declared and paid during the year.	

ILLUSTRATION 23.4 Income Statement, Tax Consultants Inc., Year 1

Step 1: Determine the Change in Cash

To prepare a statement of cash flows, the first step is to **determine the change in cash**. This is a simple computation. Tax Consultants had no cash on hand at the beginning of the year 2022. It had $49,000 on hand at the end of 2022. Thus, cash changed (increased) in 2022 by $49,000.

Step 2: Determine Net Cash Flow from Operating Activities

To determine net cash flow from operating activities,[3] companies adjust net income in numerous ways. A useful starting point is to understand why net income must be converted to net cash provided by operating activities.

Under IFRS, companies use the accrual basis of accounting. As you have learned, this basis requires that companies record revenue when they satisfy performance obligations and record expenses when incurred. Revenues may include credit sales for which the company has not yet collected cash. Expenses incurred may include some items that the company has not yet paid in cash. Thus, under the accrual basis of accounting, net income is not the same as net cash flow from operating activities.

To arrive at net cash flow from operating activities, a company must determine revenues and expenses on a **cash basis**. **It does this by eliminating the effects of income statement transactions that do not result in an increase or decrease in cash.** Illustration 23.5 shows the relationship between net income and net cash flow from operating activities.

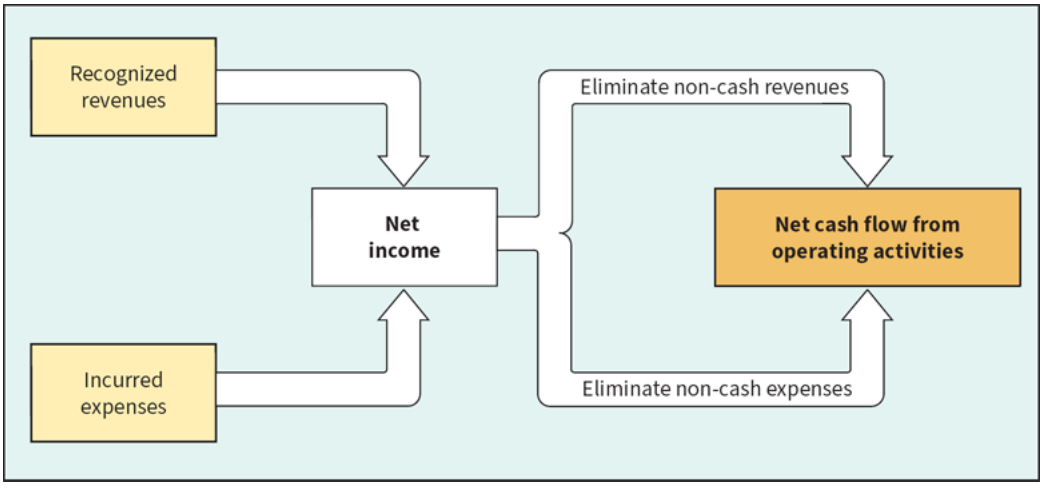


ILLUSTRATION 23.5 Net Income versus Net Cash Flow from Operating Activities

In this chapter, we use the term net income to refer to accrual-based net income. A company may convert net income to net cash flow from operating activities through either a direct method or an indirect method. Due to its widespread use in practice, in the following sections we illustrate use of the indirect method. Later in the chapter, we describe the direct method and discuss the advantages and disadvantages of the two methods.

The **indirect method** (or **reconciliation method**) starts with net income and converts it to net cash flow from operating activities. In other words, **the indirect method adjusts net income for items that affected reported net income but did not affect cash**. To compute net cash flow from operating activities, a company adds back non-cash charges in the income statement to net income and deducts non-cash credits. We explain the two adjustments to net income for Tax Consultants, namely, the increases in accounts receivable and accounts payable, as follows.

Increase in Accounts Receivable—Indirect Method

Tax Consultants' accounts receivable increased by $36,000 (from $0 to $36,000) during the year. For Tax Consultants, this means that cash receipts were $36,000 lower than revenues. The Accounts Receivable account in Illustration 23.6 shows that Tax Consultants had $125,000 in revenues (as reported on the income statement), but it collected only $89,000 in cash.

Accounts Receivable				
1/1/22	Balance	–0–	Receipts from customers	89,000
	Revenues	125,000		
12/31/22	Balance	36,000		

ILLUSTRATION 23.6 Analysis of Accounts Receivable

As shown in Illustration 23.7, to adjust net income to net cash provided by operating activities, Tax Consultants must deduct the increase of $36,000 in accounts receivable from net income. When the Accounts Receivable balance *decreases*, cash receipts are higher than revenue recognized under the accrual basis. Therefore, the company adds to net income the amount of the decrease in accounts receivable to arrive at net cash provided by operating activities.

Increase in Accounts Payable—Indirect Method

When accounts payable increase during the year, expenses on an accrual basis exceed those on a cash basis. Why? Because Tax Consultants incurred expenses, but some of the expenses are not yet paid. To convert net income to net cash flow from operating activities, Tax Consultants must add back the increase of $5,000 in accounts payable to net income.

As a result of the accounts receivable and accounts payable adjustments, Tax Consultants determines that the net cash provided by operating activities is $3,000 for the year 2022. Illustration 23.7 shows this computation.

Net income		$ 34,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Increase in accounts receivable	$(36,000)	
Increase in accounts payable	5,000	(31,000)
Net cash provided by operating activities		$ 3,000

ILLUSTRATION 23.7 Computation of Net Cash Flow from Operating Activities, Year 1—Indirect Method

Step 3: Determine Net Cash Flows from Investing and Financing Activities

After Tax Consultants has computed the net cash provided by operating activities, the next step is to determine whether any other changes in the statement of financial position accounts caused an increase or decrease in cash.

For example, an examination of the remaining statement of financial position accounts for Tax Consultants shows increases in both ordinary shares and retained earnings. The Share Capital—Ordinary increase of $60,000 resulted from the issuance of ordinary shares for cash. The issuance of ordinary shares is reported in the statement of cash flows as a receipt of cash from a financing activity.

Two items caused the retained earnings increase of $20,000:

1. Net income of $34,000 increased retained earnings.
2. Declaration of $14,000 of dividends decreased retained earnings.

Tax Consultants has converted net income into net cash flow from operating activities, as explained earlier. The additional data indicate that it paid the dividend. Thus, the company reports the dividend payment as a cash outflow, classified as a financing activity.

Statement of Cash Flows—2022

We are now ready to prepare the statement of cash flows. The statement starts with the operating activities section. Tax Consultants may use either the direct or indirect method to report net cash flow from operating activities.

The IASB **encourages** the use of the direct method over the indirect method. [6] If a company uses the indirect method, it can either report the reconciliation within the statement of cash flows or can provide it in a separate schedule, with the statement of cash flows reporting only the **net** cash flow from operating activities. Throughout this chapter, we use the indirect method, which is also used more extensively in practice.[4]

Illustration 23.8 shows the statement of cash flows for Tax Consultants Inc., for year 1 (2022).

Tax Consultants Inc. Statement of Cash Flows For the Year Ended December 31, 2022 Increase (Decrease) in Cash		
Cash flows from operating activities		
Net income		$ 34,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Increase in accounts receivable	$(36,000)	
Increase in accounts payable	5,000	(31,000)
Net cash provided by operating activities		3,000
Cash flows from financing activities		
Issuance of ordinary shares	60,000	
Payment of cash dividends	(14,000)	
Net cash provided by financing activities		46,000
Net increase in cash		49,000
Cash, January 1, 2022		–0–
Cash, December 31, 2022		$ 49,000

ILLUSTRATION 23.8 Statement of Cash Flows, Tax Consultants Inc., Year 1

As indicated, the $60,000 increase in ordinary shares results in a financing-activity cash inflow. The payment of $14,000 in cash dividends is a financing-activity outflow of cash. The $49,000 increase in cash reported in the statement of cash flows agrees with the increase of $49,000 shown in the comparative statements of financial position (in Illustration 23.3) as the change in the Cash account.

Illustration—2023

Tax Consultants Inc. continued to grow and prosper in its second year of operations. The company purchased land, building, and equipment, and revenues and net income increased substantially from the first year. **Illustrations 23.9** and **23.10** present information related to the second year of operations for Tax Consultants Inc.

Tax Consultants Inc. Comparative Statements of Financial Position as of December 31			
Assets	2023	2022	Change Increase/Decrease
Land	$ 70,000	$ –0–	$ 70,000 Increase
Buildings	200,000	–0–	200,000 Increase
Accumulated depreciation—buildings	(11,000)	–0–	11,000 Increase
Equipment	68,000	–0–	68,000 Increase
Accumulated depreciation—equipment	(10,000)	–0–	10,000 Increase
Accounts receivable	26,000	36,000	10,000 Decrease
Prepaid expenses	6,000	–0–	6,000 Increase
Cash	37,000	49,000	12,000 Decrease
Total	$386,000	$ 85,000	
Equity and Liabilities			
Share capital—ordinary ($1 par)	$ 60,000	$ 60,000	$ –0–
Retained earnings	136,000	20,000	116,000 Increase
Bonds payable	150,000	–0–	150,000 Increase
Accounts payable	40,000	5,000	35,000 Increase
Total	$386,000	$ 85,000	

ILLUSTRATION 23.9 Comparative Statements of Financial Position, Tax Consultants Inc., Year 2

Tax Consultants Inc. Income Statement For the Year Ended December 31, 2023		
Revenues		$492,000
Operating expenses (excluding depreciation)	$269,000	
Depreciation expense	21,000	290,000
Income from operations		202,000
Income tax expense		68,000
Net income		$134,000

Additional Information

a. The company declared and paid an $18,000 cash dividend.

b. The company obtained $150,000 cash through the issuance of long-term bonds.

c. Land, building, and equipment were acquired for cash.

ILLUSTRATION 23.10 Income Statement, Tax Consultants Inc., Year 2

Step 1: Determine the Change in Cash

To prepare a statement of cash flows from the available information, the first step is to determine the change in cash. As indicated from the information presented, cash decreased $12,000 ($49,000 – $37,000).

Step 2: Determine Net Cash Flow from Operating Activities—Indirect Method

Using the indirect method, we adjust net income of $134,000 on an accrual basis to arrive at net cash flow from operating activities. Explanations for the adjustments to net income follow.

- **Decrease in Accounts Receivable.** Accounts receivable decreased during the period because cash receipts (cash-basis revenues) are higher than revenues reported on an accrual basis. To convert net income to net cash flow from operating activities, the decrease of $10,000 in accounts receivable must be added to net income.
- **Increase in Prepaid Expenses.** When prepaid expenses (assets) increase during a period, expenses on an accrual-basis income statement are lower than they are on a cash-basis income statement. The reason: Tax Consultants has made cash payments in the current period, but expenses (as charges to the income statement) have been deferred to future periods. To convert net income to net cash flow from operating activities, the company must deduct from net income the increase of $6,000 in prepaid expenses. An increase in prepaid expenses results in a decrease in cash during the period.
- **Increase in Accounts Payable.** Like the increase in 2022, Tax Consultants must add the 2023 increase of $35,000 in accounts payable to net income, to convert to net cash flow from operating activities. The company incurred a greater amount of expense than the amount of cash it disbursed.
- **Depreciation Expense (Increase in Accumulated Depreciation).** The purchase of depreciable assets is a use of cash, shown in the investing section in the year of acquisition. Tax Consultants' depreciation expense of $21,000 (also represented by the increase in accumulated depreciation) is a non-cash charge; the company adds it back to net income, to arrive at net cash

flow from operating activities. The $21,000 is the sum of the $11,000 depreciation on the building plus the $10,000 depreciation on the equipment.

Certain other periodic charges to expense do not require the use of cash. Examples are the amortization of intangible assets and depletion expense. Such charges are treated in the same manner as depreciation. Companies frequently list depreciation and similar non-cash charges as the first adjustments to net income in the statement of cash flows.

As a result of the foregoing items, net cash provided by operating activities is $194,000, as shown in **Illustration 23.11**.

Step 3: Determine Net Cash Flows from Investing and Financing Activities

After you have determined the items affecting net cash provided by operating activities, the next step involves analyzing the remaining changes in the statement of financial position accounts. Tax Consultants Inc. analyzed the following accounts.

- **Increase in Land.** As indicated from the change in the Land account, the company purchased land of $70,000 during the period. This transaction is an investing activity, reported as a use of cash.
- **Increase in Buildings and Related Accumulated Depreciation.** As indicated in the additional data, and from the change in the Buildings account, Tax Consultants acquired an office building using $200,000 cash. This transaction is a cash outflow, reported in the investing section. The $11,000 increase in accumulated depreciation results from recording depreciation expense on the building. As indicated earlier, the reported depreciation expense has no effect on the amount of cash.
- **Increase in Equipment and Related Accumulated Depreciation.** An increase in equipment of $68,000 resulted because the company used cash to purchase equipment. This transaction is an outflow of cash from an investing activity. The depreciation expense entry for the period explains the increase in Accumulated Depreciation—Equipment.
- **Increase in Bonds Payable.** The Bonds Payable account increased $150,000. Cash received from the issuance of these bonds represents an inflow of cash from a financing activity.
- **Increase in Retained Earnings.** Retained earnings increased $116,000 during the year. Two factors explain this increase: (1) net income of $134,000 increased retained earnings, and (2) dividends of $18,000 decreased retained earnings. As indicated earlier, the company adjusts net income to net cash provided by operating activities in the operating activities section. Payment of the dividends is a financing activity that involves a cash outflow.

Net income		$134,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	$21,000	
Decrease in accounts receivable	10,000	
Increase in prepaid expenses	(6,000)	
Increase in accounts payable	35,000	60,000
Net cash provided by operating activities		$194,000

ILLUSTRATION 23.11 Computation of Net Cash Flow from Operating Activities, Year 2—Indirect Method

Statement of Cash Flows—2023

Combining the previous items, we get a statement of cash flows for Year 2 (2023) for Tax Consultants Inc., as shown in Illustration 23.12, using the indirect method to compute net cash flow from operating activities.

Tax Consultants Inc. Statement of Cash Flows For the Year Ended December 31, 2023 Increase (Decrease) in Cash		
Cash flows from operating activities		
Net income		$ 134,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	$ 21,000	
Decrease in accounts receivable	10,000	
Increase in prepaid expenses	(6,000)	
Increase in accounts payable	35,000	60,000
Net cash provided by operating activities		194,000
Cash flows from investing activities		
Purchase of land	(70,000)	
Purchase of building	(200,000)	
Purchase of equipment	(68,000)	
Net cash used by investing activities		(338,000)
Cash flows from financing activities		
Issuance of bonds	150,000	
Payment of cash dividends	(18,000)	
Net cash provided by financing activities		132,000
Net decrease in cash		(12,000)
Cash, January 1, 2023		49,000
Cash, December 31, 2023		$ 37,000

ILLUSTRATION 23.12 Statement of Cash Flows, Tax Consultants Inc., Year 2

Illustration—2024

Our third example, covering the 2024 operations of Tax Consultants Inc., is more complex. It again uses the indirect method to compute and present net cash flow from operating activities.

Tax Consultants Inc. experienced continued success in 2024 (its third year) and expanded its operations to include the sale of computer software used in tax-return preparation and tax planning. Thus, inventory is a new asset appearing in the company's December 31, 2024, statement of financial position. Illustrations 23.13 and 23.14 show the comparative statements of financial position, income statements, and selected data for 2024.

Tax Consultants Inc. Comparative Statements of Financial Position as of December 31			
Assets	2024	2023	Change Increase/Decrease
Land	$ 45,000	$ 70,000	$ 25,000 Decrease
Buildings	200,000	200,000	–0–
Accumulated depreciation—buildings	(21,000)	(11,000)	10,000 Increase
Equipment	193,000	68,000	125,000 Increase
Accumulated depreciation—equipment	(28,000)	(10,000)	18,000 Increase
Inventory	54,000	–0–	54,000 Increase
Accounts receivable	68,000	26,000	42,000 Increase
Prepaid expenses	4,000	6,000	2,000 Decrease
Cash	54,000	37,000	17,000 Increase
Totals	$569,000	$386,000	
Equity and Liabilities			
Share capital—ordinary ($1 par)	$220,000	$ 60,000	$160,000 Increase
Retained earnings	206,000	136,000	70,000 Increase
Bonds payable	110,000	150,000	40,000 Decrease
Accounts payable	33,000	40,000	7,000 Decrease
Totals	$569,000	$386,000	

ILLUSTRATION 23.13 Comparative Statements of Financial Position, Tax Consultants Inc., Year 3

Tax Consultants Inc. Income Statement For the Year Ended December 31, 2024		
Revenues		$890,000
Cost of goods sold	$465,000	
Operating expenses	221,000	
Interest expense	12,000	
Loss on sale of equipment	2,000	700,000
Income from operations		190,000
Income tax expense		65,000
Net income		$125,000

Additional Information

a. Operating expenses include depreciation expense of $33,000 and expiration of prepaid expenses of $2,000.

b. Land was sold at its book value for cash.

c. Cash dividends of $55,000 were declared and paid.

d. Interest expense of $12,000 was paid in cash.

e. Equipment with a cost of $166,000 was purchased for cash. Equipment with a cost of $41,000 and a book value of $36,000 was sold for $34,000 cash.

f. Bonds were redeemed at their book value for cash.

g. Ordinary shares ($1 par) were issued for cash.

ILLUSTRATION 23.14 Income Statement, Tax Consultants Inc., Year 3

Step 1: Determine the Change in Cash

The first step in the preparation of the statement of cash flows is to determine the change in cash. As the comparative statements of financial position show, cash increased $17,000 in 2024.

Step 2: Determine Net Cash Flow from Operating Activities—Indirect Method

We explain the adjustments to net income of $125,000 as follows.

- **Increase in Accounts Receivable.** The increase in accounts receivable of $42,000 represents recorded accrual-basis revenues in excess of cash collections in 2024. The company deducts this increase from net income to convert from the accrual basis to the cash basis.
- **Increase in Inventories.** The $54,000 increase in inventories represents an operating use of cash, not an expense. Tax Consultants therefore deducts this amount from net income, to arrive at net cash flow from operations. In other words, when inventory purchased exceeds inventory sold during a period, cost of goods sold on an accrual basis is lower than on a cash basis.
- **Decrease in Prepaid Expenses.** The $2,000 decrease in prepaid expenses represents a charge to the income statement for which Tax Consultants made no cash payment in the current period. The company adds back the decrease to net income, to arrive at net cash flow from operating activities.

- **Decrease in Accounts Payable.** When accounts payable decrease during the year, cost of goods sold and expenses on a cash basis are higher than they are on an accrual basis. To convert net income to net cash flow from operating activities, the company must deduct the $7,000 in accounts payable from net income.
- **Depreciation Expense (Increase in Accumulated Depreciation).** Accumulated Depreciation—Buildings increased $10,000 ($21,000 – $11,000). The Buildings account did not change during the period, which means that Tax Consultants recorded depreciation expense of $10,000 in 2024.

  Accumulated Depreciation—Equipment increased by $18,000 ($28,000 – $10,000) during the year. But Accumulated Depreciation—Equipment decreased by $5,000 as a result of the sale during the year. Thus, depreciation for the year was $23,000. The company reconciled Accumulated Depreciation—Equipment as follows.

Beginning balance	$10,000
Add: Depreciation for 2024	23,000
	33,000
Deduct: Sale of equipment	5,000
Ending balance	$28,000

  The company must add back to net income the total depreciation expense (buildings and equipment) of $33,000 ($10,000 + $23,000) charged to the income statement, to determine net cash flow from operating activities.
- **Loss on Sale of Equipment.** Tax Consultants sold for $34,000 equipment that cost $41,000 and had a book value of $36,000. As a result, the company reported a loss of $2,000 on its sale. To arrive at net cash flow from operating activities, it must add back to net income the loss on the sale of the equipment. The reason is that the loss is a non-cash charge to the income statement. The loss did not reduce cash, but it did reduce net income.

From the foregoing items, the company prepares the operating activities section of the statement of cash flows, as shown in **Illustration 23.15**.

Cash flows from operating activities		
Net income		$125,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	$ 33,000	
Loss on sale of equipment	2,000	
Increase in accounts receivable	(42,000)	
Increase in inventory	(54,000)	
Decrease in prepaid expenses	2,000	
Decrease in accounts payable	(7,000)	(66,000)
Net cash provided by operating activities		59,000

ILLUSTRATION 23.15 Operating Activities Section of Cash Flow Statement

Step 3: Determine Net Cash Flows from Investing and Financing Activities

By analyzing the remaining changes in the statement of financial position accounts, Tax Consultants identifies cash flows from investing and financing activities.

- **Land.** Land decreased $25,000 during the period. As indicated from the information presented, the company sold land for cash at its book value. This transaction is an investing activity, reported as a $25,000 source of cash.
- **Equipment.** An analysis of the Equipment account indicates the following.

Beginning balance	$ 68,000
Purchase of equipment	166,000
	234,000
Sale of equipment	41,000
Ending balance	$193,000

  The company used cash to purchase equipment with a fair value of $166,000—an investing transaction reported as a cash outflow. The sale of the equipment for $34,000 is also an investing activity, but one that generates a cash inflow.
- **Bonds Payable.** Bonds payable decreased $40,000 during the year. As indicated from the additional information, the company redeemed the bonds at their book value. This financing transaction used $40,000 of cash.
- **Share Capital—Ordinary.** The Share Capital—Ordinary account increased $160,000 during the year. As indicated from the additional information, Tax Consultants issued ordinary shares of $160,000 at par. This financing transaction provided cash of $160,000.
- **Retained Earnings.** Retained earnings changed $70,000 ($206,000 – $136,000) during the year. The $70,000 change in retained earnings results from net income of $125,000 from operations and the financing activity of paying cash dividends of $55,000.

Statement of Cash Flows—2024

Tax Consultants Inc. combines the previous items to prepare the statement of cash flows shown in **Illustration 23.16**.

Tax Consultants Inc. Statement of Cash Flows For the Year Ended December 31, 2024 Increase (Decrease) in Cash		
Cash flows from operating activities		
Net income		$ 125,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	$ 33,000	
Loss on sale of equipment	2,000	
Increase in accounts receivable	(42,000)	
Increase in inventory	(54,000)	
Decrease in prepaid expenses	2,000	
Decrease in accounts payable	(7,000)	(66,000)
Net cash provided by operating activities		59,000
Cash flows from investing activities		
Sale of land	25,000	
Sale of equipment	34,000	
Purchase of equipment	(166,000)	
Net cash used by investing activities		(107,000)
Cash flows from financing activities		
Redemption of bonds	(40,000)	
Sale of ordinary shares	160,000	
Payment of dividends	(55,000)	
Net cash provided by financing activities		65,000
Net increase in cash		17,000
Cash, January 1, 2024		37,000
Cash, December 31, 2024		$ 54,000

ILLUSTRATION 23.16 Statement of Cash Flows, Tax Consultants Inc., Year 3

Sources of Information for the Statement of Cash Flows

Important points to remember in the preparation of the statement of cash flows are these:

1. Comparative statements of financial position provide the basic information from which to prepare the report. Additional information obtained from analyses of specific accounts is also included.
2. An analysis of the Retained Earnings account is necessary. Including the net increase or decrease in Retained Earnings without any explanation is meaningless. Without explanation, it might represent the effect of net income, dividends declared, or prior period adjustments.
3. The statement includes all changes that have passed through cash or have resulted in an increase or decrease in cash.
4. Write-downs, amortization charges, and similar “book” entries, such as depreciation of plant assets, represent neither inflows nor outflows of cash because they have no effect on cash. To the extent that they have entered into the determination of net income, however, the company must

add them back to or subtract them from net income, to arrive at net cash provided (used) by operating activities.

Indirect Method—Additional Adjustments

For consistency and comparability and because it is the most widely used method in practice, we used the indirect method in the Tax Consultants' illustrations. We determined net cash flow from operating activities by adding back to or deducting from net income those items that had no effect on cash. **Illustration 23.17** presents a more complete set of common types of adjustments that companies make to net income to arrive at net cash flow from operating activities.

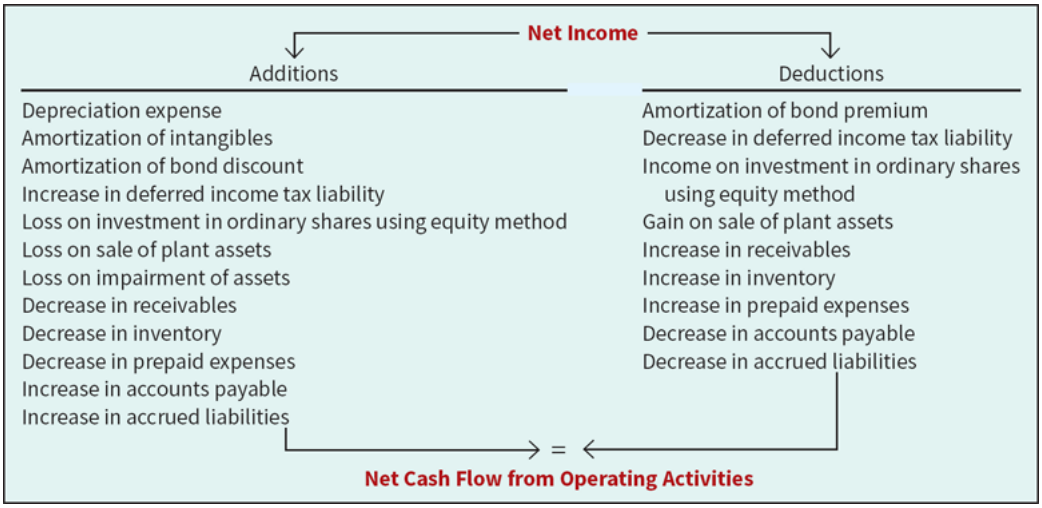


ILLUSTRATION 23.17 Adjustments Needed to Determine Net Cash Flow from Operating Activities—Indirect Method

The additions and deductions in Illustration 23.17 reconcile net income to net cash flow from operating activities, illustrating why the indirect method is also called the reconciliation method.

Net Cash Flow from Operating Activities—Direct Method

LEARNING OBJECTIVE 3

Contrast the direct and indirect methods of calculating net cash flow from operating activities.

As discussed, two different methods are available to adjust income from operations on an accrual basis to net cash flow from operating activities. We showed the indirect method in the Tax Consultants' illustrations in the prior sections.

The **direct method** reports cash receipts and cash disbursements from operating activities. The difference between these two amounts is the net cash flow from operating activities. In other words, the direct method deducts operating cash disbursements from operating cash receipts. The direct method results in the presentation of a condensed cash receipts and cash disbursements statement.

As indicated from the accrual-based income statement (see Illustration 23.4), Tax Consultants reported revenues of $125,000. However, because the company's accounts receivable increased by $36,000 during 2022, the company collected only $89,000 ($125,000 – $36,000) in cash from these revenues. Similarly, Tax Consultants reported operating expenses of $85,000. However, accounts payable increased during the period by $5,000. Assuming that these payables relate to operating expenses, cash operating expenses were $80,000 ($85,000 – $5,000). Because no taxes payable exist at the end of the year, the company must have paid $6,000 income tax expense for 2022 in cash during the year. Tax Consultants computes net cash flow from operating activities as shown in **Illustration 23.18**.

Cash collected from revenues	$89,000
Cash payments for expenses	80,000
Income before income taxes	9,000
Cash payments for income taxes	6,000
Net cash provided by operating activities	$ 3,000

ILLUSTRATION 23.18 Computation of Net Cash Flow from Operating Activities, Year 1—Direct Method

"Net cash provided by operating activities" is the equivalent of cash basis net income. ("Net cash used by operating activities" is equivalent to cash basis net loss.)

The IASB encourages use of the direct method and permits use of the indirect method. Yet, if the direct method is used, the Board requires that companies provide in a separate schedule a reconciliation of net income to net cash flow from operating activities. Therefore, under either method, companies must prepare and report information from the indirect (reconciliation) method.

Direct Method—An Example

Under the direct method, the statement of cash flows reports net cash flow from operating activities as major classes of *operating cash receipts* (e.g., cash collected from customers and cash received from interest and dividends) and *cash disbursements* (e.g., cash paid to suppliers for goods, to employees for services, to creditors for interest, and to government authorities for taxes).

We illustrate the direct method here in more detail to help you understand the difference between accrual-based income and net cash flow from operating activities. This example also illustrates the data needed to apply the direct method. Drogba SA, which began business on January 1, 2022, has the selected statement of financial position information as shown in **Illustration 23.19**.

	December 31, 2022	January 1, 2022
Property, plant, and equipment (net)	€ 90,000	€–0–
Inventory	160,000	–0–
Accounts payable	60,000	–0–
Accrued expenses payable	20,000	–0–
Accounts receivable	15,000	–0–
Prepaid expenses	8,000	–0–
Cash	159,000	–0–

ILLUSTRATION 23.19 Statement of Financial Position Accounts, Drogba SA

Illustration 23.20 shows Drogba's December 31, 2022, income statement and additional information.

Sales revenue		€780,000
Cost of goods sold		450,000
Gross profit		330,000
Operating expenses	€160,000	
Depreciation	10,000	170,000
Income before income taxes		160,000
Income tax expense		48,000
Net income		€112,000

Additional Information

a. Dividends of €70,000 were declared and paid in cash.

b. The accounts payable increase resulted from the purchase of merchandise.

c. Prepaid expenses and accrued expenses payable relate to operating expenses.

ILLUSTRATION 23.20 Income Statement, Drogba SA

Under the **direct method**, companies compute net cash provided by operating activities by **adjusting each item in the income statement** from the accrual basis to the cash basis. To simplify and condense the operating activities section, only major classes of operating cash receipts and cash payments are reported. As **Illustration 23.21** shows, the difference between these major classes of cash receipts and cash payments is the net cash provided by operating activities.

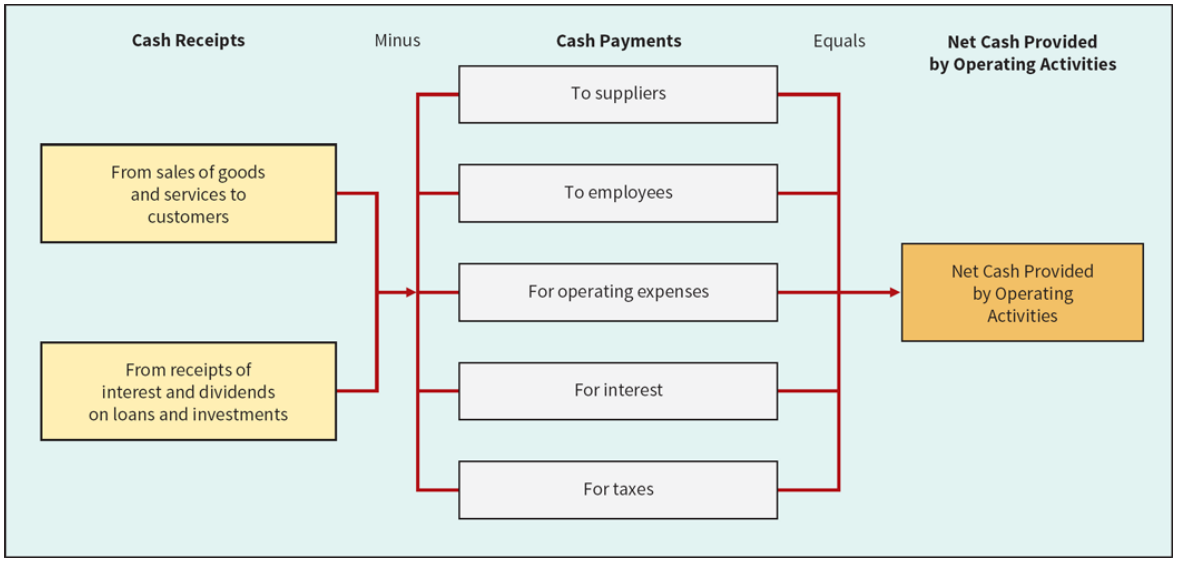


ILLUSTRATION 23.21 Major Classes of Cash Receipts and Payments

An efficient way to apply the direct method is to analyze the revenues and expenses reported in the income statement in the order in which they are listed. The company then determines cash receipts and cash payments related to these revenues and expenses. In the following sections, we present the direct method adjustments for Drogba SA in 2022, to determine net cash provided by operating activities.

Cash Receipts from Customers

The income statement for Drogba SA reported revenues from customers of €780,000. To determine cash receipts from customers, the company considers the change in accounts receivable during the year.

When accounts receivable increase during the year, revenues on an accrual basis are higher than cash receipts from customers. In other words, operations led to increased revenues, but not all of these revenues resulted in cash receipts. To determine the amount of cash receipts, deduct the amount of the increase in accounts receivable from the total sales revenues. Conversely, a decrease in accounts receivable is added to sales revenues because cash receipts from customers then exceed sales revenues.

For Drogba, accounts receivable increased €15,000. Thus, cash receipts from customers were €765,000, computed as follows.

Sales revenue	€780,000
Deduct: Increase in accounts receivable	15,000
Cash receipts from customers	€765,000

Drogba could also determine cash receipts from customers by analyzing the Accounts Receivable account, as shown below.

Accounts Receivable				
1/1/22	Balance	–0–	Receipts from customers	765,000
	Sales revenue	780,000		
12/31/22	Balance	15,000		

Illustration 23.22 shows the relationships between cash receipts from customers, revenues from sales, and changes in accounts receivable.

$$\text{Cash Receipts from Customers} = \text{Sales Revenue} \begin{cases} + \text{ Decrease in Accounts Receivable} \\ \text{or} \\ - \text{ Increase in Accounts Receivable} \end{cases}$$

ILLUSTRATION 23.22 Formula to Compute Cash Receipts from Customers

Cash Payments to Suppliers

Drogba reported cost of goods sold on its income statement of €450,000. To determine cash payments to suppliers, the company first finds purchases for the year, by adjusting cost of goods sold for the change in inventory. When inventory increases during the year, purchases this year exceed cost of goods sold. As a result, the company adds the increase in inventory to cost of goods sold, to arrive at purchases.

In 2022, Drogba's inventory increased €160,000. The company computes purchases as follows.

Cost of goods sold	€450,000
Add: Increase in inventory	160,000
Purchases	€610,000

After computing purchases, Drogba determines cash payments to suppliers by adjusting purchases for the change in accounts payable. When accounts payable increase during the year, purchases on an accrual basis are higher than they are on a cash basis. As a result, it deducts from purchases the increase in accounts payable to arrive at cash payments to suppliers. Conversely, if cash payments to suppliers exceed purchases, Drogba adds to purchases the decrease in accounts payable. Cash payments to suppliers were €550,000, computed as follows.

Purchases	€610,000
Deduct: Increase in accounts payable	60,000
Cash payments to suppliers	€550,000

Drogba also can determine cash payments to suppliers by analyzing Accounts Payable, as shown below.

Accounts Payable				
Payments to suppliers	550,000	1/1/22	Balance	–0–
			Purchases	610,000
		12/31/22	Balance	60,000

Illustration 23.23 shows the relationships between cash payments to suppliers, cost of goods sold, changes in inventory, and changes in accounts payable.

Cash Payments to Suppliers = **Cost of Goods Sold** { + **Increase in Inventory** / **or** / – **Decrease in Inventory** } { + **Decrease in Accounts P** / **or** / – **Increase in Accounts P** }

ILLUSTRATION 23.23 Formula to Compute Cash Payments to Suppliers

Cash Payments for Operating Expenses

Drogba reported operating expenses of €160,000 on its income statement. To determine the cash paid for operating expenses, it must adjust this amount for any changes in prepaid expenses and accrued expenses payable.

For example, when prepaid expenses increased €8,000 during the year, cash paid for operating expenses was €8,000 higher than operating expenses reported on the income statement. To convert operating expenses to cash payments for operating expenses, the company adds to operating expenses the increase of €8,000. Conversely, if prepaid expenses decrease during the year, Drogba deducts from operating expenses the amount of the decrease.

Drogba also must adjust operating expenses for changes in accrued expenses payable. When accrued expenses payable increase during the year, operating expenses on an accrual basis are higher than they are on a cash basis. As a result, the company deducts from operating expenses an increase in accrued expenses payable, to arrive at cash payments for operating expenses. Conversely, it adds to operating expenses a decrease in accrued expenses payable because cash payments exceed operating expenses.

Drogba's cash payments for operating expenses were €148,000, computed as follows.

Operating expenses	€160,000
Add: Increase in prepaid expenses	8,000
Deduct: Increase in accrued expenses payable	20,000
Cash payments for operating expenses	€148,000

The relationships among cash payments for operating expenses, changes in prepaid expenses, and changes in accrued expenses payable are shown in Illustration 23.24.

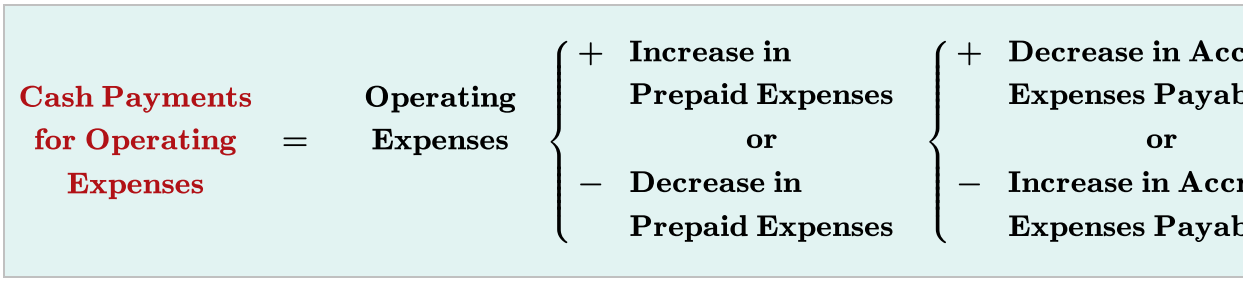


ILLUSTRATION 23.24 Formula to Compute Cash Payments for Operating Expenses

Note that the company did not consider depreciation expense because it is a non-cash charge.

Cash Payments for Income Taxes

The income statement for Drogba shows income tax expense of €48,000. This amount equals the cash paid. How do we know that? Because the comparative statement of financial position indicated no income taxes payable at either the beginning or end of the year.

Summary of Net Cash Flow from Operating Activities—Direct Method

The schedule shown in Illustration 23.25 summarizes the computations illustrated above.

Accrual Basis			Adjustment	Add (Subtract)	Cash Basis
Sales revenue	€780,000	–	Increase in accounts receivable	€ (15,000)	€765,000
Cost of goods sold	450,000	+	Increase in inventory	160,000	
		–	Increase in accounts payable	(60,000)	550,000
Operating expenses	160,000	+	Increase in prepaid expenses	8,000	
		–	Increase in accrued expenses payable	(20,000)	148,000
Depreciation expense	10,000	–	Depreciation expense	(10,000)	–0–
Income tax expense	48,000				48,000
Total expense	668,000				746,000
Net income	€112,000		Net cash provided by operating activities		€ 19,000

ILLUSTRATION 23.25 Accrual Basis to Cash Basis

Illustration 23.26 shows the presentation of the direct method for reporting net cash flow from operating activities for the Drogba example.

Drogba SA Statement of Cash Flows (partial)		
Cash flows from operating activities		
Cash received from customers		€765,000
Cash payments:		
To suppliers	€550,000	
For operating expenses	148,000	
For income taxes	48,000	746,000
Net cash provided by operating activities		€ 19,000

ILLUSTRATION 23.26 Operating Activities Section—Direct Method, 2022

If Drogba uses the direct method to present the net cash flow from operating activities, it is required to provide in a separate schedule the reconciliation of net income to net cash provided by operating activities. The reconciliation assumes the identical form and content of the indirect method of presentation, as shown in **Illustration 23.27**.

Drogba SA Reconciliation		
Net income		€112,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	€ 10,000	
Increase in accounts receivable	(15,000)	
Increase in inventory	(160,000)	
Increase in prepaid expenses	(8,000)	
Increase in accounts payable	60,000	
Increase in accrued expense payable	20,000	(93,000)
Net cash provided by operating activities		€ 19,000

ILLUSTRATION 23.27 Reconciliation of Net Income to Net Cash Provided by Operating Activities, 2022

Evolving Issue

Direct versus Indirect

The IASB faced a contentious decision related to cash flow reporting when it had to choose between the direct method and the indirect method of determining net cash flow from operating activities. Companies lobbied *against* the direct method, urging adoption of the indirect method. However, commercial lending officers expressed to the IASB a strong preference in favor of the direct method. What are the arguments in favor of each of the methods?

In Favor of the Direct Method

The principal advantage of the direct method is that it shows operating cash receipts and payments. Thus, it is more consistent with the objective of a statement of cash flows—to provide information about cash receipts and cash payments—than the indirect method, which does not report operating cash receipts and payments.

Supporters of the direct method contend that knowledge of the specific sources of operating cash receipts and the purposes for which operating cash payments were made in past periods is useful in estimating future operating cash flows. Furthermore, information about amounts of major classes of operating cash receipts and payments is more useful than information only about their arithmetic sum (the net cash flow from operating activities). Such information is more revealing of a company's ability (1) to generate sufficient cash from operating activities to pay its debts, (2) to reinvest in its operations, and (3) to make distributions to its owners. Indeed a comprehensive review of academic research related to direct method cash flow presentation indicates that financial statement users prefer the direct method and that the direct method generally provides decision-useful information. That is, the direct method information is reflected in share prices indicating that users appear to utilize this information when available.

Many companies indicate that they do not currently collect information in a manner that allows them to determine amounts such as cash received from customers or cash paid to suppliers directly from their accounting systems. But supporters of the direct method contend that the incremental cost of determining operating cash receipts and payments is not significant.

In Favor of the Indirect Method

The principal advantage of the indirect method is that it focuses on the differences between net income and net cash flow from operating activities. That is, it provides a useful link between the statement of cash flows and the income statement and statement of financial position.

Many companies contend that it is less costly to adjust net income to net cash flow from operating activities (indirect) than it is to report gross operating cash receipts and payments (direct). Supporters of the indirect method also state that the direct method, which effectively reports income statement information on a cash rather than an accrual basis, may erroneously suggest that net cash flow from operating activities is as good as, or better than, net income as a measure of performance.

In their joint financial statement presentation project, the IASB and the FASB proposed to allow only the direct method. However, there has been significant pushback on this proposal, which suggests that the choice of either the direct or indirect method will continue to be available.

Sources: J. Hales and S. Orpurt, "A Review of Academic Research on the Reporting of Cash Flows from Operations," *Accounting Horizons* (September 2013), pp. 539–578. See www.fasb.org/project/research_projects.shtml for the Inactive Joint FASB/IASB Projects. See also T. Whitehouse, "FASB Proposal May Foreshadow Changes to Cash Flow Rules," www.complianceweek.com (April 24, 2015).

Special Problems in Statement Preparation

LEARNING OBJECTIVE 4

Discuss special problems in preparing a statement of cash flows.

We discussed some of the special problems related to preparing the statement of cash flows in connection with the preceding illustrations. Other problems that arise with some frequency in the preparation of this statement include the following.

1. Adjustments to net income.
2. Accounts receivable (net).
3. Other working capital changes.
4. Net loss.
5. Disclosures.

Adjustments to Net Income

Depreciation and Amortization

Depreciation expense is the most common adjustment to net income that companies make to arrive at net cash flow from operating activities. But there are numerous other non-cash expense or revenue items. Examples of expense items that companies must add back to net income are the **amortization of limited-life intangible assets**, such as patents, and **depletion of mineral resources**. These charges to expense involve expenditures made in prior periods that a company amortizes currently. These charges reduce net income without affecting cash in the current period.

Also, **amortization of bond discount or premium** on long-term bonds payable affects the amount of interest expense. However, neither changes cash. As a result, a company should add back discount amortization and subtract premium amortization from net income to arrive at net cash flow from operating activities.

Postretirement Benefit Costs

If a company has postretirement costs such as an employee pension plan, chances are that the pension expense recorded during a period will either be higher or lower than the cash funded. It will be higher when there is an unfunded liability and will be lower when there is a prepaid pension cost. When the expense is higher or lower than the cash paid, **the company must adjust net income by the difference between cash paid and the expense reported** in computing net cash flow from operating activities.

Change in Deferred Income Taxes

Changes in deferred income taxes affect net income but have no effect on cash. For example, **Baytex Energy Corp.** (CAN) reported an increase in its liability for deferred taxes of approximately $107,598,000. This change in the liability increased tax expense and decreased net income, but did not affect cash. Therefore, Baytex added back $107,598,000 to net income on its statement of cash flows.

Equity Method of Accounting

Another common adjustment to net income is **a change related to an equity investment** when recording income or loss under the equity method. Recall that under the equity method, the investor (1) debits the investment account and credits revenue for its share of the investee's net income, and (2) credits dividends received to the investment account. Therefore, the net increase in the investment account does not affect cash flows. A company must deduct the net increase from net income to arrive at net cash flow from operating activities.

Assume that Victor Co. owns 40 percent of Milo Inc. During the year, Milo reports net income of $100,000 and pays a cash dividend of $30,000. Victor reports this in its statement of cash flows as a deduction from net income in the following manner—Equity in earnings of Milo, net of dividends, $28,000 [($100,000 – $30,000) × .40].

Losses and Gains

Realized Losses and Gains

In the illustration for Tax Consultants, the company experienced a loss of $2,000 from the sale of equipment. The company added this loss to net income to compute net cash flow from operating activities because **the loss is a non-cash charge in the income statement**.

If Tax Consultants experiences a **gain** from a sale of equipment, it too requires an adjustment to net income. Because a company reports the gain in the statement of cash flows as part of the cash proceeds from the sale of equipment under investing activities, **it deducts the gain from net income to avoid double-counting**—once as part of net income and again as part of the cash proceeds from the sale.

To illustrate, assume that Tax Consultants had land with a carrying value of $200,000, which was condemned by the provincial government for a highway project. The condemnation proceeds received were $205,000, resulting in a gain of $5,000. In the statement of cash flows (indirect method), the company would deduct the $5,000 gain from net income in the operating activities section. It would report the $205,000 cash inflow from the condemnation as an investing activity, as follows.

Cash flows from investing activities	
Condemnation of land	$ 205,000

Unrealized Losses and Gains

Unrealized losses and gains generally occur for debt investments accounted for at fair value (trading and held-for-collection and selling) and for equity investments. For example, assume that **AB InBev** (BEL) purchases the following two security investments on January 10, 2022.

1. Debt investment for €1 million that is classified as trading. During 2022, the debt investment has an unrealized holding gain of €110,000 (recorded in net income).
2. Equity investment for €600,000 that is non-trading in nature. During 2022, the non-trading equity investment has an unrealized holding loss of €50,000 (recorded in other comprehensive income).

For AB InBev, the unrealized holding gain of €110,000 on the debt investment increases net income but does not increase net cash flow from operating activities. As a result, the unrealized holding gain of €110,000 is deducted from net income to compute net cash flow from operating activities.

On the other hand, the unrealized holding loss of €50,000 that AB InBev incurs on the non-trading equity investment does not affect net income or cash flows—this loss is reported in the other comprehensive income section. As a result, no adjustment to net income is necessary in computing net cash flow from operating activities.

Thus, the general rule is that unrealized holding gains or losses that affect net income must be adjusted to determine net cash flow from operating activities. Conversely, unrealized holding gains or losses that do not affect net income are not adjusted to determine net cash flow from operating activities.[5]

Share-Based Compensation

Recall that, for share-based compensation plans, companies are required to use the fair value method to determine total compensation cost. The compensation cost is then recognized as an expense in the periods in which the employee provides services. When Compensation Expense is debited, Share Premium—Options is often credited. Cash is not affected by recording the expense. **Therefore, the company must increase net income by the amount of compensation expense from share options in computing net cash flow from operating activities.**

To illustrate how this information should be reported on a statement of cash flows, assume that First Wave plc grants 5,000 options to its CEO, Ann Johnson. Each option entitles Johnson to purchase one share of First Wave's £1 par value ordinary shares at £50 per share at any time in the next two years (the service period). The fair value of the options is £200,000. First Wave records compensation expense in the first year as follows.

Compensation Expense (£200,000 ÷ 2)	100,000	
Share Premium—Options		100,000

In addition, if we assume that First Wave has a 35 percent tax rate, it would recognize a deferred tax asset of £35,000 (£100,000 × .35) in the first year, as follows.

Deferred Tax Asset	35,000	
Income Tax Expense		35,000

Therefore, on the statement of cash flows for the first year, First Wave reports the following (assuming a net income of £600,000).

Net income	£600,000
Adjustments to reconcile net income to net cash provided by operating activities:	
Share-based compensation expense	100,000
Increase in deferred tax asset	(35,000)

As shown in First Wave's statement of cash flows, it adds the share-based compensation expense to net income because it is a non-cash expense. The increase in the deferred tax asset and the related reduction in income tax expense increase net income. Although the negative income tax expense increases net income, it does not increase cash. Therefore, it should be deducted. Subsequently, if Ann Johnson exercises her options, First Wave reports "Cash provided by exercise of share options" in the financing section of the statement of cash flows.[6]

Accounts Receivable (Net)

Up to this point, we assumed no allowance for doubtful accounts—a contra account—to offset accounts receivable. However, if a company needs an allowance for doubtful accounts, how does that allowance affect the company's determination of net cash flow from operating activities? For example, assume that Redmark AG reports net income of €40,000. It has the accounts receivable balances, as shown in **Illustration 23.28**.

	2022	2021	Change Increase/Decrease
Accounts receivable	€105,000	€90,000	€15,000 Increase
Allowance for doubtful accounts	(10,000)	(4,000)	6,000 Increase
Accounts receivable (net)	€ 95,000	€86,000	9,000 Increase

ILLUSTRATION 23.28 Accounts Receivable Balances, Redmark AG

Indirect Method

Because an increase in Allowance for Doubtful Accounts results from a charge to bad debt expense, a company should add back an increase in Allowance for Doubtful Accounts to net income to arrive at net cash flow from operating activities. Illustration 23.29 shows one method for presenting this information in a statement of cash flows.

Redmark AG Statement of Cash Flows (partial) For the Year 2022		
Cash flows from operating activities		
Net income		€40,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Increase in accounts receivable	€(15,000)	
Increase in allowance for doubtful accounts	6,000	(9,000)
		€31,000

ILLUSTRATION 23.29 Presentation of Allowance for Doubtful Accounts—Indirect Method

As we indicated, the increase in the Allowance for Doubtful Accounts balance results from a charge to bad debt expense for the year. Because bad debt expense is a non-cash charge, a company must add it back to net income in arriving at net cash flow from operating activities.

Instead of separately analyzing the allowance account, a short-cut approach is to net the allowance balance against the receivable balance and compare the change in accounts receivable on a net basis. Illustration 23.30 shows this presentation.

Redmark AG Statement of Cash Flows (partial) For the Year 2022	
Cash flows from operating activities	
Net income	€40,000
Adjustments to reconcile net income to net cash provided by operating activities:	
Increase in accounts receivable (net)	(9,000)
	€31,000

ILLUSTRATION 23.30 Net Approach to Allowance for Doubtful Accounts—Indirect Method

This short-cut procedure works also if the change in the allowance account results from a write-off of accounts receivable. This reduces both Accounts Receivable and Allowance for Doubtful Accounts. No effect on cash flows occurs. Because of its simplicity, *use the net approach for your homework assignments*.

Direct Method

If using the direct method, a company **should not net** Allowance for Doubtful Accounts against Accounts Receivable. To illustrate, assume that Redmark AG's net income of €40,000 consisted of the items shown in Illustration 23.31.

Redmark AG Income Statement For the Year 2022		
Sales revenue		€100,000
Expenses		
Salaries	€46,000	
Utilities	8,000	
Bad debts	6,000	60,000
Net income		€ 40,000

ILLUSTRATION 23.31 Income Statement, Redmark AG

If Redmark deducts the €9,000 increase in accounts receivable (net) from sales for the year, it would report cash sales at €91,000 (€100,000 – €9,000) and cash payments for operating expenses at €60,000. Both items would be misstated: Cash sales should be reported at €85,000 (€100,000 – €15,000), and total cash payments for operating expenses should be reported at €54,000 (€60,000 – €6,000). Illustration 23.32 shows the proper presentation.

Redmark AG Statement of Cash Flows (partial) For the Year 2022		
Cash flows from operating activities		
Cash received from customers		€85,000
Salaries paid	€46,000	
Utilities paid	8,000	54,000
Net cash provided by operating activities		€31,000

ILLUSTRATION 23.32 Bad Debts—Direct Method

An added complication develops when a company writes off accounts receivable. Simply adjusting sales for the change in accounts receivable will not provide the proper amount of cash sales. The reason is that the write-off of the accounts receivable is not a cash collection. Thus, an additional adjustment is necessary.

Other Working Capital Changes

Up to this point, we showed how companies handled all of the changes in working capital items (current asset and current liability items) as adjustments to net income in determining net cash flow from operating activities. You must be careful, however, because **some changes in working capital**, **although they affect cash**, **do not affect net income**. Generally, these are investing or financing activities of a current nature.

One activity is the purchase of **short-term non-trading equity investments**. For example, the purchase of short-term non-trading equity investments for ¥5,000,000 cash has no effect on net income, but it does cause a ¥5,000,000 decrease in cash. A company reports this transaction as a cash flow from investing activities as follows.

Cash flows from investing activities	
Purchase of short-term non-trading equity investments	¥5,000,000

Another example is the issuance of a **short-term non-trade note payable** for cash. This change in a working capital item has no effect on income from operations, but it increases cash by the amount of

the note payable. For example, a company reports the issuance of a ¥10,000,000 short-term, non-trade note payable for cash in the statement of cash flows as follows.

Cash flows from financing activities	
Issuance of short-term note	¥10,000,000

Another change in a working capital item that has no effect on income from operations or on cash is a **cash dividend payable**. Although a company will report the cash dividends when paid as a financing activity, it does not report the declared but unpaid dividend on the statement of cash flows.

Net Losses

If a company reports a net loss instead of a net income, it must adjust the net loss for those items that do not result in a cash inflow or outflow. The net loss, after adjusting for the charges or credits not affecting cash, may result in a negative or a positive cash flow from operating activities.

For example, if the net loss is £50,000 and the total amount of charges to add back is £60,000, then net cash provided by operating activities is £10,000. Illustration 23.33 shows this computation.

Net income (loss)		£(50,000)
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation of plant assets	£55,000	
Amortization of patents	5,000	60,000
Net cash provided by operating activities		£ 10,000

ILLUSTRATION 23.33 Computation of Net Cash Flow from Operating Activities—Cash Inflow

If the company experiences a net loss of £80,000 and the total amount of the charges to add back is £25,000, the presentation appears as shown in Illustration 23.34.

Net income (loss)	£(80,000)
Adjustments to reconcile net income to net cash used by operating activities:	
Depreciation of plant assets	25,000
Net cash used by operating activities	£(55,000)

ILLUSTRATION 23.34 Computation of Net Cash Flow from Operating Activities—Cash Outflow

Although not illustrated in this chapter, a negative cash flow may result even if the company reports a net income.

Disclosures

Significant Non-Cash Transactions

Because the statement of cash flows reports only the effects of operating, investing, and financing activities in terms of cash flows, it omits some **significant non-cash transactions** and other events that are investing or financing activities. Among the more common of these non-cash transactions that a company should report or disclose in some manner are the following.

1. Acquisition of assets by assuming liabilities (including lease obligations) or by issuing equity securities.
2. Exchanges of non-monetary assets.
3. Refinancing of long-term debt.

4. Conversion of debt or preference shares to ordinary shares.
5. Issuance of equity securities to retire debt.

Investing and financing transactions that do not require the use of cash are excluded from the statement of cash flows. [8] If material in amount, these disclosures may be either narrative or summarized in a separate schedule. This schedule may appear in a separate note or supplementary schedule to the financial statements.[7] Illustration 23.35 shows the presentation of these significant non-cash transactions or other events in a separate schedule in the notes to the financial statements.

Note G: Significant non-cash transactions. During the year, the company engaged in the following significant non-cash investing and financing transactions:	
Issued 250,000 ordinary shares to purchase land and building	€1,750,000
Exchanged land in New York, New York, for land in Berlin, Germany	€2,000,000
Converted 12% bonds to 50,000 ordinary shares	€ 500,000

ILLUSTRATION 23.35 Note Presentation of Non-Cash Investing and Financing Activities

Companies do not generally report certain other significant non-cash transactions or other events in conjunction with the statement of cash flows. Examples of these types of transactions are **share dividends**, **share splits**, **and restrictions on retained earnings**. Companies generally report these items, neither financing nor investing activities, in conjunction with the statement of changes in equity or schedules and notes pertaining to changes in equity accounts.

Special Disclosures

IAS 7 indicates that cash flows related to interest received and paid, and dividends received and paid, should be separately disclosed in the statement of cash flows. [9] Each item should be classified in a consistent manner from period to period as operating, investing, or financing cash flows. As indicated earlier, *for homework purposes classify interest received and paid and dividends received as part of cash flows from operating activities and dividends paid as cash flows from financing activities*. The justification for reporting the first three items in cash flows from operating activities is that each item affects net income. Dividends paid, however, do not affect net income and are often considered a cost of financing.[8]

Companies should also disclose income taxes paid separately in the cash flows from operating activities unless they can be separately identified as part of investing or financing activities. While tax expense may be readily identifiable with investing or financing activities, the related tax cash flows are often impracticable to identify and may arise in a different period from the cash flows of the underlying transaction. Therefore, taxes paid are usually classified as cash flows from operating activities. IFRS requires that the cash paid for taxes, as well as cash flows from interest and dividends received and paid, be disclosed. The category (operating, investing, or financing) in which each item was included must be disclosed as well (see Underlying Concepts).

Underlying Concepts

Additional requirements for disclosures of interest, dividends, and taxes reflect application of the full disclosure principle.

An example of such a disclosure from the notes to Daimler's (DEU) financial statement is provided in Illustration 23.36.

Daimler

Cash provided by operating activities includes the following cash flows:		
(in millions of €)	2018	2017
Interest paid	(678)	(304)
Interest received	257	187
Dividends received	1,429	895

ILLUSTRATION 23.36 Note Disclosure of Interest, Taxes, and Dividends

Other companies choose to report these items directly in the statement of cash flows. In many cases, companies start with income before income taxes and then show income taxes paid as a separate item. In addition, they often add back interest expense on an accrual basis and then subtract interest paid. Reporting these items in the operating activites section is shown for Wáng Ltd. in **Illustration 23.37**.

Wáng Ltd. Statement of Cash Flows (in millions) (Operating Activities Section Only)		
Income before income tax		¥4,000
Adjustments to reconcile income before income tax to net cash provided by operating activities		
Depreciation expense	¥1,000	
Interest expense	500	
Investment revenue	(650)	
Decrease in inventory	1,050	
Increase in trade receivables	(310)	1,590
Cash generated from operations		5,590
Interest paid	(300)	
Income taxes paid	(760)	(1,060)
Net cash provided by operating activities		¥4,530

ILLUSTRATION 23.37 Reporting of Interest, Taxes, and Dividends in the Operating Section

Companies often provide a separate section to identify interest and income taxes paid.

What Do the Numbers Mean?

Better than ROA?

As you have learned in your study of accounting, both accounting income (measured under accrual-accounting principles) and cash flow from operations can provide useful information. However, both measures are sometimes criticized. Accounting income is sometimes faulted for the multitude of judgments required to determine revenues and expenses. In addition, many companies can boost return on equity, an earnings-based metric, by piling on debt, which also makes the company a riskier, not a better, investment. On the other hand, cash flow performance metrics are criticized because they do not follow the revenue and expense recognition principles.

So what's a better way to measure how profitable companies really are? Or, to adopt master investor Warren Buffett's view of investing: How do you find companies that consistently generate big returns on invested capital? Recently, a new measure of profitability, "COROA" (cash operating return on assets) has been introduced as a better performance metric. The idea is to measure management's ability to generate pure cash returns, not cash expected in the future, on every dollar invested in property, plant, and equipment; R&D centers; inventories; and all other assets.

Specifically, COROA is computed by starting with the cash flow from operations amount and then adding back cash taxes and cash interest to calculate pure operating cash flows. That's the dollar amount that the company actually puts in its coffers during the year—and which could be used to pay dividends, make "investments" by purchasing companies or divisions, and fund capital expenditures, especially those that propel growth. That's the numerator. Adjustments for taxes and interest are fundamental to this COROA measure. This is because falling taxes can create the illusion of ongoing progress. Interest is added back because it primarily reflects the level of leverage but has nothing to do with how well management is managing their assets.

The denominator consists of every dollar spent on the assets that produce those operating cash flows. To calculate that figure, take "total assets" from the statement of financial position and add "accumulated depreciation" to account for operating assets that are still being used to make cars, semiconductors, or other products that, for accounting purposes, are fully expensed.

Two recent examples make the point. First, consider **Apple** (USA): from late 2015 to late 2017, its stock price was in a funk. Why? From the start of fiscal 2016 through September 30, 2017, Apple's total assets, measured as a yearly average, jumped by $104 billion to $392 billion. Yet despite reinvesting that $100-billion-plus, primarily by plowing retained earnings into low-yielding securities, Apple generated $17 billion less in operating cash flows in 2017 than it posted in 2015. Its COROA dropped over that two-year span from 33.1 percent to 19.9 percent.

Looking next at **GE** (USA), its COROA chronicled a steep and ongoing decline. In 2013, it posted operating cash flow of $35 billion; it has fallen in every one of the five succeeding years, hitting $10.5 billion in 2018, a drop of 70 percent. This resulted mainly from a slide in the cash it reported from running its basic businesses. Its reported cash from operations (before adding back cash interest and taxes) dropped from $30 billion in 2016 to $4.2 billion in 2018. As a result, GE's COROA dropped from an already weak 4.8 percent to just 2.7 percent.

Thus, COROA—adjusted cash flow from operations as a percentage of total assets—is the ratio to keep an eye on. It's the best measure of pure profitability. If the number has been high for a while and is either staying high or improving, evidence is strong that the company is generating strong returns from its new investments. That's the quality that Buffett looks for. And according to accounting guru Jack Ciesielski, it's all about cash. "What's more important in the world than cash?" he asks. "Why, it's *more* cash, of course."

Sources: S. Tully, "A Top Accounting Guru's Compelling New Measure for Profitability," *Fortune* (March 10, 2014); S. Tully, "Apple's Big Stock Selloff Is a Sign of Things to Come," *Fortune* (January 29, 2019); and S. Tully, "GE's Basic Businesses Are Badly Underperforming, by This Accounting Metric," *Fortune* (August 27, 2019).

Use of a Worksheet

LEARNING OBJECTIVE 5

Explain the use of a worksheet in preparing a statement of cash flows.

When numerous adjustments are necessary or other complicating factors are present, companies often use **a worksheet to assemble and classify the data that will appear on the statement of cash flows**. The worksheet is merely a device that aids in the preparation of the statement. Its use is optional. Illustration 23.38 shows the skeleton format of the worksheet for preparation of the statement of cash flows using the indirect method.

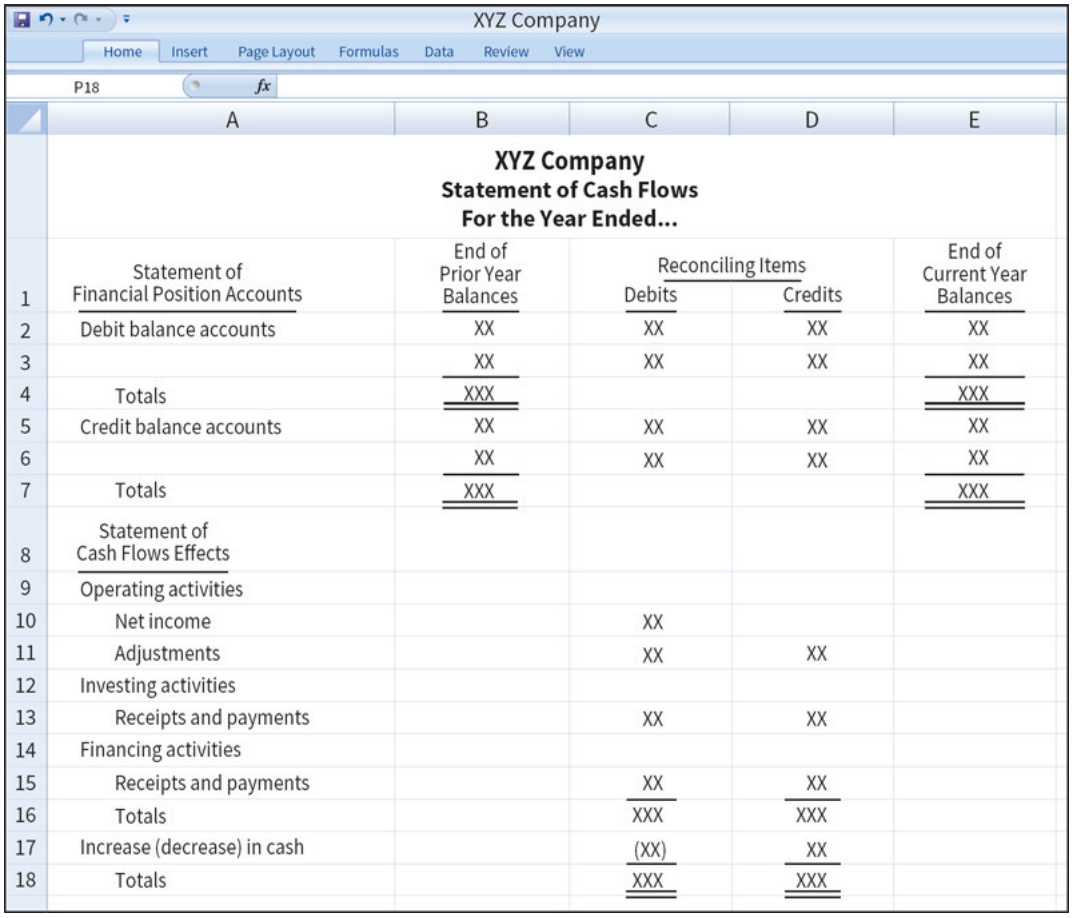
The following guidelines are important in using a worksheet.

1. In the statement of financial position accounts section, **list accounts with debit balances separately from those with credit balances**. This means, for example, that Accumulated Depreciation is listed under credit balances and not as a contra account under debit balances. Enter the beginning and ending balances of each account in the appropriate columns. Then, enter the transactions that caused the change in the account balance during the year as reconciling items in the two middle columns.

   After all reconciling items have been entered, each line pertaining to a statement of financial position account should foot across. That is, the beginning balance plus or minus the reconciling item(s) must equal the ending balance. When this agreement exists for all statement of financial position accounts, all changes in account balances have been reconciled.

2. The bottom portion of the worksheet consists of the operating, investing, and financing activities sections. Accordingly, it provides the information necessary to prepare the formal statement of cash flows. **Enter inflows of cash as debits in the reconciling columns, and outflows of cash as credits in the reconciling columns**. Thus, in this section, a company would enter the sale of equipment for cash at book value as a debit under inflows of cash from investing activities. Similarly, it would enter the purchase of land for cash as a credit under outflows of cash from investing activities.

3. **Do not enter in any journal, or post to any account, the reconciling items shown in the worksheet**. These items do not represent either adjustments or corrections to the statement of financial position accounts. They are used only to facilitate the preparation of the statement of cash flows.



	A	B	C	D	E
	XYZ Company **Statement of Cash Flows** **For the Year Ended...**				
1	Statement of Financial Position Accounts	End of Prior Year Balances	Reconciling Items Debits	Reconciling Items Credits	End of Current Year Balances
2	Debit balance accounts	XX	XX	XX	XX
3		XX	XX	XX	XX
4	Totals	XXX			XXX
5	Credit balance accounts	XX	XX	XX	XX
6		XX	XX	XX	XX
7	Totals	XXX			XXX
8	Statement of Cash Flows Effects				
9	Operating activities				
10	Net income		XX		
11	Adjustments		XX	XX	
12	Investing activities				
13	Receipts and payments		XX	XX	
14	Financing activities				
15	Receipts and payments		XX	XX	
16	Totals		XXX	XXX	
17	Increase (decrease) in cash		(XX)	XX	
18	Totals		XXX	XXX	

ILLUSTRATION 23.38 Format of Worksheet for Preparation of Statement of Cash Flows

Preparation of the Worksheet

The preparation of a worksheet involves the following steps.

Step 1. Enter the statement of financial position accounts and their beginning and ending balances in the statement of financial position accounts section.

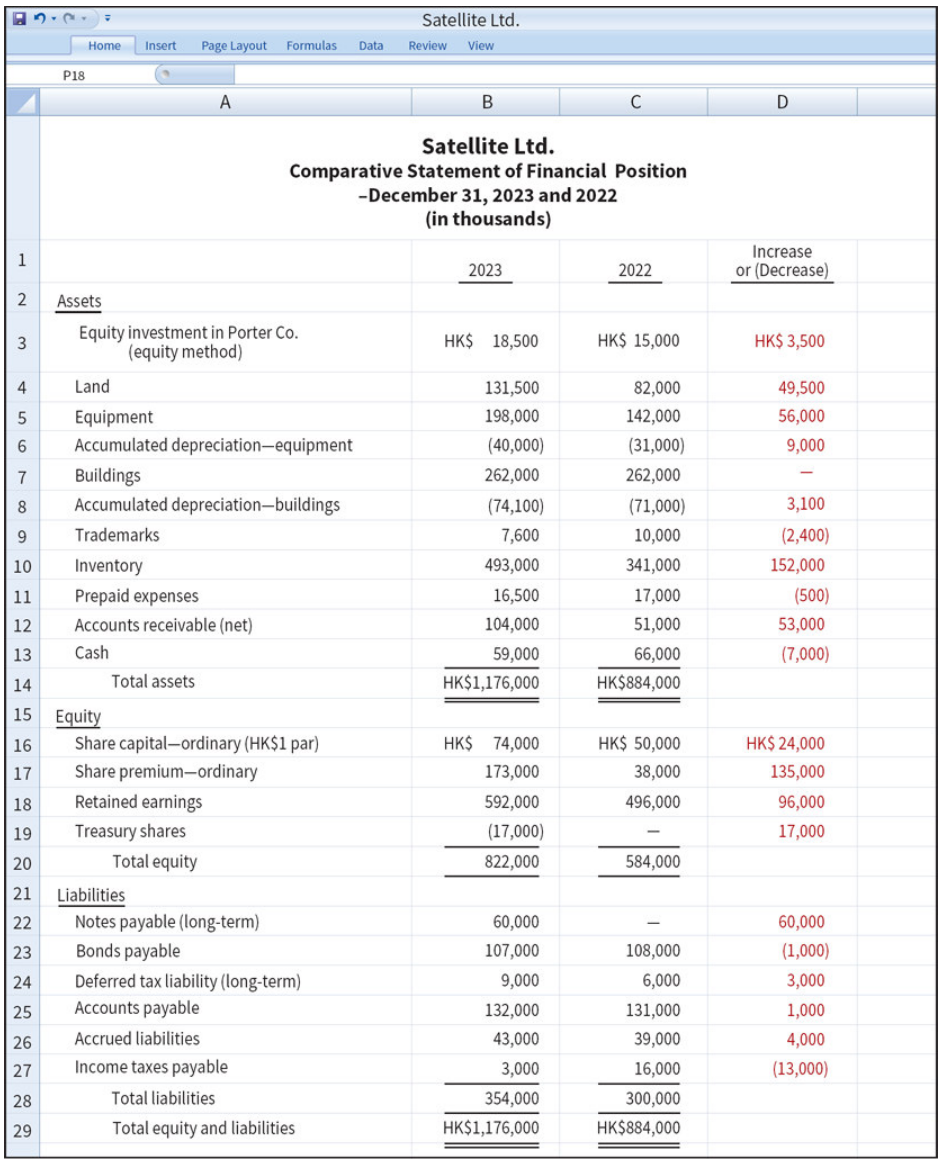
Step 2. Enter the data that explain the changes in the statement of financial position accounts (other than cash) and their effects on the statement of cash flows in the reconciling columns of the worksheet.

Step 3. Enter the increase or decrease in cash on the cash line and at the bottom of the worksheet. This entry should enable the totals of the reconciling columns to be in agreement.

To illustrate the preparation and use of a worksheet and to illustrate the reporting of some of the special problems discussed in the prior section, we present a comprehensive example for Satellite Ltd. Again, the indirect method serves as the basis for the computation of net cash provided by operating activities. Illustrations 23.39 and 23.40 present the statement of financial position, combined statement of income and retained earnings, and additional information for Satellite Ltd. The discussion that follows these financial statements provides additional explanations related to the preparation of the worksheet.

Analysis of Transactions

The following discussion explains the individual adjustments that appear on the worksheet in Illustration 23.41. Because cash is the basis for the analysis, Satellite reconciles the cash account last. Because income is the first item that appears on the statement of cash flows, it is handled first.



Satellite Ltd.

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Satellite Ltd.
Comparative Statement of Financial Position
–December 31, 2023 and 2022
(in thousands)

		2023	2022	Increase or (Decrease)
2	Assets			
3	Equity investment in Porter Co. (equity method)	HK$ 18,500	HK$ 15,000	HK$ 3,500
4	Land	131,500	82,000	49,500
5	Equipment	198,000	142,000	56,000
6	Accumulated depreciation—equipment	(40,000)	(31,000)	9,000
7	Buildings	262,000	262,000	—
8	Accumulated depreciation—buildings	(74,100)	(71,000)	3,100
9	Trademarks	7,600	10,000	(2,400)
10	Inventory	493,000	341,000	152,000
11	Prepaid expenses	16,500	17,000	(500)
12	Accounts receivable (net)	104,000	51,000	53,000
13	Cash	59,000	66,000	(7,000)
14	Total assets	HK$1,176,000	HK$884,000	
15	Equity			
16	Share capital—ordinary (HK$1 par)	HK$ 74,000	HK$ 50,000	HK$ 24,000
17	Share premium—ordinary	173,000	38,000	135,000
18	Retained earnings	592,000	496,000	96,000
19	Treasury shares	(17,000)	—	17,000
20	Total equity	822,000	584,000	
21	Liabilities			
22	Notes payable (long-term)	60,000	—	60,000
23	Bonds payable	107,000	108,000	(1,000)
24	Deferred tax liability (long-term)	9,000	6,000	3,000
25	Accounts payable	132,000	131,000	1,000
26	Accrued liabilities	43,000	39,000	4,000
27	Income taxes payable	3,000	16,000	(13,000)
28	Total liabilities	354,000	300,000	
29	Total equity and liabilities	HK$1,176,000	HK$884,000	

ILLUSTRATION 23.39 Comparative Statement of Financial Position, Satellite Ltd.

Change in Retained Earnings

Net income for the period is HK$117,000. The entry for it on the worksheet is as follows.

(1)		
Operating—Net Income	117,000	
Retained Earnings		117,000

Satellite reports net income on the bottom section of the worksheet. **This is the starting point for preparation of the statement of cash flows (under the indirect method)**.

A share dividend and a cash dividend also affected retained earnings. The retained earnings statement reports a share dividend of HK$15,000. The worksheet entry for this transaction is as follows.

(2)		
Retained Earnings	15,000	
Share Capital—Ordinary		15,000

Satellite Ltd. Combined Statement of Income and Retained Earnings For the Year Ended December 31, 2023 (in thousands)		
Net sales		HK$526,500
Other revenue		3,500
Total revenues		530,000
Expense		
Cost of goods sold		310,000
Selling and administrative expenses		47,000
Other income and expense		4,000
Total expenses		361,000
Income before income tax		169,000
Income tax		
Current	HK$49,000	
Deferred	3,000	52,000
Net income		117,000
Retained earnings, January 1		496,000
Less:		
Cash dividends	6,000	
Share dividend	15,000	21,000
Retained earnings, December 31		HK$592,000
Per share:		
Net income		HK$2.13

Additional Information

a. Other income of HK$3,500 represents Satellite's equity share in the net income of Porter Co., an equity investee. Satellite owns 22% of Porter Co.

b. An analysis of the Equipment account and related Accumulated Depreciation—Equipment account indicates the following.

	Equipment Dr./(Cr.)	Accum. Dep. Dr./(Cr.)	Gain or (Loss)
Balance at end of 2022	HK$142,000	HK$(31,000)	
Purchases of equipment	53,000		
Sale of equipment	(8,000)	2,500	HK$(1,500)
Depreciation for the period		(11,500)	
Major repair charged to equipment	11,000		
Balance at end of 2023	HK$198,000	HK$(40,000)	

Satellite Ltd.
Combined Statement of Income and Retained Earnings
For the Year Ended December 31, 2023
(in thousands)

c. Land in the amount of HK$60,000 was purchased through the issuance of a long-term note; in addition, certain parcels of land costing HK$10,500 were condemned. The government paid Satellite HK$18,500, resulting in an HK$8,000 gain.

d. The change in the Accumulated Depreciation—Buildings, Trademarks, and Bonds Payable accounts resulted from depreciation and amortization entries.

e. An analysis of the share capital and premium accounts in equity discloses the following:

	Share Capital—Ordinary	Share Premium—Ordinary
Balance at end of 2022	HK$50,000	HK$ 38,000
Issuance of HK$15,000 share dividend	15,000	
Sale of shares for cash	9,000	135,000
Balance at end of 2023	HK$74,000	HK$173,000

f. Interest paid is HK$9,000; income taxes paid is HK$62,000.

ILLUSTRATION 23.40 Income and Retained Earnings Statements, Satellite Ltd.

The issuance of share dividends is not a cash operating, investing, or financing item. Therefore, **although the company enters this transaction on the worksheet for reconciling purposes, it does not report it in the statement of cash flows**.

Retained Earnings			
(2)	15,000	Bal.	496,000
(3)	6,000	(1)	117,000
		Bal.	592,000

The HK$6,000 cash dividend paid represents a financing activity cash outflow. Satellite makes the following worksheet entry:

(3)		
Retained Earnings	6,000	
Financing—Cash Dividends		6,000

The company reconciles the beginning and ending balances of retained earnings by entry of the three items above.

Accounts Receivable (Net)

The increase in accounts receivable (net) of HK$53,000 represents adjustments that did not result in cash inflows during 2023. As a result, the company would deduct from net income the increase of HK$53,000. Satellite makes the following worksheet entry.

(4)		
Accounts Receivable (net)	53,000	
Operating—Increase in Accounts Receivable (net)		53,000

Inventory

The increase in inventory of HK$152,000 represents an operating use of cash. The incremental investment in inventory during the year reduces cash without increasing the cost of goods sold. Satellite makes the following worksheet entry.

(5)		
Inventory	152,000	
Operating—Increase in Inventory		152,000

Prepaid Expenses

The decrease in prepaid expenses of HK$500 represents a charge in the income statement for which there was no cash outflow in the current period. Satellite should add that amount back to net income through the following entry.

(6)		
Operating—Decrease in Prepaid Expenses	500	
Prepaid Expenses		500

Equity Investment in Porter Co. (Equity Method)

Satellite's investment in the shares of Porter Co. increased HK$3,500. This amount reflects Satellite's share of net income earned by Porter (its equity investee) during the current year. Although Satellite's revenue, and therefore its net income, increased HK$3,500 by recording Satellite's share of Porter Co.'s net income, no cash (dividend) was provided. Satellite makes the following worksheet entry.

(7)		
Equity Investment in Porter Co.	3,500	
Operating—Equity in Earnings of Porter Co.		3,500

Land

Satellite purchased land in the amount of HK$60,000 through the issuance of a long-term note payable. This transaction did not affect cash. It is a significant non-cash investing/financing transaction that the company would disclose in the accompanying notes. Satellite makes the following entry to reconcile the worksheet.

(8)		
Land	60,000	
Notes Payable		60,000

In addition to the non-cash transaction involving the issuance of a note to purchase land, the Land account was decreased by the condemnation proceedings. The following worksheet entry records the receipt of HK$18,500 for land having a book value of HK$10,500.

(9)		
Investing—Proceeds from Condemnation of Land	18,500	
Land		10,500
Operating—Gain on Condemnation of Land		8,000

Land			
Bal.	82,000	(9)	10,500
(8)	60,000		

Bal.	131,500		

In reconciling net income to net cash flow from operating activities, Satellite deducts from net income the gain of HK$8,000. The reason is that the transaction that gave rise to the gain is an item whose cash effect is already classified as an investing cash inflow. The Land account is now reconciled.

Equipment and Accumulated Depreciation—Equipment

An analysis of Equipment and Accumulated Depreciation—Equipment shows that a number of transactions have affected these accounts. The company purchased equipment in the amount of HK$53,000 during the year. Satellite records this transaction on the worksheet as follows.

(10)		
Equipment	53,000	
Investing—Purchase of Equipment		53,000

In addition, Satellite sold, at a loss of HK$1,500, equipment with a book value of HK$5,500. It records this transaction as follows.

(11)		
Investing—Sale of Equipment	4,000	
Operating—Loss on Sale of Equipment	1,500	
Accumulated Depreciation—Equipment	2,500	
Equipment		8,000

Equipment			
Bal.	142,000	(11)	8,000
(10)	53,000		
(13)	11,000		
Bal.	198,000		

The proceeds from the sale of the equipment provided cash of HK$4,000. In addition, the loss on the sale of the equipment has reduced net income but did not affect cash. Therefore, the company adds back to net income the amount of the loss, in order to accurately report cash provided by operating activities.

Satellite reported depreciation on the equipment at HK$11,500 and recorded it on the worksheet as follows.

(12)		
Operating—Depreciation Expense—Equipment	11,500	
Accumulated Depreciation—Equipment		11,500

Accumulated Depreciation—Equipment			
(11)	2,500	Bal.	31,000
		(12)	11,500
		Bal.	40,000

The company adds depreciation expense back to net income because that expense reduced income but did not affect cash.

Finally, the company made a major repair to the equipment. It charged this expenditure, in the amount of HK$11,000, to the Equipment account. This expenditure required cash, and so Satellite makes the

following worksheet entry.

(13)		
Equipment	11,000	
Investing—Major Repairs of Equipment		11,000

After adjusting for the foregoing items, Satellite has reconciled the balances in the Equipment and related Accumulated Depreciation—Equipment accounts.

Building Depreciation and Amortization of Trademarks

Depreciation expense on the buildings of HK$3,100 and amortization of trademarks of HK$2,400 are both expenses in the income statement that reduced net income but did not require cash outflows in the current period. Satellite makes the following worksheet entry.

(14)		
Operating—Depreciation Expense—Buildings	3,100	
Operating—Amortization of Trademarks	2,400	
Accumulated Depreciation—Buildings		3,100
Trademarks		2,400

Other Non-Cash Charges or Credits

Analysis of the remaining accounts indicates that changes in the Accounts Payable, Accrued Liabilities, Income Taxes Payable, Bonds Payable, and Deferred Tax Liability balances resulted from charges or credits to net income that did not affect cash. The company should individually analyze each of these items and enter them in the worksheet. The following compound entry summarizes these non-cash, income-related items.

(15)		
Income Taxes Payable	13,000	
Bonds Payable	1,000	
Operating—Increase in Accounts Payable	1,000	
Operating—Increase in Accrued Liabilities	4,000	
Operating—Increase in Deferred Tax Liability	3,000	
Operating—Decrease in Income Taxes Payable		13,000
Operating—Amortization of Bond Premium		1,000
Accounts Payable		1,000
Accrued Liabilities		4,000
Deferred Tax Liability		3,000

Share Capital—Ordinary and Related Accounts

Comparison of the Share Capital—Ordinary balance and the Share Premium—Ordinary balance shows that transactions during the year affected these accounts. First, Satellite issues a share dividend of two percent to shareholders. As the discussion of worksheet entry (2) indicated, no cash was provided or used by the share dividend transaction. In addition to the shares issued via the share dividend, Satellite sold ordinary shares at HK$16 per share. The company records this transaction as follows.

Share Capital—Ordinary		
	Bal.	50,000
	(2)	15,000

	(16)	9,000
	Bal.	74,000

(16)		
Financing—Sale of Ordinary Shares	144,000	
Share Capital—Ordinary		9,000
Share Premium—Ordinary		135,000

Share Premium—Ordinary		
	Bal.	38,000
	(16)	135,000
	Bal.	173,000

Also, the company purchased its ordinary shares in the amount of HK$17,000. It records this transaction on the worksheet as follows.

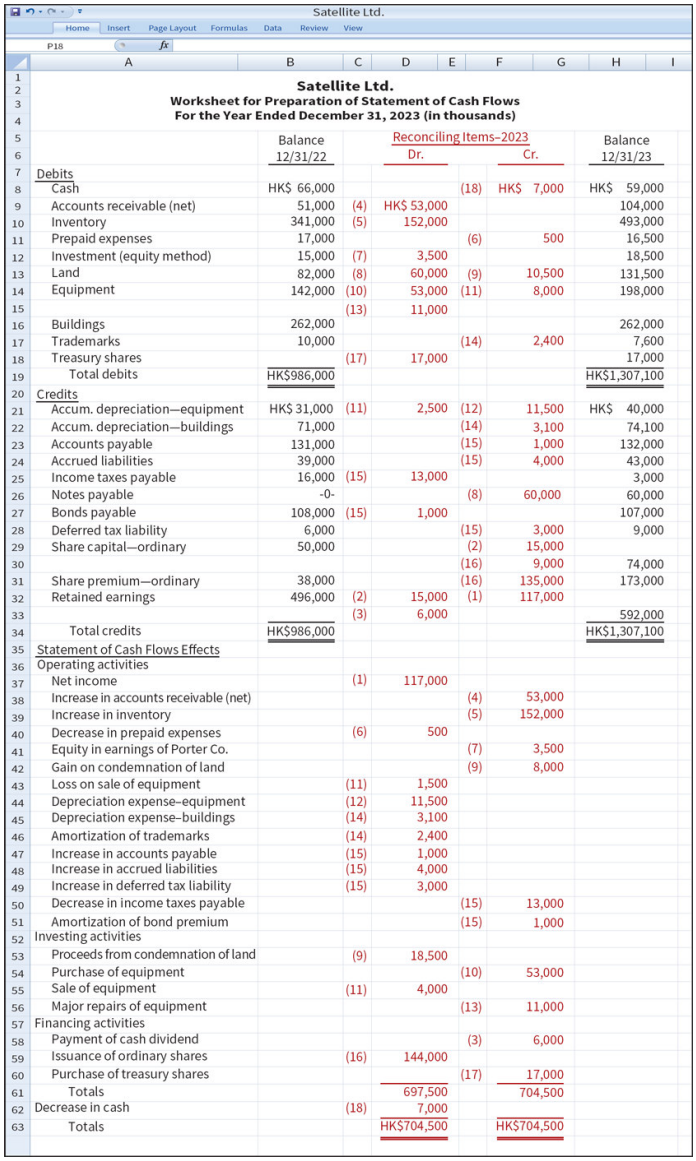
(17)		
Treasury Shares	17,000	
Financing—Purchase of Treasury Shares		17,000

Final Reconciling Entry

The final entry to reconcile the change in cash and to balance the worksheet is shown below. The HK$7,000 amount is the difference between the beginning and ending cash balance.

(18)		
Decrease in Cash	7,000	
Cash		7,000

Once the company has determined that the differences between the beginning and ending balances per the worksheet columns have been accounted for, it can total the reconciling transactions columns, and they should balance. Satellite can prepare the statement of cash flows entirely from the items and amounts that appear at the bottom of the worksheet under “Statement of Cash Flows Effects,” as shown in **Illustration 23.41**.



Satellite Ltd.
Worksheet for Preparation of Statement of Cash Flows
For the Year Ended December 31, 2023 (in thousands)

	Balance 12/31/22		Reconciling Items–2023 Dr.		Reconciling Items–2023 Cr.	Balance 12/31/23
Debits						
Cash	HK$ 66,000			(18)	HK$ 7,000	HK$ 59,000
Accounts receivable (net)	51,000	(4)	HK$ 53,000			104,000
Inventory	341,000	(5)	152,000			493,000
Prepaid expenses	17,000			(6)	500	16,500
Investment (equity method)	15,000	(7)	3,500			18,500
Land	82,000	(8)	60,000	(9)	10,500	131,500
Equipment	142,000	(10)	53,000	(11)	8,000	198,000
		(13)	11,000			
Buildings	262,000					262,000
Trademarks	10,000			(14)	2,400	7,600
Treasury shares		(17)	17,000			17,000
Total debits	HK$986,000					HK$1,307,100
Credits						
Accum. depreciation—equipment	HK$ 31,000	(11)	2,500	(12)	11,500	HK$ 40,000
Accum. depreciation—buildings	71,000			(14)	3,100	74,100
Accounts payable	131,000			(15)	1,000	132,000
Accrued liabilities	39,000			(15)	4,000	43,000
Income taxes payable	16,000	(15)	13,000			3,000
Notes payable	-0-			(8)	60,000	60,000
Bonds payable	108,000	(15)	1,000			107,000
Deferred tax liability	6,000			(15)	3,000	9,000
Share capital—ordinary	50,000			(2)	15,000	
				(16)	9,000	74,000
Share premium—ordinary	38,000			(16)	135,000	173,000
Retained earnings	496,000	(2)	15,000	(1)	117,000	
		(3)	6,000			592,000
Total credits	HK$986,000					HK$1,307,100
Statement of Cash Flows Effects						
Operating activities						
Net income		(1)	117,000			
Increase in accounts receivable (net)				(4)	53,000	
Increase in inventory				(5)	152,000	
Decrease in prepaid expenses		(6)	500			
Equity in earnings of Porter Co.				(7)	3,500	
Gain on condemnation of land				(9)	8,000	
Loss on sale of equipment		(11)	1,500			
Depreciation expense–equipment		(12)	11,500			
Depreciation expense–buildings		(14)	3,100			
Amortization of trademarks		(14)	2,400			
Increase in accounts payable		(15)	1,000			
Increase in accrued liabilities		(15)	4,000			
Increase in deferred tax liability		(15)	3,000			
Decrease in income taxes payable				(15)	13,000	
Amortization of bond premium				(15)	1,000	
Investing activities						
Proceeds from condemnation of land		(9)	18,500			
Purchase of equipment				(10)	53,000	
Sale of equipment		(11)	4,000			
Major repairs of equipment				(13)	11,000	
Financing activities						
Payment of cash dividend				(3)	6,000	
Issuance of ordinary shares		(16)	144,000			
Purchase of treasury shares				(17)	17,000	
Totals			697,500		704,500	
Decrease in cash		(18)	7,000			
Totals			HK$704,500		HK$704,500	

ILLUSTRATION 23.41 Completed Worksheet for Preparation of Statement of Cash Flows, Satellite Ltd.

Preparation of Final Statement

Illustration 23.42 presents a formal statement of cash flows prepared from the data compiled in the lower portion of the worksheet.

Satellite Ltd. Statement of Cash Flows For the Year Ended December 31, 2023 Increase (Decrease) in Cash (in thousands)		
Cash flows from operating activities		
Net income		HK$117,000
Adjustments to reconcile net income to net cash used by operating activities:		
Depreciation expense	HK$ 14,600	
Amortization of trademarks	2,400	
Amortization of bond premium	(1,000)	
Equity in earnings of Porter Co.	(3,500)	
Gain on condemnation of land	(8,000)	
Loss on sale of equipment	1,500	
Increase in deferred tax liability	3,000	
Increase in accounts receivable (net)	(53,000)	
Increase in inventory	(152,000)	
Decrease in prepaid expenses	500	
Increase in accounts payable	1,000	
Increase in accrued liabilities	4,000	
Decrease in income taxes payable	(13,000)	(203,500)
Net cash used by operating activities		(86,500)
Cash flows from investing activities		
Proceeds from condemnation of land	18,500	
Purchase of equipment	(53,000)	
Sale of equipment	4,000	
Major repairs of equipment	(11,000)	
Net cash used by investing activities		(41,500)
Cash flows from financing activities		
Payment of cash dividend	(6,000)	
Issuance of ordinary shares	144,000	
Purchase of treasury shares	(17,000)	
Net cash provided by financing activities		121,000
Net decrease in cash		(7,000)
Cash, January 1, 2023		66,000
Cash, December 31, 2023		HK$ 59,000
In addition, a supplemental note of Non-Cash Investing and Financing Activities is as follows. **Supplemental Note of Non-Cash Investing and Financing Activities** Purchase of land for HK$60,000 in exchange for a HK$60,000 long-term note.		

ILLUSTRATION 23.42 Statement of Cash Flows, Satellite Ltd.

Review and Practice

Key Terms Review

cash equivalents

direct method

financing activities

indirect method

investing activities

operating activities

significant non-cash transactions

statement of cash flows

Learning Objectives Review

1 Describe the usefulness and format of the statement of cash flows.

The primary purpose of the statement of cash flows is to provide information about an entity's cash receipts and cash payments during a given period. A secondary objective is to report the entity's operating, investing, and financing activities during the period.

Companies classify cash flows as follows. (1) **Operating activities**—transactions that result in the revenues, expenses, gains, and losses that determine net income. (2) **Investing activities**—lending money and collecting on those loans, and acquiring and disposing of investments, plant assets, and intangible assets. (3) **Financing activities**—obtaining cash from creditors and repaying loans, issuing and reacquiring share capital, and paying cash dividends.

2 Prepare a statement of cash flows.

Preparing the statement involves three major steps. (1) *Determine the change in cash*. This is the difference between the beginning and the ending cash balance shown on the comparative statements of financial position. (2) *Determine the net cash flow from operating activities*. This procedure is complex; it involves analyzing not only the current year's income statement but also the comparative statements of financial position and the selected transaction data. (3) *Determine cash flows from investing and financing activities*. Analyze all other changes in the statement of financial position accounts to determine the effects on cash.

Companies must adjust net income on an accrual basis to determine net cash flow from operating activities because some expenses and losses do not cause cash outflows, and some revenues and gains do not provide cash inflows. Once a company has computed the net cash flow from operating activities, the next step is to determine whether any other changes in statement of financial position accounts caused an increase or decrease in cash. Net cash flows from investing and financing activities can be determined by examining the changes in non-current statement of financial position accounts.

The information to prepare the statement usually comes from three sources. (1) *Comparative statements of financial position*. Information in these statements indicates the amount of the changes in assets, liabilities, and equities during the period. (2) *Current income statement*. Information in this statement is used in determining the cash provided by operations during the period. (3) *Selected transaction data*. These data from the general ledger provide additional detailed information needed to determine how cash was provided or used during the period.

3 Contrast the direct and indirect methods of calculating net cash flow from operating activities.

Under the direct approach, companies calculate the major classes of operating cash receipts and cash disbursements. Presentation of the direct approach of reporting net cash flow from operating activities takes the form of a condensed cash-basis income statement. The indirect method adds back to net income the non-cash expenses and losses and subtracts the non-cash revenues and gains.

4 Discuss special problems in preparing a statement of cash flows.

These special problems are (1) adjustments to net income, (2) accounts receivable (net), (3) other working capital changes, (4) net loss, and (5) disclosures.

5 Explain the use of a worksheet in preparing a statement of cash flows.

When numerous adjustments are necessary or other complicating factors are present, companies often use a worksheet to assemble and classify the data that will appear on the statement of cash flows. The worksheet is merely a device that aids in the preparation of the statement. Its use is optional.

Enhanced Review and Practice

Go online for multiple-choice questions with solutions, review exercises with solutions, and a full glossary of all key terms.

Practice Problem

Data presented below are from the records of Antonio Brasileiro SA.

	December 31, 2022	December 31, 2021
Plant assets	R$335,000	R$215,000
Long-term investments	10,000	53,000
Current assets other than cash	85,000	60,000
Cash	15,000	8,000
	R$445,000	R$336,000
Retained earnings	R$ 56,000	R$ 20,000
Ordinary shares	254,000	254,000
Bonds payable	75,000	–0–
Current liabilities	40,000	22,000
Accumulated depreciation	20,000	40,000
	R$445,000	R$336,000

Additional information:

1. In 2022, the company sold for R$34,000 held-for-collection and selling debt investments carried at a cost of R$43,000 on December 31, 2022. No unrealized gains or losses were recorded on this investment in 2022.
2. In 2022, the company sold for R$8,000 plant assets that cost R$50,000 and were 80% depreciated. The loss was incorrectly charged directly to Retained Earnings.

3. Net income as reported on the income statement for the year was R$48,000.

4. The company paid dividends totaling R$10,000.

5. Depreciation charged for the year was R$20,000.

Instructions

Prepare a statement of cash flows for the year 2022 using the indirect method.

Solution

Antonio Brasileiro SA Statement of Cash Flows For the Year Ended December 31, 2022 Indirect Method		
Cash flows from operating activities		
Net income (R$48,000 – R$2,000)		R$ 46,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	R$ 20,000	
Loss on sale of investments	9,000	
Loss on sale of plant assets	2,000	
Increase in current assets other than cash	(25,000)	
Increase in current liabilities	18,000	24,000
Net cash provided by operating activities		70,000
Cash flows from investing activities		
Sale of plant assets	8,000	
Sale of investments	34,000	
Purchase of plant assets*	(170,000)	
Net cash used by investing activities		(128,000)
Cash flows from financing activities		
Issuance of bonds payable	75,000	
Payment of dividends	(10,000)	
Net cash provided by financing activities		65,000
Net increase in cash		7,000
Cash balance, January 1, 2022		8,000
Cash balance, December 31, 2022		R$ 15,000
*Supporting computation (purchase of plant assets):		
Plant assets, December 31, 2022	R$335,000	
Less: Plant assets, December 31, 2021	215,000	
Net change	120,000	
Plant assets sold	50,000	
Plant assets purchased	R$170,000	

Exercises, Problems, Problem Solution Walkthrough Videos, Data Analytics Activities, and many more assessment tools and resources are available for practice in Wiley's online courseware.

Questions

1. What is the purpose of the statement of cash flows? What information does it provide?

2. Of what use is the statement of cash flows?

3. Differentiate between investing activities, financing activities, and operating activities.

4. What are the major sources of cash (inflows) in a statement of cash flows? What are the major uses (outflows) of cash?

5. Identify and explain the major steps involved in preparing the statement of cash flows.

6. Identify the following items as (1) operating, (2) investing, or (3) financing activities: purchase of land, payment of dividends, cash sales, and purchase of treasury shares.

7. Unlike the other major financial statements, the statement of cash flows is not prepared from the adjusted trial balance. From what sources does the information to prepare this statement come, and what information does each source provide?

8. Why is it necessary to convert accrual-based net income to a cash basis when preparing a statement of cash flows?

9. Differentiate between the direct method and the indirect method by discussing each method.

10. Broussard Company reported net income of $3.5 million in 2022. Depreciation for the year was $520,000, accounts receivable increased $500,000, and accounts payable increased $300,000. Compute net cash flow from operating activities using the indirect method.

11. Collinsworth plc reported sales on an accrual basis of £100,000. If accounts receivable increased £30,000 and the allowance for doubtful accounts increased £9,000 after a write-off of £2,000, compute cash sales.

12. Your roommate is puzzled. During the last year, the company in which she is a shareholder reported a net loss of $675,000, yet its cash increased $321,000 during the same period of time. Explain to your roommate how this situation could occur.

13. The board of directors of Gifford plc declared cash dividends of £260,000 during the current year. If dividends payable was £85,000 at the beginning of the year and £90,000 at the end of the year, how much cash was paid in dividends during the year?

14. Explain how the amount of cash payments to suppliers is computed under the direct method.

15. The net income for Letterman AG for 2022 was €320,000. During 2022, depreciation on plant assets was €124,000, amortization of patent was €40,000, and the company incurred a loss on sale of plant assets of €21,000. Compute net cash flow from operating activities.

16. Each of the following items must be considered in preparing a statement of cash flows for Blackwell Inc. for the year ended December 31, 2022. Indicate how each item is to be shown in the statement, if at all.

a. Plant assets that had cost $18,000 6½ years before and were being depreciated on a straight-line basis over 10 years with no estimated residual value were sold for $4,000.

b. During the year, 10,000 ordinary shares with a stated value of $20 a share were issued for $41 a share.

c. Uncollectible accounts receivable in the amount of $22,000 were written off against Allowance for Doubtful Accounts.

d. The company sustained a net loss for the year of $50,000. Depreciation amounted to $22,000, and a gain of $9,000 was realized on the sale of non-trading equity investments for $38,000 cash.

17. Classify the following items as (1) operating, (2) investing, (3) financing, or (4) significant non-cash investing and financing activities, using the direct method.

a. Cash payments to employees.
b. Redemption of bonds payable.
c. Sale of building at book value.
d. Cash payments to suppliers.
e. Exchange of equipment for furniture.
f. Issuance of preference shares.
g. Cash received from customers.
h. Purchase of treasury shares.
i. Issuance of bonds for land.
j. Payment of dividends.
k. Purchase of equipment.
l. Cash payments for operating expenses.

18. Silva Rojas and Hans Jensen were discussing the statement of cash flows of Liu Ltd. In the notes to the statement of cash flows was a schedule entitled "Non-cash investing and financing activities." Give three examples of significant non-cash transactions that would be reported in this schedule.

19. During 2022, Simms Group redeemed ¥2,000,000 of bonds payable for ¥1,880,000 cash. Indicate how this transaction would be reported on a statement of cash flows, if at all.

20. What are some of the arguments in favor of using the indirect (reconciliation) method as opposed to the direct method for reporting a statement of cash flows?

21. Why is it desirable to use a worksheet when preparing a statement of cash flows? Is a worksheet required to prepare a statement of cash flows?

Brief Exercises

BE23.1 (LO 2) Wainwright Corporation had the following activities in 2022.

1. Sale of land $180,000.
2. Purchase of inventory $845,000.
3. Purchase of treasury shares $72,000.
4. Purchase of equipment $415,000.
5. Issuance of ordinary shares $320,000.
6. Purchase of investments—equity $59,000.

Compute the amount Wainwright should report as net cash provided (used) by investing activities in its statement of cash flows.

BE23.2 (LO 2) Stansfield AG had the following activities in 2022.

1. Payment of accounts payable €770,000.
2. Issuance of ordinary shares €250,000.

3. Payment of dividends €350,000.
4. Collection of note receivable €100,000.
5. Issuance of bonds payable €510,000.
6. Purchase of treasury shares €46,000.

Compute the amount Stansfield should report as net cash provided (used) by financing activities in its 2022 statement of cash flows.

BE23.3 (LO 1) Novak SpA is preparing its 2022 statement of cash flows, using the indirect method. The following is a list of items that may affect the statement. Using the code letters provided, indicate how each item will affect Novak's 2022 statement of cash flows.

Code Letter	Effect
A	Added to net income in the operating section
D	Deducted from net income in the operating section
R-I	Cash receipt in investing section
P-I	Cash payment in investing section
R-F	Cash receipt in financing section
P-F	Cash payment in financing section
N	Non-cash investing and/or financing activity in notes

Items

_____	a. Purchase of land and building.
_____	b. Decrease in accounts receivable.
_____	c. Issuance of shares.
_____	d. Depreciation expense.
_____	e. Sale of land at book value.
_____	f. Sale of land at a gain.
_____	g. Payment of dividends.
_____	h. Increase in accounts receivable.
_____	i. Purchase of an equity investment.
_____	j. Increase in accounts payable.

_____	k. Decrease in accounts payable.
_____	l. Loan from bank by signing note.
_____	m. Purchase of equipment using a note.
_____	n. Increase in inventory.
_____	o. Issuance of bonds.
_____	p. Retirement of bonds payable.
_____	q. Sale of equipment at a loss.
_____	r. Purchase of treasury shares.

BE23.4 (LO 2, 3) Bloom SA had the following 2022 income statement.

Sales revenue	€200,000
Cost of goods sold	120,000
Gross profit	80,000
Operating expenses (includes depreciation of €21,000)	50,000
Net income	€ 30,000

The following accounts increased during 2022: accounts receivable €12,000, inventory €11,000, and accounts payable €13,000. Prepare the cash flows from operating activities section of Bloom's 2022 statement of cash flows using the direct method.

BE23.5 (LO 2, 3) Use the information from BE23.4 for Bloom SA. Prepare the cash flows from operating activities section of Bloom's 2022 statement of cash flows using the indirect method.

BE23.6 (LO 3) At January 1, 2022, Eikenberry Inc. had accounts receivable of $72,000. At December 31, 2022, accounts receivable is $54,000. Sales for 2022 total $420,000. Compute Eikenberry's 2022 cash receipts from customers.

BE23.7 (LO 3) Moxley AG had January 1 and December 31 balances as follows.

	1/1/22	12/31/22
Inventory	€95,000	€113,000
Accounts payable	61,000	69,000

For 2022, cost of goods sold was €500,000. Compute Moxley's 2022 cash payments to suppliers.

BE23.8 (LO 2) In 2022, Elbert plc had net cash provided by operating activities of £531,000, net cash used by investing activities of £963,000, and net cash provided by financing activities of £585,000. At January 1, 2022, the cash balance was £333,000. Compute December 31, 2022, cash.

BE23.9 (LO 2, 3) Loveless Corporation had the following 2022 income statement.

Revenues	$100,000

Expenses	60,000
	$ 40,000

In 2022, Loveless had the following activity in selected accounts.

Accounts Receivable			
1/1/22	20,000		
Revenues	100,000	1,000	Write-offs
		90,000	Collections
12/31/22	29,000		

Allowance for Doubtful Accounts			
		1,200	1/1/22
Write-offs	1,000	1,840	Bad debt expense
		2,040	12/31/22

Prepare Loveless's cash flows from operating activities section of the statement of cash flows using (a) the direct method and (b) the indirect method.

BE23.10 (LO 2) Hendrickson Corporation reported net income of $50,000 in 2022. Depreciation expense was $17,000. The following working capital accounts changed.

Accounts receivable	$11,000 increase
Non-trading equity investment	16,000 increase
Inventory	7,400 increase
Non-trade notes payable	15,000 decrease
Accounts payable	12,300 increase

Compute net cash provided by operating activities.

BE23.11 (LO 2) In 2022, Shaw AG reported a net loss of €70,000. Shaw's only net income adjustments were depreciation expense €81,000, and increase in accounts receivable €8,100. Compute Shaw's net cash provided (used) by operating activities.

BE23.12 (LO 4) In 2022, Leppard Inc. issued 1,000 ordinary shares of $10 par value for land worth $40,000.

a. Prepare Leppard's journal entry to record the transaction.

b. Indicate the effect the transaction has on cash.

c. Indicate how the transaction is reported on the statement of cash flows.

BE23.13 (LO 5) Indicate in general journal form how the items below would be entered in a worksheet for the preparation of the statement of cash flows.

a. Net income is ¥317,000,000.

b. Cash dividends declared and paid totaled ¥120,000,000.

c. Equipment was purchased for ¥114,000,000.

d. Equipment that originally cost ¥40,000,000 and had accumulated depreciation of ¥32,000,000 was sold for ¥10,000,000.

Exercises

E23.1 (LO 1) (Classification of Transactions) Springsteen Co. had the following activity in its most recent year of operations.

a. Pension expense exceeds amount funded.
b. Redemption of bonds payable.
c. Sale of building at book value.
d. Depreciation.
e. Exchange of equipment for furniture.
f. Issuance of ordinary shares.
g. Amortization of intangible assets.
h. Purchase of treasury shares.
i. Issuance of bonds for land.
j. Payment of dividends.
k. Increase in interest receivable on notes receivable.
l. Purchase of equipment.

Instructions

Classify the items as (1) operating—add to net income, (2) operating—deduct from net income, (3) investing, (4) financing, or (5) significant non-cash investing and financing activities. Use the indirect method.

E23.2 (LO 1, 2) (Statement Presentation of Transactions—Indirect Method) Each of the following items must be considered in preparing a statement of cash flows (indirect method) for Granderson SA for the year ended December 31, 2022.

a. Plant assets that had cost €25,000 6 years before and were being depreciated on a straight-line basis over 10 years with no estimated residual value were sold at the beginning of the year for €5,300.
b. During the year, 10,000 ordinary shares with a stated value of €10 a share were issued for €33 a share.
c. Uncollectible accounts receivable in the amount of €27,000 were written off against Allowance for Doubtful Accounts.
d. The company sustained a net loss for the year of €50,000. Depreciation amounted to €22,000, and a gain of €9,000 was realized on the sale of land for €39,000 cash.
e. A 3-month certificate of deposit was purchased for €100,000. The company uses a cash and cash-equivalent basis for its cash flow statement.
f. Patent amortization for the year was €20,000.
g. The company exchanged ordinary shares for a 70% interest in Plumlee Co. for €900,000.
h. During the year, treasury shares costing €47,000 were purchased.
i. The company recognized an unrealized holding gain on a debt investment not held for collection.

Instructions

State where each item is to be shown in the statement of cash flows, if at all.

E23.3 (LO 2) (Preparation of Operating Activities Section—Indirect Method, Periodic Inventory) The income statement of Rodriquez SA is shown below.

Rodriquez SA Income Statement For the Year Ended December 31, 2022		
Sales revenue		R$6,900,000
Cost of goods sold		
Beginning inventory	R$1,900,000	
Purchases	4,400,000	
Goods available for sale	6,300,000	
Ending inventory	1,600,000	
Cost of goods sold		4,700,000
Gross profit		2,200,000
Operating expenses		
Selling expenses	450,000	
Administrative expenses	700,000	1,150,000
Net income		R$1,050,000

Additional information:

1. Accounts receivable decreased R$310,000 during the year.
2. Prepaid expenses increased R$170,000 during the year.
3. Accounts payable to suppliers of merchandise decreased R$275,000 during the year.
4. Accrued expenses payable decreased R$120,000 during the year.
5. Administrative expenses include depreciation expense of R$60,000.

Instructions

Prepare the operating activities section of the statement of cash flows for the year ended December 31, 2022, for Rodriquez SA, using the indirect method.

E23.4 (LO 3) (Preparation of Operating Activities Section—Direct Method) Data for the Rodriquez SA are presented in E23.3.

Instructions

Prepare the operating activities section of the statement of cash flows using the direct method.

E23.5 (LO 3) (Preparation of Operating Activities Section—Direct Method) Norman NV's income statement for the year ended December 31, 2022, contained the following condensed information.

Service revenue		€840,000
Operating expenses (excluding depreciation)	€624,000	
Depreciation expense	60,000	
Loss on sale of equipment	26,000	710,000
Income before income taxes		130,000
Income tax expense		40,000
Net income		€ 90,000

Norman's statement of financial position contained the following comparative data at December 31.

	2022	2021
Accounts receivable	€37,000	€59,000
Accounts payable	46,000	31,000
Income taxes payable	4,000	8,500

(Accounts payable pertains to operating expenses.)

Instructions

Prepare the operating activities section of the statement of cash flows using the direct method.

E23.6 (LO 2) (Preparation of Operating Activities Section—Indirect Method) Data for Norman NV are presented in E23.5.

Instructions

Prepare the operating activities section of the statement of cash flows using the indirect method.

E23.7 (LO 3) (Computation of Operating Activities—Direct Method) Presented below are two independent situations.

Situation A: Chenowith AG reports revenues of €200,000 and operating expenses of €110,000 in its first year of operations, 2022. Accounts receivable and accounts payable at year-end were €71,000 and €39,000, respectively. Assume that the accounts payable related to operating expenses. (Ignore income taxes.)

Instructions

Using the direct method, compute net cash provided (used) by operating activities.

Situation B: The income statement for Edgebrook SA shows cost of goods sold €310,000 and operating expenses (exclusive of depreciation) €230,000. The comparative statements of financial position for the year show that inventory increased €21,000, prepaid expenses decreased €8,000, accounts payable (related to merchandise) decreased €17,000, and accrued expenses payable increased €11,000.

Instructions

Compute (a) cash payments to suppliers and (b) cash payments for operating expenses.

E23.8 (LO 2) (Schedule of Net Cash Flow from Operating Activities—Indirect Method) Messner AG reported €145,000 of net income for 2022. The accountant, in preparing the statement of cash flows, noted several items occurring during 2022 that might affect cash flows from operating activities. These items are listed below.

1. Messner purchased 100 treasury shares at a cost of €20 per share. These shares were then resold at €25 per share.
2. Messner sold 100 ordinary shares of Nokia at €200 per share. The acquisition cost of these shares was €165 per share. This investment was shown on Messner's December 31, 2021, statement of financial position as a non-trading equity investment.
3. Messner revised its estimate for bad debts. Before 2022, Messner's bad debt expense was 1% of its receivables. In 2022, this percentage was increased, resulting in bad debt expense of $3,500. Net accounts receivable decreased by €12,000 during 2022.
4. Messner issued 500 ordinary shares with a €10 par value for a patent. The fair value of the shares on the date of the transaction was €23 per share.
5. Depreciation expense is €39,000.

6. Messner holds 30% of the Sanchez Company's ordinary shares as a long-term investment. Sanchez Company reported €27,000 of net income for 2022.
7. Sanchez Company paid a total of €2,000 of cash dividends to all investees in 2022.
8. Messner declared a 10% share dividend. One thousand ordinary shares with a €10 par value were distributed. The market price at date of issuance was €20 per share.

Instructions

Prepare a schedule that shows the net cash flow from operating activities using the indirect method. Assume no items other than those listed above affected the computation of 2022 net cash flow from operating activities.

E23.9 (LO 3, 4) (SCF—Direct Method) Costa SA uses the direct method to prepare its statement of cash flows. Costa's trial balances at December 31, 2022 and 2021, are as follows.

	December 31	
	2022	2021
Debits		
Cash	R$ 35,000	R$ 32,000
Accounts receivable	33,000	30,000
Inventory	31,000	47,000
Property, plant, and equipment	100,000	95,000
Cost of goods sold	250,000	380,000
Selling expenses	141,500	172,000
General and administrative expenses	137,000	151,300
Interest expense	4,300	2,600
Income tax expense	20,400	61,200
	R$752,200	R$971,100
Credits		
Allowance for doubtful accounts	R$ 1,300	R$ 1,100
Accumulated depreciation	16,500	13,500
Accounts payable	25,000	17,000
Income taxes payable	21,000	29,100
Deferred income taxes	5,300	4,600
8% callable bonds payable	40,500	15,000
Share capital—ordinary	50,000	40,000
Share premium—ordinary	9,100	7,500
Retained earnings	44,700	64,600
Sales revenue	538,800	778,700
	R$752,200	R$971,100

Additional information:

1. Costa purchased R$5,000 in equipment during 2022.
2. Costa allocated one-third of its depreciation expense to selling expenses and the remainder to general and administrative expenses.
3. Bad debt expense for 2022 was R$5,000, and write-offs of uncollectible accounts totaled R$4,800.

4. Interest expense includes R$500 of discount amortization.

Instructions

Determine what amounts Costa should report in its statement of cash flows for the year ended December 31, 2022, for the following items.

a. Cash collected from customers.

b. Cash paid to suppliers.

c. Cash paid for interest.

d. Cash paid for income taxes.

e. Cash paid for selling expenses.

E23.10 (LO 1, 4) (Classification of Transactions) Following are selected statement of financial position accounts of Sander Bros. Corp. at December 31, 2022 and 2021, and the increases or decreases in each account from 2021 to 2022. Also presented is selected income statement information for the year ended December 31, 2022, and additional information.

Selected statement of financial position accounts	2022	2021	Increase (Decrease)
Assets			
Property, plant, and equipment	$ 277,000	$247,000	$ 30,000
Accumulated depreciation	(178,000)	(167,000)	(11,000)
Accounts receivable	34,000	24,000	10,000
Equity and liabilities			
Share capital—ordinary, $1 par	$ 22,000	$ 19,000	$ 3,000
Share premium—ordinary	9,000	3,000	6,000
Retained earnings	104,000	91,000	13,000
Bonds payable	49,000	46,000	3,000
Dividends payable	8,000	5,000	3,000

Selected income statement information for the year ended December 31, 2022	
Sales revenue	$ 155,000
Depreciation	38,000
Gain on sale of equipment	14,500
Net income	31,000

Additional information:

1. During 2022, equipment costing $45,000 was sold for cash.
2. Accounts receivable relate to sales of merchandise.
3. During 2022, $25,000 of bonds payable were issued in exchange for property, plant, and equipment. There was no amortization of bond discount or premium.

Instructions

Determine the category (operating, investing, or financing) and the amount that should be reported in the statement of cash flows for the following items.

a. Payments for purchase of property, plant, and equipment.

b. Proceeds from the sale of equipment.

c. Cash dividends paid.

d. Redemption of bonds payable.

E23.11 (LO 2) (SCF—Indirect Method) Condensed financial data of Fairchild SA for 2022 and 2021 are presented below.

Fairchild SA Comparative Statements of Financial Position As of December 31, 2022 and 2021		
	2022	2021
Debt investments (held-for-collection)	€1,300	€1,470
Plant assets	1,900	1,700
Accumulated depreciation	(1,200)	(1,170)
Inventory	1,600	1,900
Accounts receivable	1,750	1,300
Cash	1,800	1,100
	€7,150	€6,300
Share capital—ordinary	€1,900	€1,700
Retained earnings	2,450	1,900
Bonds payable	1,400	1,650
Accounts payable	1,200	800
Accrued liabilities	200	250
	€7,150	€6,300

Fairchild SA Income Statement For the Year Ended December 31, 2022	
Sales revenue	€6,900
Cost of goods sold	4,700
Gross margin	2,200
Selling and administrative expense	930
Income from operations	1,270
Other income and expense Gain on sale of investments	80
Income before tax	1,350
Income tax expense	540
Net income	€ 810

Additional information:

During the year, €70 of ordinary shares were issued in exchange for plant assets. No plant assets were sold in 2022. Cash dividends were €260.

Instructions

Prepare a statement of cash flows using the indirect method.

E23.12 (LO 3) (SCF—Direct Method) Data for Fairchild SA are presented in E23.11.

Instructions

Prepare a statement of cash flows using the direct method.

E23.13 (LO 3) (SCF—Direct Method) Andrews AG, a greeting card company, had the following statements prepared as of December 31, 2022.

Andrews AG Comparative Statement of Financial Position As of December 31, 2022 and 2021		
	12/31/22	12/31/21
Equipment	€154,000	€130,000
Accum. depreciation—equipment	(35,000)	(25,000)
Copyrights	46,000	50,000
Inventory	40,000	60,000
Prepaid rent	5,000	4,000
Accounts receivable	62,000	49,000
Short-term investments (trading)	35,000	18,000
Cash	6,000	9,000
Total assets	€313,000	€295,000
Share capital—ordinary, €10 par	€100,000	€100,000
Share premium—ordinary	30,000	30,000
Retained earnings	57,000	36,000
Long-term loans payable	60,000	67,000
Accounts payable	46,000	42,000
Income taxes payable	4,000	6,000
Salaries and wages payable	8,000	4,000
Short-term loans payable	8,000	10,000
Total equity and liabilities	€313,000	€295,000

Andrews AG Income Statement For the Year Ending December 31, 2022		
Sales revenue		€338,150
Cost of goods sold		175,000
Gross margin		163,150
Operating expenses		120,000
Operating income		43,150
Interest expense	€11,400	
Gain on sale of equipment	2,000	9,400
Income before tax		33,750
Income tax expense		6,750
Net income		€ 27,000

Additional information:

1. Dividends in the amount of €6,000 were declared and paid during 2022.
2. Depreciation expense and amortization expense are included in operating expenses.

3. No unrealized gains or losses have occurred on the investments during the year.
4. Equipment that had a cost of €30,000 and was 70% depreciated was sold during 2022.

Instructions

Prepare a statement of cash flows using the direct method.

E23.14 (LO 2) (SCF—Indirect Method) Data for Andrews AG are presented in E23.13.

Instructions

Prepare a statement of cash flows using the indirect method.

E23.15 (LO 2) (SCF—Indirect Method) The following are data taken from the records of Durand SpA.

Debit Balances	December 31, 2022	December 31, 2021
Cash	€ 15,000	€ 10,000
Current assets other than cash	85,000	58,000
Long-term investments	10,000	53,000
Plant assets	335,000	215,000
	€445,000	€336,000
Credit Balances		
Accumulated depreciation	€ 20,000	€ 40,000
Current liabilities	40,000	22,000
Bonds payable	75,000	–0–
Share capital—ordinary	254,000	254,000
Retained earnings	56,000	20,000
	€445,000	€336,000

Additional information:

1. Held-for-collection investments carried at a cost of €43,000 on December 31, 2021, were sold in 2022 for €34,000. The loss was incorrectly charged directly to Retained Earnings.
2. Plant assets that cost €60,000 and were 80% depreciated were sold during 2022 for €8,000. The loss was incorrectly charged directly to Retained Earnings.
3. Net income as reported on the income statement for the year was €59,000.
4. Dividends paid amounted to €10,000.
5. Depreciation recorded for the year was €28,000.

Instructions

Prepare a statement of cash flows for the year 2022 using the indirect method.

E23.16 (LO 1, 2) (Cash Provided by Operating, Investing, and Financing Activities) The statement of financial position data of Yang Ltd. at the end of 2022 and 2021 follow (amounts in thousands).

	2022	2021
Equipment	¥ 90,000	¥ 75,000
Accumulated depreciation—equipment	(18,000)	(8,000)

Land	70,000	40,000
Inventory	65,000	45,000
Accounts receivable (net)	55,000	45,000
Prepaid expenses	15,000	25,000
Cash	30,000	35,000
	¥307,000	¥257,000
Share capital—ordinary, $10 par	¥189,000	¥159,000
Retained earnings	8,000	5,000
Notes payable—bank, long-term	–0–	23,000
Bonds payable	30,000	–0–
Accounts payable	65,000	52,000
Accrued expenses	15,000	18,000
	¥307,000	¥257,000

Land was acquired for ¥30,000 in exchange for ordinary shares, par ¥30,000, during the year; all equipment purchased was for cash. Equipment costing ¥13,000 was sold for ¥3,000; book value of the equipment was ¥6,000. Cash dividends of ¥9,000 were declared and paid during the year.

Instructions

Compute net cash provided (used) by:

a. Operating activities (indirect).

b. Investing activities.

c. Financing activities.

E23.17 (LO 2) (SCF—Indirect Method and Statement of Financial Position) Ochoa Group, had the following condensed statement of financial position at the end of operations for 2021 (¥ in thousands).

Ochoa Group Statement of Financial Position December 31, 2021			
Investments	¥ 20,000	Share capital—ordinary	¥ 75,000
Land	40,000	Retained earnings	24,500
Plant assets (net)	67,500	Long-term notes payable	25,500
Current assets other than cash	29,000	Bonds payable	25,000
Cash	8,500	Current liabilities	15,000
	¥165,000		¥165,000

During 2022, the following occurred.

1. A tract of land was purchased for ¥11,000.
2. Bonds payable in the amount of ¥20,000 were retired at par.
3. An additional ¥10,000 in ordinary shares were issued at par.
4. Dividends totaling ¥9,375 were paid to shareholders.
5. Net income was ¥30,250 after deducting depreciation of ¥13,500.
6. Land was purchased through the issuance of ¥22,500 in bonds.

7. Ochoa Group sold part of its investment portfolio for ¥12,875. This transaction resulted in a gain of ¥2,000 for the company. The company classifies them as non-trading equity investments.
8. Both current assets (other than cash) and current liabilities remained at the same amount.

Instructions

a. Prepare a statement of cash flows for 2022 using the indirect method.

b. Prepare the condensed statement of financial position for Ochoa Group as it would appear at December 31, 2022.

E23.18 (LO 2, 4) (Partial SCF—Indirect Method) The accounts below appear in the ledger of Popovich SA.

	Retained Earnings	Dr.	Cr.	Bal.
Jan. 1, 2022	Credit Balance			€ 42,000
Aug. 15	Dividends (cash)	€15,000		27,000
Dec. 31	Net Income for 2022		€50,000	77,000
	Equipment	Dr.	Cr.	Bal.
Jan. 1, 2022	Debit Balance			€140,000
Apr. 8	Major Repairs	€21,000		161,000
Aug. 3	Purchase of Equipment	62,000		223,000
Sept. 10	Cost of Equipment Constructed	48,000		271,000
Nov. 15	Equipment Sold		€66,000	205,000
	Accumulated Depreciation—Equipment	Dr.	Cr.	Bal.
Jan. 1, 2022	Credit Balance			€ 84,000
Nov. 15	Accum. Depreciation on Equipment Sold	€25,200		58,800
Dec. 31	Depreciation for 2022		€16,800	75,600

Instructions

From the postings in the accounts above, indicate how the information is reported on a statement of cash flows by preparing a partial statement of cash flows using the indirect method. The loss on sale of equipment (November 15) was €5,800.

E23.19 (LO 5) (Worksheet Analysis of Selected Accounts) Data for Popovich SA are presented in E23.18.

Instructions

Prepare entries in journal form for all adjustments that should be made on a worksheet for a statement of cash flows.

E23.20 (LO 5) (Worksheet Analysis of Selected Transactions) The transactions below took place during the year 2022.

1. Convertible bonds payable with a par value of $300,000 were exchanged for unissued ordinary shares with a par value of $300,000. The market price of both types of securities was par.
2. The net income for the year was $360,000.
3. Depreciation expense for the building was $90,000.

4. Some old equipment was traded in on the purchase of some newer equipment and the following entry was made. (The exchange has commercial substance.)

Equipment	45,000	
Accum. Depreciation—Equipment	30,000	
Equipment		40,000
Cash		34,000
Gain on Disposal of Plant Assets		1,000

The Gain on Disposal of Plant Assets was credited to current operations as ordinary income.

5. Dividends in the amount of $123,000 were declared. They are payable in January of next year.

Instructions

Show by journal entries the adjustments that would be made on a worksheet for a statement of cash flows.

E23.21 (LO 5) (Worksheet Preparation) Below are the comparative statements of financial position for Lowenstein Corporation.

	Dec. 31, 2022	Dec. 31, 2021
Land	$ 50,000	$ 50,000
Buildings	125,000	78,500
Accumulated depreciation—buildings	(30,000)	(23,000)
Equipment	53,000	46,000
Accumulated depreciation—equipment	(19,000)	(15,500)
Delivery equipment	39,000	39,000
Accumulated depreciation—delivery equipment	(22,000)	(20,500)
Patents	15,000	–0–
Inventory	81,500	57,000
Prepaid expenses	4,200	2,500
Accounts receivable	43,000	45,000
Allowance for doubtful accounts	(1,800)	(2,000)
Equity investments	25,000	19,000
Cash	16,500	24,000
	$379,400	$300,000
Share capital—ordinary	$140,000	$102,000
Share premium—ordinary	10,000	4,000
Retained earnings	73,400	51,500
Mortgage payable	73,000	53,400
Bonds payable	50,000	62,500
Accounts payable	26,000	16,000
Short-term notes payable (trade)	4,000	6,000
Accrued payables	3,000	4,600
	$379,400	$300,000

Dividends in the amount of $10,000 were declared and paid in 2022.

Instructions

From this information, prepare a worksheet for a statement of cash flows. Make reasonable assumptions as appropriate. The equity investments are considered trading, and no unrealized gains or losses have occurred on these securities.

Problems

P23.1 (LO 2, 4) (SCF—Indirect Method) The following is Sullivan Corp.'s comparative statement of financial position accounts at December 31, 2022 and 2021, with a column showing the increase (decrease) from 2021 to 2022.

Comparative Statements of Financial Position			
	2022	2021	Increase (Decrease)
Property, plant and equipment	$3,307,000	$2,967,000	$340,000
Accumulated depreciation	(1,165,000)	(1,040,000)	(125,000)
Equity investment (Myers Co.)	310,000	275,000	35,000
Inventory	1,850,000	1,715,000	135,000
Accounts receivable	1,128,000	1,168,000	(40,000)
Debt investment	250,000	—	250,000
Cash	815,000	700,000	115,000
Total assets	$6,495,000	$5,785,000	$710,000
Share capital—ordinary, $1 par	$ 500,000	$ 500,000	—
Share premium—ordinary	1,500,000	1,500,000	—
Retained earnings	2,970,000	2,680,000	$290,000
Finance lease obligation	400,000	—	400,000
Accounts payable	1,015,000	955,000	60,000
Income taxes payable	30,000	50,000	(20,000)
Dividends payable	80,000	100,000	(20,000)
Total equity and liabilities	$6,495,000	$5,785,000	$710,000

Additional information:

1. On December 31, 2020, Sullivan acquired 25% of Myers Co.'s ordinary shares for $275,000. On that date, the carrying value of Myers' assets and liabilities, which approximated their fair values, was $1,100,000. Myers reported income of $140,000 for the year ended December 31, 2022. No dividend was paid on Myers' ordinary shares during the year.
2. During 2022, Sullivan loaned $300,000 to TLC Co., an unrelated company. TLC made the first semi-annual principal repayment of $50,000, plus interest at 10%, on December 31, 2022.
3. On January 2, 2022, Sullivan sold equipment costing $60,000, with a carrying amount of $38,000, for $40,000 cash.
4. On December 31, 2022, Sullivan entered into a finance lease for an office building. The present value of the annual rental payments is $400,000, which equals the fair value of the building. Sullivan made the first rental payment of $60,000 when due on January 2, 2023.
5. Net income for 2022 was $370,000.
6. Sullivan declared and paid cash dividends for 2022 and 2021 as shown below.

	2022	2021
Declared	December 15, 2022	December 15, 2021
Paid	February 28, 2023	February 28, 2022
Amount	$80,000	$100,000

Instructions

Prepare a statement of cash flows for Sullivan Corp. for the year ended December 31, 2022, using the indirect method.

P23.2 (LO 2, 4) Groupwork **(SCF—Indirect Method)** The comparative statements of financial position for Hinckley SA include the following information.

	December 31	
Debt Balances	2022	2021
Investments	€ –0–	€ 3,000
Buildings	–0–	29,750
Equipment	45,000	20,000
Patents	5,000	6,250
Inventory	12,000	9,000
Accounts receivable	12,250	10,000
Cash	33,500	13,000
	€107,750	€91,000
Credit Balances		
Share capital—ordinary	€ 43,000	€33,000
Retained earnings	20,750	6,000
Allowance for doubtful accounts	3,000	4,500
Accumulated depreciation—equipment	2,000	4,500
Accumulated depreciation—buildings	–0–	6,000
Accounts payable	5,000	3,000
Dividends payable	–0–	5,000
Long-term notes payable	31,000	25,000
Notes payable, short-term (non-trade)	3,000	4,000
	€107,750	€91,000

Additional data related to 2022 are as follows.

1. Equipment that had cost €11,000 and was 40% depreciated at time of disposal was sold for €2,500.
2. €10,000 of the long-term note payable was paid by issuing ordinary shares.
3. Cash dividends paid were €5,000.
4. On January 1, 2022, the building was completely destroyed by a flood. Insurance proceeds on the building were €32,000.
5. Equity investments were sold at €1,700 above their cost.
6. Cash was paid for the acquisition of equipment.
7. A long-term note for €16,000 was issued for the acquisition of equipment.
8. Interest of €2,000 and income taxes of €6,500 were paid in cash.

Instructions

Prepare a statement of cash flows using the indirect method.

P23.3 (LO 2, 3) (SCF—Direct Method) Mortonson plc has not yet prepared a formal statement of cash flows for the 2022 fiscal year. Comparative statements of financial position as of December 31, 2021 and 2022, and a statement of income and retained earnings for the year ended December 31, 2022, are presented as follows.

Mortonson plc Statement of Income and Retained Earnings For the Year Ended December 31, 2022 (in thousands)		
Sales revenue		£3,800
Expenses		
Cost of goods sold	£1,200	
Salaries and benefits	725	
Heat, light, and power	75	
Depreciation	80	
Property taxes	19	
Patent amortization	25	
Miscellaneous expenses	10	
Interest	30	2,164
Income before income taxes		1,636
Income taxes		818
Net income		818
Retained earnings—Jan. 1, 2022		310
		1,128
Share dividend declared and issued		600
Retained earnings—Dec. 31, 2022		£ 528

Mortonson plc Comparative Statements of Financial Position As of December 31 (in thousands)		
Assets	2022	2021
Equity investments (non-trading)	£ 10	£ 50
Land	150	70
Buildings and equipment	910	600
Accumulated depreciation	(200)	(120)
Patents (less amortization)	105	130
Inventory	720	560
Accounts receivable	780	500
Cash	333	100
Total assets	£2,808	£1,890
Equity and Liabilities		

Mortonson plc Comparative Statements of Financial Position As of December 31 (in thousands)		
Share capital—ordinary	£1,300	£ 700
Retained earnings	528	310
Total equity	1,828	1,010
Long-term notes payable—due 2024	200	200
Accounts payable	420	330
Income taxes payable	40	30
Notes payable	320	320
Total liabilities	980	880
Total equity and liabilities	£2,808	£1,890

Instructions

Prepare a statement of cash flows using the direct method. Changes in accounts receivable and accounts payable relate to sales and cost of goods sold.

P23.4 (LO 2, 3, 4) (SCF—Direct Method) Michaels Ltd. had available at the end of 2022 the following information.

Michaels Ltd. Comparative Statements of Financial Position As of December 31, 2022 and 2021		
	2022	2021
Land	£125,000	£175,000
Buildings	350,000	350,000
Accumulated depreciation—buildings	(105,000)	(87,500)
Equipment	525,000	400,000
Accumulated depreciation—equipment	(130,000)	(112,000)
Patents	45,000	50,000
Inventory	42,000	35,000
Prepaid rent	3,000	12,000
Prepaid insurance	2,100	900
Supplies	1,000	750
Accounts receivable	20,500	12,950
Short-term equity investments	22,000	30,000
Cash	10,000	4,000
Total assets	£910,600	£871,100
Share capital—ordinary	£240,000	£220,000
Share premium—ordinary	25,000	17,500
Retained earnings	123,297	88,747
Long-term notes payable	60,000	70,000
Bonds payable	420,303	425,853
Accounts payable	22,000	32,000

Michaels Ltd. Comparative Statements of Financial Position As of December 31, 2022 and 2021		
Income taxes payable	5,000	4,000
Salaries and wages payable	5,000	3,000
Short-term notes payable	10,000	10,000
Total equity and liabilities	£910,600	£871,100

Michaels Ltd. Income Statement For the Year Ended December 31, 2022		
Sales revenue		£1,160,000
Cost of goods sold		(748,000)
Gross margin		412,000
Operating expenses		
Selling expenses	£ 79,200	
Administrative expenses	156,700	
Depreciation/Amortization expense	40,500	
Total operating expenses		(276,400)
Income from operations		135,600
Other income and expense		
Gain on sale of land	8,000	
Gain on sale of short-term investment	4,000	
Dividend revenue	2,400	
Interest expense	(51,750)	(37,350)
Income before taxes		98,250
Income tax expense		(39,400)
Net income		58,850
Dividends to ordinary shareholders		(24,300)
To retained earnings		£ 34,550

Instructions

Prepare a statement of cash flows for Michaels Ltd. using the direct method. Assume the short-term investments are non-trading. Bond premium amortized was £5,550.

P23.5 (LO 2, 3, 4) (SCF—Indirect Method, and Net Cash Flow from Operating Activities, Direct Method) Comparative statement of financial position accounts of Marcus AG are presented below.

Marcus AG Comparative Statement of Financial Position Accounts As of December 31, 2022 and 2021		
	December 31	
Debit Accounts	2022	2021
Cash	€ 42,000	€ 33,750
Accounts Receivable	70,500	60,000

Marcus AG Comparative Statement of Financial Position Accounts As of December 31, 2022 and 2021		
Inventory	30,000	24,000
Equity Investments (non-trading)	22,250	38,500
Machinery	30,000	18,750
Buildings	67,500	56,250
Land	7,500	7,500
	€269,750	€238,750
Credit Accounts		
Allowance for Doubtful Accounts	€ 2,250	€ 1,500
Accumulated Depreciation—Machinery	5,625	2,250
Accumulated Depreciation—Buildings	13,500	9,000
Accounts Payable	35,000	24,750
Accrued Payables	3,375	2,625
Long-Term Notes Payable	21,000	31,000
Share Capital—Ordinary, no par	150,000	125,000
Retained Earnings	39,000	42,625
	€269,750	€238,750

Additional data (ignoring taxes):

1. Net income for the year was €42,500.
2. Cash dividends declared and paid during the year were €21,125.
3. A 20% share dividend was declared during the year. €25,000 of retained earnings was capitalized.
4. Equity investments that cost €25,000 were sold during the year for €28,750.
5. Machinery that cost €3,750, on which €750 of depreciation had accumulated, was sold for €2,200.

Marcus's 2022 income statement follows (ignoring taxes).

Sales revenue		€540,000
Less: Cost of goods sold		380,000
Gross margin		160,000
Less: Operating expenses (includes €8,625 depreciation and €5,400 bad debts)		120,450
Income from operations		39,550
Other: Gain on sale of equity investments (non-trading)	€3,750	
Loss on sale of machinery	(800)	2,950
Net income		€ 42,500

Instructions

a. Compute net cash flow from operating activities using the direct method.

b. Prepare a statement of cash flows using the indirect method.

P23.6 (LO 2, 3, 4) Groupwork (SCF—Direct and Indirect Methods from Comparative Financial Statements) Chapman Company, a major retailer of bicycles and accessories, operates

several stores and is a publicly traded company. The comparative statement of financial position and the income statement for Chapman as of May 31, 2022, are as follows. The company is preparing its statement of cash flows.

Chapman Company Comparative Statements of Financial Position As of May 31		
	2022	2021
Plant assets		
Plant assets	$600,000	$502,000
Less: Accumulated depreciation—plant assets	150,000	125,000
	450,000	377,000
Current assets		
Inventory	220,000	250,000
Prepaid expenses	9,000	7,000
Accounts receivable	75,000	58,000
Cash	28,250	20,000
Total current assets	332,250	335,000
Total assets	$782,250	$712,000
Equity		
Share capital—ordinary, $10 par	$370,000	$280,000
Retained earnings	145,000	120,000
Total equity	515,000	400,000
Non-current liabilities		
Bonds payable	70,000	100,000
Current liabilities		
Accounts payable	123,000	115,000
Salaries and wages payable	47,250	72,000
Interest payable	27,000	25,000
Total current liabilities	197,250	212,000
Total liabilities	267,250	312,000
Total equity and liabilities	$782,250	$712,000

Chapman Company Income Statement For the Year Ended May 31, 2022	
Sales revenue	$1,255,250
Cost of merchandise sold	722,000
Gross profit	533,250
Expenses	
Salaries and wages expense	252,100
Interest expense	75,000
Other expenses	8,150
Depreciation expense	25,000

Chapman Company Income Statement For the Year Ended May 31, 2022	
Total expenses	360,250
Operating income	173,000
Income tax expense	43,000
Net income	$ 130,000

The following is additional information concerning Chapman's transactions during the year ended May 31, 2022.

1. All sales during the year were made on account.
2. All merchandise was purchased on account, comprising the total accounts payable account.
3. Plant assets costing $98,000 were purchased by paying $28,000 in cash and issuing 7,000 ordinary shares.
4. The "other expenses" are related to prepaid items.
5. All income taxes incurred during the year were paid during the year.
6. In order to supplement its cash, Chapman issued 2,000 ordinary shares at par value.
7. There were no penalties assessed for the retirement of bonds.
8. Cash dividends of $105,000 were declared and paid at the end of the fiscal year.

Instructions

a. Compare and contrast the direct method and the indirect method for reporting cash flows from operating activities.

b. Prepare a statement of cash flows for Chapman Company for the year ended May 31, 2022, using the direct method. Be sure to support the statement with appropriate calculations.

c. Using the indirect method, calculate only the net cash flow from operating activities for Chapman Company for the year ended May 31, 2022.

P23.7 (LO 2, 3, 4) (SCF—Direct and Indirect Methods) Comparative statement of financial position accounts of Shi Group are presented below.

Shi Group Comparative Statement of Financial Position Accounts As of December 31 (in thousands)		
Debit Balances	2022	2021
Cash	HK$ 70,000	HK$ 51,000
Accounts Receivable	155,000	130,000
Inventory	75,000	61,000
Equity Investments (non-trading)	55,000	85,000
Equipment	70,000	48,000
Buildings	145,000	145,000
Land	40,000	25,000
Totals	HK$610,000	HK$545,000
Credit Balances		

Shi Group Comparative Statement of Financial Position Accounts As of December 31 (in thousands)		
Allowance for Doubtful Accounts	HK$ 10,000	HK$ 8,000
Accumulated Depreciation—Equipment	21,000	14,000
Accumulated Depreciation—Buildings	37,000	28,000
Accounts Payable	66,000	60,000
Income Taxes Payable	12,000	10,000
Long-Term Notes Payable	62,000	70,000
Share Capital—Ordinary	310,000	260,000
Retained Earnings	92,000	95,000
Totals	HK$610,000	HK$545,000

Additional data:

1. Equipment that cost HK$10,000 and was 60% depreciated was sold in 2022.
2. Cash dividends were declared and paid during the year.
3. Ordinary shares were issued in exchange for land.
4. Equity investments that cost HK$35,000 were sold during the year.
5. There were no write-offs of uncollectible accounts during the year.

Shi's 2022 income statement is as follows.

Sales revenue		HK$950,000
Less: Cost of goods sold		600,000
Gross profit		350,000
Less: Operating expenses (includes depreciation expense and bad debt expense)		250,000
Income from operations		100,000
Other income and expense		
Gain on sale of investments	HK$15,000	
Loss on sale of equipment	(3,000)	12,000
Income before taxes		112,000
Income taxes		45,000
Net income		HK$ 67,000

Instructions

a. Compute net cash provided by operating activities under the direct method.

b. Prepare a statement of cash flows using the indirect method.

P23.8 (LO 2, 4) Groupwork **(Indirect SCF)** Greco Corporation has contracted with you to prepare a statement of cash flows. The controller has provided the following trial balance information.

	December 31	
	2022	2021

Cash	$ 38,500	$13,000
Accounts receivable	12,250	10,000
Inventory	12,000	10,000
Equity investments (non-trading)	–0–	3,000
Buildings	–0–	29,750
Equipment	40,000	20,000
Copyright	5,000	5,250
Totals	$107,750	$91,000
Allowance for doubtful accounts	$ 3,000	$ 4,500
Accumulated depreciation—equipment	2,000	4,500
Accumulated depreciation—buildings	–0–	6,000
Accounts payable	5,000	4,000
Dividends payable	–0–	5,000
Notes payable, short-term (non-trade)	3,000	4,000
Long-term notes payable	36,000	25,000
Share capital—ordinary	38,000	33,000
Retained earnings	20,750	5,000
	$107,750	$ 91,000

Additional data related to 2022 are as follows.

1. Equipment that had cost $11,000 and was 30% depreciated at time of disposal was sold for $2,500.
2. $5,000 of the long-term note payable was paid by issuing ordinary shares.
3. Cash dividends paid were $5,000.
4. On January 1, 2022, the building was completely destroyed by a flood. Insurance proceeds on the building were $33,000 (net of $4,000 taxes).
5. Equity investments (non-trading) were sold at $1,500 above their cost. The company has made similar sales and investments in the past.
6. Cash and a long-term note for $16,000 were given for the acquisition of equipment.
7. Interest of $2,000 and income taxes of $5,000 were paid in cash.

Instructions

a. Use the indirect method to analyze the above information and prepare a statement of cash flows for Greco.

b. What would you expect to observe in the operating, investing, and financing sections of a statement of cash flows of:

   1. A severely financially troubled firm?
   2. A recently formed firm that is experiencing rapid growth?

Concepts for Analysis

CA23.1 (LO 1, 2, 4) Writing (Analysis of Improper SCF) The following statement was prepared by Maloney Corporation's accountant.

Maloney Corporation Statement of Sources and Uses of Cash For the Year Ended September 30, 2022	
Sources of cash	
Net income	$111,000
Depreciation and depletion	70,000
Increase in long-term debt	179,000
Changes in current receivables and inventories, less current liabilities (excluding current maturities of long-term debt)	14,000
	$374,000
Application of cash	
Cash dividends	$ 60,000
Expenditure for property, plant, and equipment	214,000
Investments and other uses	20,000
Change in cash	80,000
	$374,000

The following additional information relating to Maloney Corporation is available for the year ended September 30, 2022.

1. Salaries and wages expense attributable to share-option plans was $25,000 for the year.
2.

Expenditures for property, plant, and equipment	$250,000
Proceeds from retirements of property, plant, and equipment	36,000
Net expenditures	$214,000

3. A share dividend of 10,000 Maloney Corporation ordinary shares was distributed to ordinary shareholders on April 1, 2022, when the per share market price was $7 and par value was $1.
4. On July 1, 2022, when its market price was $6 per share, 16,000 of Maloney Corporation ordinary shares were issued in exchange for 4,000 preference shares.
5.

Depreciation expense	$ 65,000
Depletion expense	5,000
	$ 70,000

6.

Increase in long-term debt	$620,000
Retirement of debt	441,000
Net increase	$179,000

Instructions

a. In general, what are the objectives of a statement of the type shown above for Maloney Corporation? Explain.

b. Identify the weaknesses in the form and format of Maloney Corporation's statement of cash flows without reference to the additional information. (Assume adoption of the indirect method.)

c. For each of the six items of additional information for the statement of cash flows, indicate the preferable treatment and explain why the suggested treatment is preferable.

CA23.2 (LO 1, 2, 4) Groupwork (SCF Theory and Analysis of Improper SCF) Teresa Ramirez and Lenny Traylor are examining the following statement of cash flows for Panaka Clothing Store's first year of operations.

Panaka Clothing Store Statement of Cash Flows For the Year Ended January 31, 2022	
Sources of cash	
From sales of merchandise	€ 382,000
From sale of ordinary shares	380,000
From sale of debt investment	120,000
From depreciation	80,000
From issuance of note for truck	30,000
From interest on investments	8,000
Total sources of cash	1,000,000
Uses of cash	
For purchase of fixtures and equipment	330,000
For merchandise purchased for resale	253,000
For operating expenses (including depreciation)	170,000
For purchase of debt investment	95,000
For purchase of truck by issuance of note	30,000
For purchase of treasury shares	10,000
For interest on note	3,000
Total uses of cash	891,000
Net increase in cash	€ 109,000

Teresa claims that Panaka's statement of cash flows shows a superb first year, with cash increasing €109,000. Lenny replies that it was not a superb first year: the year was an operating failure, the statement was incorrectly presented, and €109,000 is not the actual increase in cash.

Instructions

a. With whom do you agree, Teresa or Lenny? Explain your position.

b. Using the data provided, prepare a statement of cash flows in proper indirect method form. The only non-cash items in income are depreciation and the gain from the sale of the investment (purchase and sale are related).

CA23.3 (LO 2, 4) (SCF Theory and Analysis of Transactions) Ashley Company is a young and growing manufacturer of electronic measuring instruments and technical equipment. The company has retained you to advise it in the preparation of a statement of cash flows using the indirect method. For the fiscal year ended October 31, 2022, you have obtained the following information concerning certain events and transactions of Ashley.

1. The amount of reported earnings for the fiscal year was $700,000, which included a deduction for a loss of $110,000 (see item 5 below).
2. Depreciation expense of $315,000 was included in the income statement.
3. Uncollectible accounts receivable of $40,000 were written off against the allowance for doubtful accounts. Also, $51,000 of bad debt expense was included in determining income for the fiscal year, and the same amount was added to the allowance for doubtful accounts.

4. A gain of $6,000 was realized on the sale of a machine. It originally cost $75,000, of which $30,000 was undepreciated on the date of sale.
5. On April 1, 2022, lightning caused an uninsured building loss of $110,000 ($180,000 loss, less reduction in income taxes of $70,000). This loss was included in determining income as indicated in item 1 above.
6. On July 3, 2022, building and land were purchased for $700,000. Ashley gave in payment $75,000 cash, $200,000 fair value of its unissued ordinary shares, and signed a $425,000 mortgage note payable.
7. On August 3, 2022, $800,000 face value of Ashley's 10% convertible preference shares was converted into $150,000 par value of its ordinary shares.

Instructions

Explain whether each of the 7 numbered items above is a source or use of cash, and explain how each should be disclosed in Ashley's statement of cash flows for the fiscal year ended October 31, 2022. If any item is neither a source nor a use of cash, explain why it is not, and indicate the disclosure, if any, that should be made of the item for the fiscal year ended October 31, 2022.

CA23.4 (LO 2, 4) Groupwork **(Analysis of Transactions' Effect on SCF)** Each of the following items must be considered in preparing a statement of cash flows for Boer Fashions for the year ended December 31, 2022.

1. Fixed assets that had cost R20,000 6½ years before and were being depreciated on a 10-year basis, with no estimated residual value, were sold for R4,750.
2. During the year, goodwill of R15,000 was considered impaired and was completely written off to expense.
3. During the year, 500 ordinary shares with a stated value of R25 a share were issued for R32 a share.
4. The company sustained a net loss for the year of R2,100. Depreciation amounted to R2,000 and patent amortization was R400.
5. Uncollectible accounts receivable in the amount of R2,000 were written off against Allowance for Doubtful Accounts.
6. Equity investments (non-trading) that cost R12,000 when purchased 4 years earlier were sold for R10,600.
7. Bonds payable with a par value of R24,000 on which there was an unamortized bond premium of R2,000 were redeemed at 101.

Instructions

For each item, state where it is to be shown in the statement and then how you would present the necessary information, including the amount. Consider each item to be independent of the others. Assume that correct entries were made for all transactions as they took place.

CA23.5 (LO 1, 2, 4) (Purpose and Elements of SCF) IFRS requires the statement of cash flows be presented when financial statements are prepared.

Instructions

a. Explain the purposes of the statement of cash flows.
b. List and describe the three categories of activities that must be reported in the statement of cash flows.
c. Identify and describe the two methods that are allowed for reporting cash flows from operations.

d. Describe the presentation of non-cash investing and financing transactions. Include in your description an example of a non-cash investing and financing transaction.

CA23.6 (LO 1, 2, 3) Ethics **(Cash Flow Reporting)** Brockman Guitar Company is in the business of manufacturing top-quality, steel-string folk guitars. In recent years, the company has experienced working capital problems resulting from the procurement of factory equipment, the unanticipated buildup of receivables and inventories, and the payoff of a balloon mortgage on a new manufacturing facility. The founder and president of the company, Barbara Brockman, has attempted to raise cash from various financial institutions, but to no avail because of the company's poor performance in recent years. In particular, the company's lead bank, First Financial, is especially concerned about Brockman's inability to maintain a positive cash position. The commercial loan officer from First Financial told Barbara, "I can't even consider your request for capital financing unless I see that your company is able to generate positive cash flows from operations."

Thinking about the banker's comment, Barbara came up with what she believes is a good plan: With a more attractive statement of cash flows, the bank might be willing to provide long-term financing. To "window dress" cash flows, the company can sell its accounts receivables to factors and liquidate its raw materials inventories. These rather costly transactions would generate lots of cash. As the chief accountant for Brockman Guitar, it is your job to tell Barbara what you think of her plan.

Instructions

Answer the following questions.

a. What are the ethical issues related to Barbara Brockman's idea?

b. What would you tell Barbara Brockman?

Using Your Judgment

Financial Reporting Problem

Marks and Spencer plc (M&S)

The financial statements of **M&S** (GBR) are presented in Appendix A. The complete annual report, including the notes to the financial statements, is available online.

Instructions

Refer to M&S's financial statements and the accompanying notes to answer the following questions.

a. Which method of computing net cash provided by operating activities does M&S use? What were the amounts of net cash provided by operating activities for the years 2018 and 2019? What were the two most significant items in the cash generated from operations in 2019?

b. What was the most significant item in the cash flows used for investing activities section in 2019? What was the most significant item in the cash flows used for financing activities section in 2019?

c. Where is "deferred income taxes" reported in M&S's statement of cash flows? Why does it appear in that section of the statement of cash flows?

d. Where is depreciation reported in M&S's statement of cash flows? Why is depreciation added to net income in the statement of cash flows?

Comparative Analysis Case

adidas and Puma

The financial statements of **adidas** (DEU) and **Puma** (DEU) are presented in Appendices B and C, respectively. The complete annual reports, including the notes to the financial statements, are available online.

Instructions

Use the companies' financial information to answer the following questions.

a. What method of computing net cash provided by operating activities does adidas use? What method does Puma use? What were the amounts of cash provided by operating activities reported by adidas and Puma in 2018?

b. What was the most significant item reported by adidas and Puma in 2018 in their investing activities sections? What is the most significant item reported by adidas and Puma in 2018 in their financing activities sections?

c. What were these two companies' trends in net cash provided by operating activities over the period 2017 to 2018?

d. Where is "depreciation and amortization" reported by adidas and Puma in their statements of cash flows? What is the amount and why does it appear in that section of the statement of cash flows?

e. Based on the information contained in adidas's and Puma's financial statements, compute the following 2018 ratios for each company. These ratios require the use of statement of cash flows data. (These ratios were covered in Chapter 5.)

   1. Current cash debt coverage.
   2. Cash debt coverage.

f. What conclusions concerning the management of cash can be drawn from the ratios computed in (e)?

Financial Statement Analysis Case

The consolidated statement of cash flows for **Telefónica, S.A.** (ESP) is presented as follows.

(millions of euros)	Current Year	Prior Year
Cash flows from operating activities		
Cash received from customers	75,962	77,222
Cash paid to suppliers and employees	(55,858)	(55,769)
Dividends received	85	82
Net interest and other financial expenses paid	(2,952)	(2,093)
Taxes paid	(2,024)	(1,959)
Net cash from operating activities	15,213	17,483
Cash flows from investing activities		
Proceeds on disposals of property, plant and equipment and intangible assets	939	811
Payments on investments in property, plant and equipment and intangible assets	(9,481)	(9,085)
Proceeds on disposals of companies, net of cash and cash equivalents disposed	1,823	4
Payments on investments in companies, net of cash and cash equivalents acquired	(37)	(2,948)
Proceeds on financial investments not included under cash equivalents	30	23
Payments made on financial investments not included under cash equivalents	(834)	(669)
Payments from cash surpluses not included under cash equivalents	(318)	(646)
Government grants received	1	13

Net cash used in investing activities	(7,877)	(12,497)
Cash flows from financing activities		
Dividends paid	(3,273)	(7,567)
Transactions with equity holders	656	(399)
Proceeds on issue of debentures and bonds	8,090	4,582
Proceeds on loans, borrowings and promissory notes	6,002	4,387
Cancellation of debentures and bonds	(4,317)	(3,235)
Repayments of loans, borrowings and promissory notes	(8,401)	(2,680)
Net cash used in financing activities	(1,243)	(4,912)
Effect of foreign exchange rate changes on collections and payments	(382)	(169)
Effect of changes in consolidation methods	1	10
Net increase (decrease) in cash and cash equivalents during the year	5,712	(85)
Cash and cash equivalents at January 1	4,135	4,220
Cash and cash equivalents at December 31	9,847	4,135

Instructions

a. What method does Telefónica use to prepare the operating cash flows section of its statement of cash flows? Briefly discuss how you can determine this.

b. Telefónica reported net income of €4,403 in the current year (in millions). Briefly discuss some of the adjustments that would explain such a difference in its income and operating cash flows.

c. IFRS requires disclosure of interest, taxes, and dividends. Briefly describe how Telefónica has complied with these requirements. What other approach could a company take to comply with the reporting requirement?

Accounting, Analysis, and Principles

The income statement for the year ended December 31, 2022, for Laskowski AG contains the following condensed information.

Laskowski AG Income Statement		
Revenues		€6,583,000
Operating expenses (excluding depreciation)	€4,920,000	
Depreciation expense	880,000	5,800,000
Income before income tax		783,000
Income tax expense		353,000
Net income		€ 430,000

Included in operating expenses is a €24,000 loss resulting from the sale of machinery for €270,000 cash. The company purchased machinery at a cost of €750,000.

Laskowski reports the following balances on its comparative statements of financial position at December 31.

Laskowski AG Comparative Statements of Financial Position (partial)		
	2022	2021
Inventories	€834,000	€867,000

Laskowski AG Comparative Statements of Financial Position (partial)		
Accounts receivable	775,000	610,000
Cash	672,000	130,000
Accounts payable	521,000	501,000

Income tax expense of €353,000 represents the amount paid in 2022. Dividends declared and paid in 2022 totaled €200,000.

Accounting

Prepare the statement of cash flows using the indirect method.

Analysis

Laskowski has an aggressive growth plan, which will require significant investments in plant and equipment over the next several years. Preliminary plans call for an investment of over €500,000 in the next year. Compute Laskowski's free cash flow and use it to evaluate the investment plans with the use of only internally generated funds.

Principles

How does the statement of cash flows contribute to achieving the objective of financial reporting?

Bridge to the Profession

Authoritative Literature References

[1] International Accounting Standard 7, *Statement of Cash Flows* (London, U.K.: International Accounting Standards Committee Foundation, 2001).

[2] International Accounting Standard 7, *Statement of Cash Flows* (London, U.K.: International Accounting Standards Committee Foundation, 2001), paras. 13–17.

[3] International Accounting Standard 7, *Statement of Cash Flows* (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 45.

[4] International Accounting Standard 7, *Statement of Cash Flows* (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 7.

[5] International Accounting Standard 7, *Statement of Cash Flows* (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 45.

[6] International Accounting Standard 7, *Statement of Cash Flows* (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 19.

[7] International Accounting Standard 7, *Statement of Cash Flows* (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 36.

[8] International Accounting Standard 7, *Statement of Cash Flows* (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 43.

[9] International Accounting Standard 7, *Statement of Cash Flows* (London, U.K.: International Accounting Standards Committee Foundation, 2001), par. 31.

Research Case

As part of the year-end accounting process for your company, you are preparing the statement of cash flows according to IFRS. One of your team, a finance major, believes the statement should be prepared to report the change in working capital because analysts many times use working capital in ratio

analysis. Your supervisor would like research conducted to verify the basis for preparing the statement of cash flows.

Instructions

Access the IFRS authoritative literature at the IFRS website (you may register for free IFRS access at this site). When you have accessed the documents, you can use the search tool in your Internet browser to respond to the following questions. (Provide paragraph citations.)

a. What is the primary objective for the statement of cash flows? Is working capital the basis for meeting this objective?

b. What information is provided in a statement of cash flows?

c. List some of the typical cash inflows and outflows from operations.

Global Accounting Insights

LEARNING OBJECTIVE 6

Compare the statement of cash flows under IFRS and U.S. GAAP.

As in IFRS, the statement of cash flows is a required statement for U.S. GAAP. In addition, the content and presentation of a U.S. GAAP statement of cash flows is similar to one used for IFRS. However, the disclosure requirements related to the statement of cash flows are more extensive under U.S. GAAP.

Relevant Facts

Following are the key similarities and differences between U.S. GAAP and IFRS related to the statement of cash flows.

Similarities

- Both U.S. GAAP and IFRS require that companies prepare a statement of cash flows.
- Both U.S. GAAP and IFRS require that the statement of cash flows should have three major sections—operating, investing, and financing—along with changes in cash and cash equivalents.
- Similar to U.S. GAAP, the cash flow statement can be prepared using either the indirect or direct method under IFRS. For both U.S. GAAP and IFRS, most companies use the indirect method for reporting net cash flow from operating activities.
- The definition of cash equivalents used in U.S. GAAP is similar to that used in IFRS.

Differences

- Under U.S. GAAP, bank overdrafts are classified as financing activities. A major difference in the definition of cash and cash equivalents is that in certain situations, bank overdrafts are considered part of cash and cash equivalents under IFRS.
- Under U.S. GAAP, companies may present non-cash investing and financing activities in the cash flow statement. IFRS requires that non-cash investing and financing activities be excluded from the statement of cash flows. As indicated in the chapter, these non-cash activities should be reported elsewhere. This requirement is interpreted to mean that non-cash investing and financing activities should be disclosed in the notes to the financial statements instead of in the financial statements.
- One area where there can be substantive differences between U.S. GAAP and IFRS relates to the classification of interest, dividends, and taxes. U.S. GAAP requires that except for dividends paid

(which are classified as a financing activity), these items are all reported as operating activities. IFRS provides more alternatives for disclosing these items.

About the Numbers

One area where there can be substantive differences between U.S. GAAP and IFRS relates to the classification of interest, dividends, and taxes. The following table indicates the differences between the two approaches.

Item	IFRS	U.S. GAAP
Interest paid	Operating or financing	Operating
Interest received	Operating or investing	Operating
Dividends paid	Operating or financing	Financing
Dividends received	Operating or investing	Operating
Taxes paid	Operating—unless specific identification with financing or investing	Operating[1, 2]

[1]U.S. GAAP has additional disclosure rules.

[2]U.S. GAAP has specific rules regarding the classification of the benefit associated with share-based compensation arrangements and the classification of derivatives that contain a financing element.

Source: PricewaterhouseCoopers, *Similarities and Difference–A Comparison of IFRS and U.S. GAAP* (October 2013).

As indicated, the major difference is that IFRS provides more alternatives for disclosing certain items.

On the Horizon

The IASB and the FASB have collaborated on a joint project on the presentation and organization of information in the financial statements. With respect to the cash flow statement specifically, the notion of *cash equivalents* has been debated. In addition, the IASB is considering some changes in cash flow reporting that will better align with U.S. GAAP.

GAAP Self-Test Questions

1. Which of the following is **true** regarding the statement of cash flows under U.S. GAAP?

a. The statement of cash flows has two major sections—operating and non-operating.

b. The statement of cash flows has two major sections—financing and investing.

c. The statement of cash flows has three major sections—operating, investing, and financing.

d. The statement of cash flows has three major sections—operating, non-operating, and financing.

2. In the case of a bank overdraft:

a. U.S. GAAP typically includes the amount in cash and cash equivalents.

b. IFRS typically includes the amount in cash equivalents but not in cash.

c. U.S. GAAP typically treats the overdraft as a liability and reports the amount in the financing section of the statement of cash flows.

d. IFRS typically treats the overdraft as a liability, and reports the amount in the investing section of the statement of cash flows.

3. Under U.S. GAAP, significant non-cash transactions:

a. are classified as operating, if they are related to income items.

b. may be presented in the statement of cash flows as a separate schedule.

c. are classified as an investing or financing activity.

d. are classified as an operating activity, unless they can be specifically identified with financing or investing activities.

4. For purposes of the statement of cash flows, under U.S. GAAP interest paid is treated as:

a. an operating activity in all cases.

b. an investing or operating activity, depending on use of the borrowed funds.

c. either a financing or investing activity.

d. either an operating or financing activity, but treated consistently from period to period.

5. For purposes of the statement of cash flows, under U.S. GAAP income taxes paid are treated as:

a. cash flows from operating activities unless they can be separately identified as part of investing or financing activities.

b. an operating activity in all cases.

c. an investing or operating activity, depending on whether a refund is received.

d. either operating, financing, or investing activity, but treated consistently to other companies in the same industry.

GAAP Concepts and Application

GAAP23.1 Briefly describe some of the similarities and differences between IFRS and U.S. GAAP with respect to cash flow reporting.

GAAP23.2 Explain how the accounting for interest received and paid in a statement of cash flows differ between IFRS and U.S. GAAP.

GAAP23.3 What are some of the key obstacles for the IASB and FASB in their convergence project for the statement of cash flows?

GAAP23.4 Founded in the early 1980s, the **Vermont Teddy Bear Co.** (USA) designs and manufactures American-made teddy bears and markets them primarily as gifts called Bear-Grams or Teddy Bear-Grams. Bear-Grams are personalized teddy bears delivered directly to the recipient for special occasions such as birthdays and anniversaries. The Shelburne, Vermont, company's primary markets are New York, Boston, and Chicago. Sales have jumped dramatically in recent years. Such dramatic growth has significant implications for cash flows. The following are the cash flow statements for two recent years for the company.

	Current Year	Prior Year
Cash flows from operating activities:		
Net income	$ 17,523	$ 838,955
Adjustments to reconcile net income to net cash provided by operating activities		
Deferred income taxes	(69,524)	(146,590)
Depreciation and amortization	316,416	181,348
Changes in assets and liabilities:		
Accounts receivable, trade	(38,267)	(25,947)
Inventories	(1,599,014)	(1,289,293)

Prepaid and other current assets	(444,794)	(113,205)
Deposits and other assets	(24,240)	(83,044)
Accounts payable	2,017,059	(284,567)
Accrued expenses	61,321	170,755
Accrued interest payable, debentures	—	(58,219)
Other	—	(8,960)
Income taxes payable	—	117,810
Net cash provided by (used for) operating activities	236,480	(700,957)
Net cash used for investing activities	(2,102,892)	(4,422,953)
Net cash (used for) provided by financing activities	(315,353)	9,685,435
Net change in cash and cash equivalents	$ (2,181,765)	$ 4,561,525
Other information:		
Current liabilities	$ 4,055,465	$ 1,995,600
Total liabilities	4,620,085	2,184,386
Net sales	20,560,566	17,025,856

Instructions

a. Briefly describe any similarities or differences in Vermont's U.S. GAAP-based statement of cash flows compared to the requirements of IFRS.

b. Note that net income in the current year was only $17,523 compared to prior-year income of $838,955, but cash flows from operations was $236,480 in the current year and a negative $700,957 in the prior year. Explain the causes of this apparent paradox.

c. Evaluate Vermont Teddy Bear's liquidity, solvency, and profitability for the current year using cash flow-based ratios (as covered in Chapter 5).

Answers to GAAP Self-Test Questions

1. c **2.** c **3.** b **4.** a **5.** b

Notes

1 *IFRS Accounting Trends and Techniques* indicates that most companies surveyed report income taxes paid or received, interest received and paid, and dividends received as operating activities. However, most companies show dividends paid as a financing activity. These results are consistent with how this information is reported in Illustration 23.1.

2 In certain circumstances, it is possible that the net increase and decrease in cash reported on the statement of cash flows will not reconcile beginning and ending cash from the statement of financial position. The most common reason will be bank overdrafts. In this case, the company should disclose a reconciliation of the amounts from the statement of cash flows to the statement of financial position. **[5]**

3 "Net cash flow from operating activities" is a generic phrase, replaced in the statement of cash flows with either "Net cash provided by operating activities" if operations increase cash, or "Net cash used by operating activities" if operations decrease cash.

4 *IFRS Accounting Trends and Techniques* reports that out of its 175 surveyed companies, 151 used the indirect method and 23 used the direct method. One company did not provide a statement of cash flows. *In doing homework assignments, you should follow instructions for use of either the direct or indirect method.*

5 Other unrealized holding gains or losses, such as revaluations on property, plant, and equipment, or intangible assets, are also reported as part of other comprehensive income. As a result, net income is not adjusted in computing cash flows from operating activities for any type of unrealized holding gains or losses that are reported in other comprehensive income.

6 In some countries, companies receive a tax deduction related to share-based compensation plans at the time employees exercise their options. The amount of the deduction is equal to the difference between the market price of the share and the exercise price at the date the employee purchases the shares, which in most cases is much larger than the total compensation expense recorded. When the tax deduction exceeds the total compensation recorded, this provides an additional cash inflow to the company. Under IFRS, this tax-related cash inflow should be reported in the financing section of the statement of cash flows. [7]

7 Some non-cash investing and financing activities are part cash and part non-cash. Companies should report only the cash portion on the statement of cash flows. The non-cash component should be reported in a separate note. A study of significant non-cash investing and financing activities found that the effects of these transactions—debt issued for capital assets and capital lease financing of capital assets—can have a significant effect on analysts' assessments of capital expenditures and free cash flow. Given the importance of non-cash capital expenditures to calculations of free cash flow, the authors encourage the IASB to revise its stance regarding the exclusion of all non-cash activities from the statement of cash flows. See C. Mulford and H. Nicholson, "Measuring the Effects of Non-Cash Investing and Financing Activities," *Journal of Applied Research in Accounting and Finance* (Vol. 9, No. 1, 2014), pp. 27–43.

8 As part of its Primary Financial Statements project, the IASB is considering elimination of options for the reporting of interest and dividends paid or received. See the IFRS website for more information on the Primary Financial Statements project.

Source: Adapted from James A. Largay III and Clyde P. Stickney, "Cash Flows, Ratio Analysis, and the W. T. Grant Company Bankruptcy," *Financial Analysts Journal* (July–August 1980), p. 51; D. Fisher, "Cash Doesn't Lie," *Forbes* (April 12, 2010), pp. 52–55; and C. Grant, "The Clock Is Ticking Faster at Tesla," *Wall Street Journal* (March 28, 2018).