

## **Learning Module 5: Analyzing Statements of Cash Flows 2**

Q.476 Which of the following is *most likely* a coverage ratio?

- A. Reinvestment ratio.
- B. Cash to income ratio.
- C. Cash return on assets.

The correct answer is **B**.

Coverage ratios are financial metrics used to evaluate a company's ability to service its debt and meet its financial obligations. Among the options provided, the Cash to income ratio is most closely aligned with the concept of a coverage ratio. This ratio specifically measures the company's ability to cover its obligations with its operating cash flows, making it a direct indicator of financial health and stability in terms of covering debts and other obligations.

**A is incorrect.** The Reinvestment ratio, while important for understanding a company's growth and sustainability by indicating how much of its cash flow is reinvested back into the business, does not directly measure the company's ability to cover its debt or financial obligations. It is more closely related to growth and capital allocation strategies rather than coverage capabilities. Therefore, it does not fit the definition of a coverage ratio as well as the Cash to income ratio does.

**C is incorrect.** The Cash return on assets ratio measures the efficiency with which a company generates cash flow from its assets. While this is an important indicator of operational efficiency and can indirectly affect a company's ability to cover its debts by generating more cash, it is not a direct measure of the company's ability to meet its financial obligations. Coverage ratios specifically assess the ability to pay interest, principal, or other obligations, making the Cash return on assets ratio less relevant in this context compared to the Cash to income ratio.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements***

---

Q.2088 Free cash flow for the firm (FCFF) is *most likely* available to:

- A. debt holders.
- B. equity holders.
- C. debt holders and equity holders.

The correct answer is **C**.

Free Cash Flow to the Firm (FCFF) represents the cash that a company generates after accounting for cash outflows to support operations and maintain its capital assets. This metric is crucial as it indicates the amount of cash available to return to the company's capital providers, which include both debt holders and equity holders. FCFF is an important measure because it provides a clear picture of a company's financial health and its ability to generate cash from its operations after making necessary investments in the business. It is a key indicator used by investors to assess the value of a company and its ability to generate cash that can be used to pay dividends, buy back shares, or reduce debt.

**A is incorrect.** While debt holders are indeed entitled to a portion of the FCFF in the form of interest payments and principal repayments, they are not the sole beneficiaries. FCFF is a broader measure that encompasses the cash available to all capital providers, including both debt and equity holders. Limiting the availability of FCFF to only debt holders overlooks the fact that equity holders are also entitled to the company's residual cash flows after meeting its debt obligations.

**B is incorrect.** This perspective neglects the priority claim that debt holders have on a company's cash flows. Before equity holders can lay claim to any of the company's cash flows, the company must first meet its obligations to debt holders, such as interest payments and principal repayments. Therefore, stating that FCFF is available only to equity holders does not accurately reflect the distribution hierarchy of a company's cash flows. FCFF is meant to represent the total pool of cash that can be distributed among all capital providers, not just equity holders.

**CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements**

---

Q.2089 Which of the following is the *most appropriate* equation for calculating Free Cash flow to the Equity (FCFE)?

- A.  $FCFE = CFO - \text{Fixed capital expenditure} + \text{Net borrowing}$
- B.  $FCFE = CFO + \text{Interest} \times (1 - \text{Tax rate}) - \text{Fixed Capital Expenditure}$
- C.  $FCFE = CFO + \text{Interest} \times (1 - \text{Tax rate}) - \text{Fixed capital expenditure} + \text{Net borrowing}$

The correct answer is A.

Free Cash Flow to Equity (FCFE) is a measure of how much cash is available to the equity shareholders of a company after all expenses, reinvestment, and debt repayments have been taken care of. It is calculated as follows:

$$\begin{aligned} FCFE &= CFO - \text{Fixed capital expenditure} + \text{Net borrowing} \\ \text{Or,} \\ FCFE &= \text{Net income} + \text{Depreciation} - \text{Working capital expenditure} \\ &\quad - \text{Fixed capital expenditure} + \text{Net borrowing} \end{aligned}$$

#### **Further information:**

If net borrowing is negative, this means that the company's debt repayments have exceeded its receipt of borrowed funds. In this case:

$$FCFE = CFO - FCInv - \text{Net debt repayment}$$

Where:

$FCInv$  = Capital expenditures

$CFO$  = cash flow from operating activities in the case where the interest paid is included as an operating activity.

A positive FCFE implies that the company has more operating cash flow than it needs to cover capital expenditures and the repayment of the debt, and therefore has cash available for distribution to shareholders.

**B is incorrect.** It gives the equation for the cash flow to the firm.

**C is incorrect.** It includes net borrowing, which should be there.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements***

Q.2090 The financial data of a hypothetical firm is provided below.

Net Income	700
Depreciation Expense	57
Decrease in Acc. Rec.	49
Increase in Inventory	36
Interest Expense	100
Increase in Capital Expenditure	180
Debt Issued	450
Debt Repaid	330

Assuming a tax rate of 40%, the Free Cash Flow for the Firm (FCFF) using the cash flow from operating activities equation is *closest to*:

- A. \$650
- B. \$690
- C. \$770

The correct answer is **A**.

Cash flow from operating activities = \$700 (Net income) + \$57 (Depreciation) + \$49 (Decrease in  
- \$36 (Increase in Inventory) = \$770

So that:

$$\begin{aligned} \text{FCFF} &= \text{CFO} + \text{Int. Exp} \times (1 - \text{Tax rate}) - \text{Fixed Capital investment} \\ &= \$770 + \$100 \times (60\%) - \$180 = \$650 \end{aligned}$$

**B is incorrect.** It does not consider the tax rate.

**C is incorrect.** It represents the cash flow from operating activities.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements***

---

Q.2094 A firm has recently repaid its long-term debt obligations. Using the data given below, based on cash flow from operations the debt payment ratio is *closed to*:

Net Income	700
Depreciation Expense	57
Decrease in Acc. Rec.	49
Increase in Inventory	36
Interest Expense	100
Increase in Capital Expenditure	180
Debt Issued	450
Debt Repaid	330

- A. 0.99
- B. 1.77
- C. 2.33

The correct answer is **C**.

$$\begin{aligned}
 \text{Cash flow from operating activities of a firm} &= \$700 \text{ (Net income)} + \$57 \text{ (Depreciation)} + \$49 \text{ (Decrease in accounts receivable)} \\
 &\quad - \$36 \text{ (Increase in inventory)} \\
 &= \$770
 \end{aligned}$$

Therefore,

$$\begin{aligned}
 \text{Debt Payment ratio} &= \frac{\text{CFO}}{\text{Debt paid}} \\
 &= \frac{\$770}{\$330} = 2.33
 \end{aligned}$$

**A is incorrect.** It divides the CFO with the sum of debt issued and the debt paid.

$$\text{Debt Payment ratio} = \frac{\text{CFO}}{\text{Debt paid} + \text{Debt Issued}} = \frac{\$770}{\$330 + \$450} = 0.99$$

**B is incorrect.** It divides the CFO with the debt issued.

$$\text{Debt Payment ratio} = \frac{\text{CFO}}{\text{Debt Issued}} = \frac{\$770}{\$450} = 1.71$$

**CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5b:** calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios

---

Q.2096 Grand Co. is a laptop distributor firm whose financial data is provided in the following table. Using the given data, the FCFF of Grand Co. is *closest to*:

Net Income	200,000
Depreciation	70,000
Interest Expense (Net of Taxes)	37,000
Fixed Capital Expenditure	110,000
Working Capital Expenditure	77,000
Net Borrowing	65,000
Tax Rate	30%
Interest Rate	8%

- A. \$108,000
- B. \$120,000
- C. \$200,000

The correct answer is **B**.

The FCFF of Grand Co. is calculated by using the FCFF equation:

$$\begin{aligned} \text{FCFF} = & \text{ Net Income} + \text{Depreciation} + \text{Interest expense}(1 - \text{Tax rate}) \\ & - \text{Working capital expenditure} - \text{Fixed capital expenditure} \end{aligned}$$

Therefore,

$$\begin{aligned} \text{FCFF} = & \$200,000 \text{ (Net Income)} + \$70,000 \text{ (Depreciation)} \\ & + \$37,000 \text{ (Interest expense} \times (1 - \text{Tax rate})) \\ & - \$77,000 \text{ (Working capital expenditure)} \\ & - \$110,000 \text{ (Fixed capital expenditure)} \\ & = \$120,000 \end{aligned}$$

Notes:

1. Since Interest expenses are given as net of taxes, we do not need to adjust the interest expense.
2. Net borrowing is only considered in the calculation of FCFE.

**A is incorrect.** Includes tax rate in calculation.

$$\begin{aligned} \text{FCFF} = & \$200,000 \text{ (Net Income)} + \$70,000 \text{ (Depreciation)} \\ & + \$37,000 (1 - 30\%) - \$77,000 \text{ (Working capital expenditure)} \\ & - \$110,000 \text{ (Fixed capital expenditure)} \\ & = \$108,900 \end{aligned}$$

**C is incorrect.** It represents the net income.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5:  
Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and  
common-size cash flow statements***

---

Q.3801 A company reported the following information:

Net income	\$323 Million
Cash flow from Investing Activities	\$13 Million
Cash flow from Financing Activities	\$40 Million
Cash flow from Operating Activities	\$62 Million
Total Cash Flows	\$115 Million
Assets at the beginning of the period	\$100 Million
Assets at the end of the period	\$143 Million

The company's cash return on asset ratio is *closed to*:

- A. 0.1069
- B. 0.5102
- C. 0.9465

The correct answer is **B**.

Recall that:

$$\begin{aligned}\text{Cash Return on Assets} &= \frac{\text{Cash Flows from Operations}}{\text{Average Total Assets}} \\ &= \frac{62,000,000}{\frac{1}{2} \times (100,000,000 + 143,000,000)} = 51.02\%\end{aligned}$$

**A is incorrect.** It has used cash flow from investing activities.

$$= \frac{13,000,000}{\frac{1}{2} \times (100,000,000 + 143,000,000)} = 10.69\%$$

**C is incorrect.** It has used total cash flows.

$$= \frac{115,000,000}{\frac{1}{2} \times (100,000,000 + 143,000,000)} = 94.65\%$$

**CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5b: calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios**

---

Q.3802 Determine the cash flow debt coverage ratio of a company based on the information provided below.

Cash Flow Metrics From Investing Activities: \$ 15 Million From Financing Activities: \$ 13 Million  
From Operating Activities: \$ 90 Million Total Cash Flows: \$ 118 Million Total Debt: \$ 270 Million

- A. 0.333
- B. 0.437
- C. 0.556

The correct answer is A.

Recall that:

$$\begin{aligned}\text{Cash Flow Debt Coverage Ratio} &= \frac{\text{Cash Flow from Operating Activities}}{\text{Total Debt}} \\ &= \frac{\$90 \text{ Million}}{\$270 \text{ Million}} = 0.3333 \text{ or } 33.33\%\end{aligned}$$

**B is incorrect.** Total cash flows have been used in place of cash flows from operating activities to calculate the cash flow debt coverage ratio.

**C is incorrect.** Cash flows from investing activities have been used in place of the cash flows from operating activities.

*CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5b: calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios*

---

Q.4734 A company in its growth phase shows a persistent negative operating cash flow over several years despite increasing net income annually. Which of the following implications is most concerning for the company's long-term financial health?

- A. The company's inventory management is highly efficient.
- B. The company's depreciation methods are likely too aggressive.
- C. The company may need to seek external financing to support its operations continuously.

The correct answer is **C**.

Persistent negative operating cash flow in the context of increasing net income typically indicates that the company's reported earnings do not reflect actual cash generation, which can be unsustainable over the long term. This situation may force the company to rely on external financing, such as debt or equity issuance, to fund its operations, a risky strategy that could jeopardize its financial stability.

**A is incorrect.** Efficient inventory management would generally positively impact operating cash flows by reducing cash tied up in inventory, contrary to the scenario described.

**B is incorrect.** Depreciation methods affect accounting earnings but do not impact cash flows directly. The concern here is not about the aggressiveness of depreciation but the sustainability of the cash flows.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements***

---

Q.4735 Which of the following statements is *most accurate* about the role of common-size cash flow statements in financial analysis?

- A. They help compare the cash flow structures of companies of different sizes.
- B. They primarily assist in assessing the profitability of a company's investments.
- C. They are most useful for determining the exact dollar amounts of cash inflows and outflows.

The correct answer is **A**.

Common-size cash flow statements convert each line item into a percentage of a total (either total inflows or total outflows), which helps compare companies of different sizes by providing a proportional analysis of where cash comes from and where it goes, making size discrepancies between companies less misleading.

**B is incorrect.** Common-size statements focus not on assessing profitability but on the structure and proportions of cash flows.

**C is incorrect.** The common-size analysis does not focus on exact dollar amounts but rather on the proportions that these amounts represent relative to total cash inflows or outflows.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements***

---

Q.4736 Which of the following statements is *most* accurate?

- A. For mature companies, financing activities would be preferable as the primary source of cash flows.
- B. If a company has a significant net income despite its negative operating cash flow, this may indicate poor earnings quality.
- C. One approach to the common-size analysis of the cash flow statement involves expressing each cash flow (inflows and outflows) as a percentage of total cash inflows.

The correct answer is **B**.

If a company has a negative operating cash flow and still has a significant net income, this is a manifestation of the poor quality of the company's earnings.

**A is incorrect.** For a mature company, operating activities, not financing activities, should be the primary source of cash flows.

**C is incorrect.** Common-sizing the cash flow statement entails the expression of each line item of cash inflow as a percentage of total cash inflows and each cash outflow as a percentage of total cash outflow.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements***

---

Q.4737 A company reported the following figures for the fiscal year:

- Net income: \$120,000
- Depreciation and amortization: \$30,000
- Interest Expense: \$20,000
- Tax Rate: 40%
- Capital Expenditures: \$50,000
- Increase in Working Capital: \$10,000

The Free Cash Flow to the Firm (FCFF) is *closest to*:

- A. \$74,000
- B. \$86,000
- C. \$102,000

The correct answer is C.

$$\begin{aligned} \text{FCFF} &= \text{NI} + \text{NCC} + \text{Int}(1 - \text{Tax Rate}) - \text{FCInv} - \text{WCInv} \\ &= \$120,000 + \$30,000 + \$20,000 \times (1 - 0.40) - \$50,000 - \$10,000 \\ &= \$120,000 + \$30,000 + \$12,000 - \$50,000 - \$10,000 = \$102,000 \end{aligned}$$

**CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements**

---

Q.4738 Consider the following data from a company's financial statements for the year 2023:

- CFO (Cash from Operations): \$400,000
- Interest Paid (post-tax): \$24,000
- Dividends Paid: \$30,000
- Long-term Asset Purchases: \$100,000

The Cash Flow Coverage ratio for dividends is *closest to*:

- A. 10.35
- B. 15.25
- C. 13.33

The correct answer is C.

Recall that:

$$\begin{aligned}\text{Dividend Payment Coverage} &= \frac{\text{CFO}}{\text{Dividends Paid}} \\ &= \frac{\$400,000}{\$30,000} \\ &= 13.33\end{aligned}$$

**CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5:  
Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and  
common-size cash flow statements**

---

Q.4739 Which of the following best describes the implications of a consistently decreasing Free Cash Flow to the Firm (FCFF) over several years for a company not experiencing significant investments?

- A. It may indicate increased efficiency in asset utilization.
- B. It reflects an intentional strategy of leveraging for growth.
- C. It suggests potential challenges in sustaining operations without external financing.

The correct answer is **C**.

A consistently decreasing FCFF suggests potential challenges in sustaining operations without external financing, highlighting possible inefficiencies or declining profitability. This can necessitate external funds to maintain operations.

**A is incorrect.** Decreasing FCFF generally indicates less efficient asset utilization, implying the company is generating less cash relative to its operations and investments.

**B is incorrect.** A decrease in FCFF is generally not a result of a strategic choice to leverage for growth but rather an indicator of potential financial stress or declining operational efficiency.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements***

---

Q.4740 Consider a scenario where a company's Free Cash Flow to Equity (FCFE) is significantly higher than its Free Cash Flow to the Firm (FCFF). What does this suggest about the company's financial strategy?

- A. The company is likely reducing its debt load aggressively.
- B. The company is maintaining a high level of reinvestment in fixed assets.
- C. The company potentially increases its leverage, resulting in higher net borrowing.

The correct answer is **C**.

Higher FCFE than FCFF typically indicates increased leverage, as net borrowing boosts FCFE. This suggests a strategic increase in debt to finance operations or growth, which could raise financial risks.

**A is incorrect.** Reducing debt would decrease net borrowing, thus reducing FCFE relative to FCFF, not increasing it.

**B is incorrect.** Reinvestment in fixed assets would be captured similarly in FCFF and FCFE calculations and thus would not explain a discrepancy between the two measures.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5a: analyze and interpret both reported and common-size cash flow statements***

---

Q.4741 A high cash return on assets ratio is observed in a company with relatively stable revenue but significantly fluctuating net income. What could this *most likely* indicate about the company's earnings?

- A. The company has made several large, one-time sales of assets.
- B. The company might be involved in aggressive earnings management.
- C. The company is experiencing substantial non-cash expenses like depreciation or amortization.

The correct answer is C.

Significant non-cash expenses such as depreciation or amortization could explain why net income fluctuates despite stable revenue, as these expenses reduce net income but do not impact cash flow.

**A is incorrect.** One-time sales of assets would typically increase, not decrease, net income in the short term and would be irregular, affecting cash flows and not explaining consistently high Cash Return on Assets.

**B is incorrect.** While earnings management could cause fluctuations, it does not directly relate to a stable revenue scenario affecting the Cash Return on Assets.

**CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5b: calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios**

---

Q.4742 What does a declining debt payment coverage ratio over time generally *most likely* indicate about a company's financial health?

- A. The company opts to refinance its existing debts rather than pay them down.
- B. The company increasingly uses its cash flow for investment rather than debt repayment.
- C. The company's operational cash flow is deteriorating relative to its long-term debt obligations.

The correct answer is C.

Recall that the debt payment coverage ratio is calculated as:

$$\text{Debt coverage ratio} = \frac{\text{Cash flow from operations}}{\text{Total debt}}$$

A declining Debt Payment Coverage ratio suggests the company's cash flow from operations is insufficient to cover its debt obligations, indicating potential financial distress or inefficiency.

**A is incorrect.** Refinancing debt generally wouldn't directly cause a decline in this ratio unless it involves unfavorable terms that increase the debt burden or payment schedules.

**B is incorrect.** Using cash for investment would typically not lead to a decline in this ratio unless these investments fail to generate sufficient returns or cash flow.

**CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5b: calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios**

---

Q.4743 Suppose a company shows a consistently high cash flow to revenue ratio while its net income to revenue ratio is declining. What might this *most likely* indicate about its operational practices?

- A. The company may be realizing high non-operating revenues.
- B. The company is effectively controlling its operational cash expenditures.
- C. The company is likely facing increasing non-cash charges impacting profitability.

The correct answer is **C**.

Increasing non-cash charges like depreciation or amortization would reduce net income while not affecting cash flow. This could explain the high Cash Flow to Revenue ratio alongside a declining Net Income to Revenue ratio.

**A is incorrect.** Non-operating revenues would affect cash flow and net income similarly, thus not explaining a divergence between these ratios.

**B is incorrect.** Effective cash expenditure control would generally support high cash flow and net income ratios.

***CFA Level I, Volume 2, Topic 5 - Financial Statements Analysis, Learning Module 5: Analyzing Statements of Cash Flows II, LOS 5b: calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios***

---