

# WILEY

## Reading 23: Understanding Cash Flow Statements

# Learning Outcome Statements

- Covered
  - 23a, 23b, 23c, 23d, 23e, 23f, 23g, 23h, 23i
- Not Covered
  - None

# Categories of a Cash Flow Statement

## **1. Cash flow from operating activities (CFO):**

Daily business activities.

## **2. Cash flow from investing activities (CFI):**

Buying and selling long-term assets

## **3. Cash flow from financing activities (CFF):**

Issuing and repaying capital and debt

# Cash Flow Classification Under U.S. GAAP

## OPERATING CASH FLOWS

<b>INFLOWS</b>	Cash collected from customers.
	Interest and dividends received.
	Proceeds from sale of securities held for trading.

<b>OUTFLOWS</b>	Cash paid to employees and suppliers.
	Cash paid for other expenses (e.g. wages).
	Cash used to purchase trading securities.
	Interest paid.
	Taxes paid.

# Cash Flow Classification Under U.S. GAAP

## INVESTING CASH FLOWS

<b>INFLOWS</b>	Sale proceeds from fixed assets.
	Sale proceeds from long term investments.
<b>OUTFLOWS</b>	Cash used to purchase fixed assets.
	Cash used to acquire LT investment securities.

# Cash Flow Classification Under U.S. GAAP

## FINANCING CASH FLOWS

<b>INFLOWS</b>	Proceeds from debt issuance.
	Proceeds from issuance of equity instruments.

<b>OUTFLOWS</b>	Redemption of LT debt.
	Payments made to repurchase stock.
	Dividend payments.

## Practice Question

Proceeds from sale of securities held for trading are classified as:

- A) CFO.
- B) CFI.
- C) CFF.

## Practice Question

Under U.S. GAAP, dividend payments are classified as:

- A) CFO
- B) CFI
- C) CFF



# Non-Cash Investing and Financing

No exchange of cash, so not reported on statement

Examples :

- Barter transactions
  - Issuance of common stock for dividends
  - Acquisition of real estate with financing
- 
- Must still disclose

## Practice Question

How would an acquisition of a building through only the issuance of shares of common stock be accounted for on the statement of cash flows?

- A) CFI
- B) CFF
- C) Only in disclosures

# Cash Flow Statements under IFRS and U.S. GAAP

IFRS vs GAAP:

## **Classification of cash flows:**

- IFRS is more flexible

## **Presentation format:**

- Operating Cash Flows presentation differs

# Differences between IFRS and U.S. GAAP

## CLASSIFICATION OF CASHFLOWS

	<b>IFRS</b>	<b>U.S. GAAP</b>
Interest and dividends received	CFO or CFI	CFO
Interest paid	CFO or CFF	CFO
Dividends paid	CFO or CFF	CFF
Bank overdrafts	Considered part of cash equivalents	CFF
Taxes paid	Generally CFO, but a portion of the tax can be categorized as CFI or CFF if it can be identified that the tax arose from investing or financing activities.	CFO

# Differences between IFRS and U.S. GAAP

## PRESENTATION FORMAT

	IFRS	U.S. GAAP
Format of statement	Direct or indirect; direct is encouraged	Direct or indirect; direct is encouraged. A reconciliation of net income to cash flow from operating activities must be provided <u>regardless</u> of the method used .

## Practice Question

Assuming IFRS, which of the following is *most likely* classified as a financing activity by a manufacturing company?

- A) Dividends received
- B) Interest paid
- C) Indirect borrowings using accounts payable

## Practice Question

Under IFRS, interest paid may be classified as:

- A) CFI or CFF
- B) CFO or CFF
- C) CFO only.

# Direct vs. Indirect Method

Both are acceptable

1. **Direct method:** Accrual income statement items converted to cash basis
  - Cash receipts = inflows
  - Cash disbursements = outflows
2. **Indirect method:** Adjustments made to net income
  - Depreciation added back
  - Non-operating items removed



# Presentation Formats

## DIRECT METHOD

### Cash Flow from Operating Activities

Cash collected from customers	\$100,000
Cash paid to suppliers	(30,000)
Cash paid to employees	(12,000)
Cash paid for interest	(5,000)
Cash paid for taxes	<u>(3,000)</u>
<b>Operating cash flow</b>	<b>\$50,000</b>

# Presentation Formats

## INDIRECT METHOD

### Cash Flow from Operating Activities

Net income	\$120,000
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Adjustments:

Depreciation	10,000
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Gain on sale of machinery	(1,000)
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Increase in inventory	(2,000)
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Decrease in accounts receivable	3,000
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Decrease in accounts payable	<u>(1,000)</u>
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<b>Operating cash flow</b>	<b>\$129,000</b>
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## Practice Question

If depreciation expense was understated in a company's financials, CFO presented under the indirect method assuming a tax-free environment is *most likely*:

- A) Accurately stated.
- B) Understated.
- C) Overstated.

## Practice Question

Which of the following statements is *least accurate*?

- A) The indirect method explicitly lists the actual sources of operating cash inflows and outflows.
- B) The indirect method provides a list of items that are responsible for the difference between net income and operating cash flow.
- C) The direct method of calculating cash flow from operations starts with cash sales and deducts all cash payments for direct and indirect costs.

## Links between the CF, IS, and BS

- The difference between beginning cash and ending cash equals net cash flow change
- Timing changes are reflected in the balance sheet
  - Accounts receivable
  - Reconcile current assets and liabilities with net income and operating CF

## Links between the CF, IS, and BS

- **CFI** changes in non-current assets
- **CFF** changes in equity and long-term debt
- Retained earnings flow from net income not distributed to shareholders

# Sources versus Uses of Cash

*Current Assets:*

- *Increase = Use*
- *Decrease = Source*

If balance sheet levels have increased, that means cash was used or not collected (in the case of AR)

# Sources versus Uses of Cash

## *Current Liabilities:*

- *Increase = Source*
- *Decrease = Use*

If balance sheet levels have increased, that means cash use was foregone used or obligations were not repaid (in the case of AP)

*The income statement and balance sheet for ABC Company are presented on the next slide. We will use them to construct the cash flow statement for the company using the direct and indirect methods.*



# Illustration of Direct and Indirect Methods

## INCOME STATEMENT

Year Ended 31 Dec 2008

Revenues	23,000
Cost of goods sold	<u>11,500</u>
<b>Gross Profit</b>	<b>11,500</b>
Salary and wages expense	4,000
Depreciation expense	1,000
Other operating expenses	<u>3,500</u>
Total operating expenses	<u>8,500</u>
<b>Operating profit</b>	<b>3,000</b>
Other revenues (expenses)	
Gain on sale of equipment	200
Interest expense	(300)
<b>Income before tax</b>	<b><u>2,900</u></b>
Income tax expense	<u>(1,400)</u>
<b>Net income</b>	<b>1,500</b>

# Illustration of Direct and Indirect Methods

## BALANCE SHEET As at 31 Dec 2008

	2008	2007	Net Change
Cash	2,300	1,150	1,150
Accounts receivable	1,000	950	50
Inventory	3,900	3,250	650
Prepaid expenses	<u>100</u>	<u>250</u>	<u>(150)</u>
<b>Total current assets</b>	<b>7,300</b>	<b>5,600</b>	<b>1,700</b>
Land	500	500	
Buildings	3,600	3,600	
Equipment	7,700	8,500	(800)
Less: accumulated depreciation	<u>(3,400)</u>	<u>(2,900)</u>	<u>(500)</u>
<b>Total long term assets</b>	<b><u>8,400</u></b>	<b><u>9,700</u></b>	<b><u>(1,300)</u></b>
<b>Total assets</b>	<b><u>15,700</u></b>	<b><u>15,300</u></b>	<b><u>400</u></b>

Note: The book value of the equipment sold was \$300.

# Illustration of Direct and Indirect Methods

## **BALANCE SHEET** **As at 31 Dec 2008**

	<b>2008</b>	<b>2007</b>	<b>Net Change</b>
Accounts payable	3,500	3,300	200
Salary and wages payable	80	70	10
Interest payable	60	85	(25)
Income tax payable	60	45	15
Other accrued liabilities	<u>1,200</u>	<u>1,100</u>	<u>100</u>
<b>Total current liabilities</b>	<b>4,900</b>	<b>4,600</b>	<b>300</b>
Long term debt	3,000	3,600	(600)
Common stock	4,550	4,850	(300)
Retained earnings	<u>3,250</u>	<u>2,250</u>	<u>1,000</u>
<b>Total liabilities and equity</b>	<b><u>15,700</u></b>	<b><u>15,300</u></b>	<b><u>400</u></b>

# Illustration of Direct Method to Compute CFO

## Steps to Calculate CFO under the Direct Method:

### *Step 1:*

Adjust each item on income statement for balance sheet change to remove timing differences

### *Step 2:*

Decide if IS change is a source or use of cash

# Illustration of Direct Method to Compute CFO

## Steps to Calculate CFO under the Direct Method:

### *Step 3:*

Ignore all non-operating items.

- e.g. gain/loss on sale of plant and equipment.

Ignore all non-cash charges.

- e.g. depreciation and amortization.

## Illustration of Direct Method to Compute CFO

**Total sales** adjusted for changes in related working capital accounts are known as cash collections from customers:

- Cash Collections: Sales – Increase in accounts receivable
  - 23,000 – 50 –
- Payments to suppliers: – COGS – Increase in inventory + Increase in A/C payable
  - – 11,500 – 650 + 200 = **-\$11,950**

## Illustration of Direct Method to Compute CFO

- **Cash salaries and wages:** – Wages and salaries + Increase in wages and salaries payable
  - $-4,000 + 10 = -\$3,990$
- **Other operating expenses:** – Other operating expenses (accrual basis) + Decrease in prepaid expenses + Increase in other accrued liabilities
  - $= -3,500 + 150 + 100 = -\$3,250$
- **Gain on Equipment sale is not CFO**

## Illustration of Direct Method to Compute CFO

- **Interest expense:** - Interest expense - Decrease in interest payable
  - $= -300 - 25 = -\$325$
- **Income tax expense:** - Income tax expense + Increase in taxes payable
  - $= -1,400 + 15 = -\$1,385$



# Illustration of Direct Method to Compute CFO

## Cash flow from operating activities under the direct method:

Cash received from customers	22,950
Cash paid to suppliers	(11,950)
Cash paid to employees	(3,990)
Cash paid for other operating expenses	(3,250)
Cash paid for interest	(325)
Cash paid for income taxes	<u>(1,385)</u>
<b>Net cash flow from operating activities</b>	<b>\$2,050</b>

## Practice Question

Given:

The company's cash flow from operations is *closest to*:

- A) \$1,155,100
- B) \$1,162,300
- C) \$1,130,000

Net income = \$1,120,000

Depreciation expense for the year = \$27,000

Decrease in inventory = \$13,800

Increase in taxes payable = \$1,500

Issuance of common stock = \$60,000

Dividends paid = \$32,300

Purchase of land = \$28,300

Investment in associate = \$58,000

Purchase of held-for-trading securities = \$7,200

Sale of available-for-sale securities = \$84,700

## Practice Question

Given:

The company's cash flow from investing activities is *closest to*:

- A) \$26,700
- B) \$56,400
- C) -\$1,600

Net income = \$1,120,000

Depreciation expense for the year = \$27,000

Decrease in inventory = \$13,800

Increase in taxes payable = \$1,500

Issuance of common stock = \$60,000

Dividends paid = \$32,300

Purchase of land = \$28,300

Investment in associate = \$58,000

Purchase of held-for-trading securities = \$7,200

Sale of available-for-sale securities = \$84,700

# Illustration of Indirect Method to Compute CFO

## Steps to Calculate CFO under the Indirect Method:

### *Step 1:*

Remove the effects of all noncash expenses and gains from net income.

- Depreciation

### *Step 2:*

Remove the effects of all non-operating activities from net income.

- Gain on sale of long-term assets

# Illustration of Indirect Method to Compute CFO

## Steps to Calculate CFO under the Indirect Method:

### *Step 3:*

Make adjustments for changes in all working capital accounts.

Add all sources of cash.

- Increases in current liabilities and declines in current assets.

Subtract all uses of cash.

- Decreases in current liabilities and increases in current assets.

# Illustration of Indirect Method to Compute CFO

## The Indirect Method to Compute CFO

Net income	1,500
Add: Depreciation expense	1,000
Less: Gain on sale of equipment	<u>(200)</u>
	<b>2,300</b>
Increase in accounts receivable (use)	(50)
Increase in inventory (use)	(650)
Decrease in prepaid expenses (source)	150
Increase in accounts payable (source)	200
Increase in salaries and wages payable (source)	10
Decrease in interest payable (use)	(25)
Increase in income tax payable (source)	15
Increase in accrued liabilities (source)	<u>100</u>
<b>Net cash flow from operating activities</b>	<b>2,050</b>

*Notice that we obtain the same answer for CFO under both methods.*

# Illustration of Direct and Indirect Methods

## Calculating CFI

- Only consider long-term assets and investments
- Beginning GFA + Purchase of new assets – Cost of Sold assets = Ending gross fixed assets.
- **Net fixed assets:** GFA – Accumulated Depreciation
- ***Calculation of historical cost of sold equipment:***
- $\$8,500 + 0 - \text{Historical cost of sold equipment} = \$7,700$
- Historical cost of sold equipment = **\$800**

## Illustration of Direct and Indirect Methods

- ***Calculation of accumulated depreciation on sold equipment:***
- Beginning AD + Current years depreciation – AD on sold = Ending AD.
- **$\$2,900 + \$1,000 - \text{AD on sold equipment} = \$3,400$**
- **AD on sold equipment = \$500**
- **Book value of sold equipment = Historical cost - Accumulated depreciation**
  - **$= \$800 - \$500 = \$300$**



# Illustration of Direct and Indirect Methods

## ***Calculation of proceeds from sale of equipment:***

Selling price – Book value = Gain/loss on sale of equipment

Selling price – \$300 = \$200

Cash proceeds from the sale of equipment equal \$500.

- These proceeds are classified as inflows from investing activities.

## **Cash flow from investing activities:**

Cash received from sale of equipment	500
<b>Net cash flow from investing activities</b>	<b>500</b>

*Note that there have been no purchases or sales of land and buildings during the year, as evident by the fact that the gross amounts recorded for them are same across both years.*

# Illustration of Direct and Indirect Methods

## Calculating CFF

- Issuing and repaying stock and debt
- ABC's debt decreased by 600= use of cash
- ABC repurchased 300 in stock=Use
- ABC Paid 500 in dividends= Use

# Illustration of Direct and Indirect Methods

## Cash flow from financing activities

Cash paid to retire long term debt	-600
Repurchase of common stock	-300
Cash paid as dividends	-500
<b>Net cash flow from financing activities</b>	<b>-1,400</b>

# The Direct Method versus The Indirect Method

- Direct method shows line items of sources and uses while the indirect just shows the net effect
- Direct-used for evaluating past and making projections
  - Indirect can be used to estimate future cash flows

# Conversion Process from Indirect to Direct Method

## Step 1: Aggregate all revenues and all expenses

Aggregate all operating and nonoperating revenues and gains such as sales and gains from sale of assets.

Aggregate all operating and non-operating expenses such as wages, depreciation, interest and taxes.

# Conversion Process from Indirect to Direct Method

Step 2: Remove the effect of noncash items from aggregated revenues and expenses and separate the adjusted revenues and expenses into their respective cash flow items.

- Deduct noncash revenue items such as gain on sales of assets from total revenue.
- Deduct noncash expense items such as depreciation from total expenses.

## Conversion Process from Indirect to Direct Method

Cost of goods sold	\$11,500
+ Salary and wage expenses	\$4,000
+ Other operating expenses	\$3,500
+ Interest expense	\$300
+ Income tax expense	\$1,400
<b>Total</b>	<b>\$20,700</b>

# Conversion Process from Indirect to Direct Method

## Step 3: Convert the accrual items into cash amounts

- Assets are negatively related to cash position, liabilities are positively related
- Adjust revenue by AR and unearned revenue
- Adjust COGS by inventory balances and AP
- Adjust wages, taxes and interest by payable accounts



# Conversion Process from Indirect to Direct Method

## Step 4: Adjust accrual items by balance sheet accounts

- Cash received from customers: \$22,950
- Cash paid to suppliers: (\$11,950)
- Cash paid to employees: (\$3,990)
- Other Operating Expenses: (\$3,250)
- Cash paid for interest: (\$325)
- Cash paid for income tax: (\$1,385)
- **CFO: \$2,050**

# Major Sources and Uses of Cash

Early stages of growth:

- Negative CFO
- Positive CFF

Mature stage of growth:

- Positive CFO
- Could lead to either negative CFI or CFF

# Major Sources and Uses of Cash

## Operating Cash Flow

- Current assets and liabilities
- Compare CFO with NI
- CFO should exceed NI
- If consistently the opposite, NI may be unsustainable

## Investing Cash Flow

- Long-term assets and investments
- Negative CFI could support future CFO

## Practice Question

Consider the following two statements:

**Statement 1:** Companies should ideally have net income that exceeds operating cash flows.

**Statement 2:** The variability of operating cash flow and net income is an important determinant of the overall risk inherent in the company.

Which of the following is *most likely*?

- A) Only Statement 1 is correct.
- B) Only Statement 2 is correct.
- C) Both statements are correct.

# Major Sources and Uses of Cash

## Financing Cash Flow

- Long-term debt and equity
- Consider level of leverage
- Negative CFF may indicate lack of opportunity

# Cash Flow Analysis

## Common-Size Analysis

**1. Percent of Net Revenues**

**2. Percent of cash inflows and outflows**

They are helpful in:

- Cash Flow Trends,
- Forecasting

*Exhibit given on next slide provides an example of a common-size cash flow statement.*

# Cash Flow Analysis

## **Rhodson Company Cash Flow Statement Percent of Revenues**

	<b>2008</b>	<b>2008</b>	<b>2007</b>	<b>2007</b>
	<b>\$</b>	<b>%</b>	<b>\$</b>	<b>%</b>
Net income	55,000	18.33	45,000	18
Depreciation	10,000	3.33	10,000	4
Increase in accounts receivable	-5,000	-1.67	-4,000	-1.6
Increase in inventory	-3,000	-1	-2,000	-0.8
Decrease in prepaid expenses	1,500	0.5	3,000	1.2
Increase in accrued expenses	2,000	0.67	2,500	1
<b>Operating cash flow</b>	<b>60,500</b>	<b>20.17</b>	<b>54,500</b>	<b>21.8</b>

## Cash Flow Analysis

	2008	2008	2007	2007
	\$	%	\$	%
Cash from sale of fixed assets	12,000	4	5,000	2
Purchase of plant and equipment	-10,000	-3.33	0	0
<b>Investing cash flow</b>	<b>2,000</b>	<b>0.67</b>	<b>5,000</b>	<b>2</b>
Sale of bonds	7,500	2.5	5,000	2
Cash dividends	-2,000	-0.67	-2,000	-0.8
<b>Financing cash flow</b>	<b>5,500</b>	<b>1.83</b>	<b>3,000</b>	<b>1.2</b>
<b>Total Cash Flow</b>	<b>68,000</b>	<b>22.67</b>	<b>62,500</b>	<b>25.00</b>



# Cash Flow Analysis

## **Brief Analysis**

- CFO lower portion of revenues
- CFI down from purchase
- Higher CFF- debt issued
- Cash flow/Sales decreased

# Free Cash Flow

- Operating Cash flow less capital expenditure
- Available to equity after operating, working capital and fixed capital needs met

$$\text{FCFF} = \text{NI} + \text{NCC} + [\text{Int} \times (1 - \text{tax rate})] - \text{FCInv} - \text{WCInv}$$

- Net income adjusted for noncash charges and changes in working capital accounts

$$\text{FCFF} = \text{CFO} + [\text{Int} \times (1 - \text{tax rate})] - \text{FCInv}$$

# Free Cash Flow

**Note:**

*Under IFRS, if the company has classified interest and dividends received as investing activities, they should be added to CFO to determine FCFF. If dividends paid were deducted from CFO, they should be added back to CFO to calculate FCFF. Dividends must not be adjusted for taxes as dividends paid are not tax-deductible.*

***Continuing from our previous example of ABC Company and assuming a tax rate of 40%, FCFF can be calculated as follows:***

$$\text{FCFF} = \text{CFO} + \text{Interest} (1 - \text{tax rate}) - \text{FCInv}$$

$$\text{FCFF} = 2,050 + 300 (1 - 0.4) - (-500)$$

$$\text{FCFF} = \$2,730$$

# Free Cash Flow

## Free cash flow to equity (FCFE)

It refers to cash that is available only to common shareholders.

$$\text{FCFE} = \text{CFO} - \text{FCInv} + \text{Net borrowing}$$

Any cash after FCFF and debt repayment belongs to shareholders

## Free Cash Flow

***Continuing from our previous example of ABC Company and assuming a tax rate of 40%, FCFE can be calculated as follows:***

$$\text{FCFE} = \text{CFO} - \text{FCInv} + \text{Net borrowing}$$

$$\text{FCFE} = 2,050 - (-500) + (-600)$$

$$\text{FCFE} = \$1,950$$

## Practice Question

Given:

XYZ's free cash flow to the firm for 2009 is *closest to*:

- A) \$675
- B) \$615
- C) \$720

Net income	\$2,050
Depreciation	\$345
Interest expense	\$150
Tax rate	30%
Net capital expenditure	\$1,500
Net debt repayment	\$20
Working capital investment	\$325
Net borrowing	\$1,500

## Practice Question

Given:

XYZ's free cash flow to equity for 2009 is *closest to*:

- A) \$5,050
- B) \$2,050
- C) \$2,090

Net income	\$2,050
Depreciation	\$345
Interest expense	\$150
Tax rate	30%
Net capital expenditure	\$1,500
Net debt repayment	\$20
Working capital investment	\$325
Net borrowing	\$1,500

# Cash Flow Ratios

## PERFORMANCE RATIOS

1.	CFO / Net Revenue	Measures cash generated per unit of revenue.
2.	CFO / Average total assets	Measures cash generated from all resources, equity and debt.
3.	CFO / Average shareholders' equity	Measures cash generated from owner resources.
4.	CFO / Operating income	Measures the ability of business operations to generate cash.
5.	(CFO - Preferred dividends) / Number of common shares outstanding	Measures operating cash flow available for each shareholder.



# Cash Flow Ratios

## COVERAGE RATIOS

1.	$\text{CFO} / \text{Total debt}$	Measures leverage and financial risk.
2.	$(\text{CFO} + \text{Interest paid} + \text{Taxes paid}) / \text{Interest paid}$	Measures the ability to satisfy interest obligations.
3.	$\text{CFO} / \text{Cash paid for long term assets}$	Measures the ability to buy long-term assets with operating cash flows.
4.	$\text{CFO} / \text{Cash paid for long term debt repayment}$	Measures the ability to meet debt obligations with operating cash flows.
5.	$\text{CFO} / \text{Dividends paid}$	Measures the ability to make dividend payments with operating cash flows.
6.	$\text{CFO} / \text{Cash outflows for investing and financing activities}$	Measures the ability to buy long term assets, settle debt obligations and make dividend payments from operating cash flows.

# WILEY

Practice Questions with Solutions

## Practice Question

Proceeds from sale of securities held for trading are classified as:

- A) CFO.
- B) CFI.
- C) CFF.

**Answer: A**

Proceeds from sale of securities held for trading are classified as CFO.

## Practice Question

Under U.S. GAAP, dividend payments are classified as:

- A) CFO
- B) CFI
- C) CFF

**Answer: C**

Under U.S. GAAP, dividend payments are classified as CFF.

## Practice Question

How would an acquisition of a building through only the issuance of shares of common stock be accounted for on the statement of cash flows?

- A) CFI
- B) CFF
- C) Only in disclosures

**Answer: C**

No actual cash exchanges hands, so it would only be reported in disclosures

## Practice Question

Assuming IFRS, which of the following is *most likely* classified as a financing activity by a manufacturing company?

- A) Dividends received
- B) Interest paid
- C) Indirect borrowings using accounts payable

### Answer: B

Under IFRS, interest paid may either be classified as an operating or a financing activity. Dividends received may either be classified as an operating or an **investing** activity. Indirect borrowings through accounts payable is classified as an **operating** activity.

## Practice Question

Under IFRS, interest paid may be classified as:

- A) CFI or CFF
- B) CFO or CFF
- C) CFO only.

**Answer: B**

Under IFRS, interest paid may be classified as CFO or CFF.

## Practice Question

If depreciation expense was understated in a company's financials, CFO presented under the indirect method assuming a tax-free environment is *most likely*:

- A) Accurately stated.
- B) Understated.
- C) Overstated.

**Answer: A**

A change in depreciation has no impact on cash flow whatsoever. An increase in depreciation would reduce net income (the starting point of the indirect cash flow statement), but have no effect on total cash flow.



## Practice Question

Which of the following statements is *least accurate*?

- A) The indirect method explicitly lists the actual sources of operating cash inflows and outflows.
- B) The indirect method provides a list of items that are responsible for the difference between net income and operating cash flow.
- C) The direct method of calculating cash flow from operations starts with cash sales and deducts all cash payments for direct and indirect costs.

**Answer: A**

The **direct** method explicitly lists the actual sources of operating cash inflows and outflows.

## Practice Question

Given:

The company's cash flow from operations is *closest to*:

- A) \$1,155,100
- B) \$1,162,300
- C) \$1,130,000

Net income = \$1,120,000

Depreciation expense for the year = \$27,000

Decrease in inventory = \$13,800

Increase in taxes payable = \$1,500

Issuance of common stock = \$60,000

Dividends paid = \$32,300

Purchase of land = \$28,300

Investment in associate = \$58,000

Purchase of held-for-trading securities = \$7,200

Sale of available-for-sale securities = \$84,700

**Answer: A**

CFO = Net income + Depreciation + Decrease in inventory + Increase in taxes payable – Purchase of held-for-trading securities

CFO = 1,120,000 + 27,000 + 13,800 + 1,500 – 7,200 = \$1,155,100

## Practice Question

Given:

The company's cash flow from investing activities is *closest to*:

- A) \$26,700
- B) \$56,400
- C) -\$1,600

Net income = \$1,120,000

Depreciation expense for the year = \$27,000

Decrease in inventory = \$13,800

Increase in taxes payable = \$1,500

Issuance of common stock = \$60,000

Dividends paid = \$32,300

Purchase of land = \$28,300

Investment in associate = \$58,000

Purchase of held-for-trading securities = \$7,200

Sale of available-for-sale securities = \$84,700

**Answer: C**

CFI = Sale of available-for-sale securities – Purchase of land – Investment in associate

CFI = 84,700 – 28,300 – 58,000 = -\$1,600

## Practice Question

Consider the following two statements:

**Statement 1:** Companies should ideally have net income that exceeds operating cash flows.

**Statement 2:** The variability of operating cash flow and net income is an important determinant of the overall risk inherent in the company.

Which of the following is *most likely*?

- A) Only Statement 1 is correct.
- B) Only Statement 2 is correct.
- C) Both statements are correct.

**Answer: B**

Companies should ideally have operating cash flows that exceed net income.

## Practice Question

Given:

XYZ's free cash flow to the firm for 2009 is *closest to*:

- A) \$675
- B) \$615
- C) \$720

Net income	\$2,050
Depreciation	\$345
Interest expense	\$150
Tax rate	30%
Net capital expenditure	\$1,500
Net debt repayment	\$20
Working capital investment	\$325
Net borrowing	\$1,500

**Answer: A**

$$\text{FCFF} = 2,050 + 345 + (150 \times (1 - 0.3)) - 1,500 - 325 = \$675$$

## Practice Question

Given:

XYZ's free cash flow to equity for 2009 is *closest to*:

- A) \$5,050
- B) \$2,050
- C) \$2,090

Net income	\$2,050
Depreciation	\$345
Interest expense	\$150
Tax rate	30%
Net capital expenditure	\$1,500
Net debt repayment	\$20
Working capital investment	\$325
Net borrowing	\$1,500

**Answer: B**

$$\text{CFO} = 2,050 + 345 - 325 = \$2,070$$

$$\text{FCFE} = 2,070 - 1,500 + 1,500 - 20 = \$2,050$$