## free cash flow

Free cash flow is a financial metric that represents the amount of cash a company generates from its operations after accounting for its capital expenditures. It is a measure of a company's ability to generate cash that can be used for various purposes, such as reinvesting in the business, paying off debt, or distributing to shareholders.

To calculate free cash flow, you would subtract the company's capital expenditures (CAPEX) from its operating cash flow. The formula for free cash flow is as follows:

Free Cash Flow = Operating Cash Flow - Capital Expenditures

Operating Cash Flow can be found in a company's cash flow statement, and Capital Expenditures can be obtained from its balance sheet or financial statements. It is important to note that free cash flow can vary significantly between different industries and companies, so it is often used in comparison with other companies or over time for the same company.

Analyzing a company's free cash flow can provide insights into its financial health and sustainability. A positive free cash flow indicates that the company is generating more cash than it needs for its regular business operations and capital investments, while a negative free cash flow may indicate financial difficulties.

## what is levered free cash flow

Levered free cash flow, also known as cash flow available to equity (CFE), is a measure of the cash that is available to the shareholders of a company after accounting for interest payments on debt and tax obligations. It is a useful metric for evaluating a company's ability to generate cash flow specifically for its equity investors.

To calculate levered free cash flow, you would start with the earnings before interest and taxes (EBIT) and then subtract the taxes paid and interest expenses. The formula for levered free cash flow is as follows:

Levered Free Cash Flow = EBIT \* (1 - Tax Rate) - Interest Expenses

The resulting levered free cash flow provides a more accurate representation of the cash flow available to the equity holders because it accounts for the effects of leverage (i.e., the use of debt) and the tax implications of interest payments on that debt.

Levered free cash flow is commonly used in financial analysis to assess a company's ability to generate cash flow to cover dividends, share buybacks, debt repayments, or other financial obligations specific to equity investors. It is especially relevant when evaluating companies with significant debt levels or varying tax rates. Comparing levered free cash flow across companies or over time can help in assessing their financial performance and shareholder value creation.

## free cash flow to equity

Free cash flow to equity (FCFE) is a financial metric that calculates the cash flow available to a company's equity shareholders after accounting for necessary capital expenditures, debt repayments, and other non-equity financing expenses. It measures the cash flow that is potentially available for distribution to shareholders or reinvestment in the business.

To calculate free cash flow to equity, you need to start with the company's net income and then adjust for non-cash expenses and changes in working capital. Next, deduct any necessary capital expenditures and debt repayments. Finally, adjust for any new debt issuance or share issuance during the period. The formula for free cash flow to equity is as follows:

FCFE = Net Income - Non-cash Expenses + Depreciation and Amortization - Change in Working Capital - Capital Expenditures - Debt Repayments + New Debt Issuance - Share Issuance

The resulting free cash flow to equity represents the cash flow available to be distributed to the shareholders (e.g., dividends) or reinvested in the business. It provides insight into the amount of cash a company can generate and potentially return to its equity shareholders.

FCFE is commonly used by investors and analysts to assess a company's ability to generate returns for its shareholders. It can also be used in valuation models to estimate the intrinsic value of a company's equity. Comparing FCFE across companies or over time can help in evaluating their financial performance and the potential for shareholder value creation.

## FCFE = Net Income - Non-cash Expenses + Depreciation and Amortization - Change in Working Capital - Capital Expenditures - Debt Repayments + New Debt Issuance - Share Issuance where to find

To calculate the components required for the free cash flow to equity (FCFE) formula, you can find the necessary information in a company's financial statements. Here is where you can typically find each component:

1. Net Income: You can find net income on the company's income statement or statement of comprehensive income.

2. Non-cash Expenses: Non-cash expenses like depreciation and amortization can also be found on the company's income statement. Look for line items such as depreciation expense and amortization expense.

3. Change in Working Capital: The change in working capital includes changes in current assets (e.g., accounts receivable, inventory) and current liabilities (e.g., accounts payable, accrued expenses). This information is typically provided in the company's balance sheet, specifically in the working capital section.

4. Capital Expenditures: Capital expenditures (CAPEX) represent the company's investments in long-term assets or fixed assets. You can find information on CAPEX in the cash flow statement under the investing activities section.

5. Debt Repayments: Debt repayments are the principal repayments made on the company's outstanding debt. These can be found in the cash flow statement, usually under financing activities, or in the notes to the financial statements.

6. New Debt Issuance: Information about new debt issuances can be found in the company's cash flow statement under financing activities or in the notes to the financial statements.

7. Share Issuance: Share issuances refer to new shares being issued by the company, which can be found in the company's equity section of the balance sheet or in the notes to the financial statements.

It is important to note that you may need to adjust the financial statements or refer to the footnotes to get more detailed information or ensure consistency in the calculation of FCFE. Additionally, some companies may report non-GAAP financial measures or provide additional details in their management discussion and analysis (MD&A) section, which can also be helpful in calculating FCFE.

Calculating free cash flow (FCF) from financial reports involves using specific line items from the income statement, balance sheet, and cash flow statement. There are three common types of free cash flow: Free Cash Flow to the Firm (FCFF), Free Cash Flow to Equity (FCFE), and Levered Free Cash Flow (LFCF). Here’s how you can calculate each:

1. Free Cash Flow to the Firm (FCFF)

FCFF represents the cash flow available to all capital providers, including both equity and debt holders.

Formula:

FCFF = EBIT (1 - Tax Rate) + Depreciation and Amortization - Changes in Working Capital - Capital Expenditures

Steps:

1. EBIT (Earnings Before Interest and Taxes): Found on the Income Statement.

2. Tax Rate: Can be calculated as Income Tax Expense/EBT (Earnings Before Tax) from the Income Statement.

3. Depreciation and Amortization: Found on the Cash Flow Statement under operating activities.

4. Changes in Working Capital: Calculated using the Balance Sheet.

* Working Capital = Current Assets - Current Liabilities
* Changes in Working Capital = (Current Assets at end of period - Current Liabilities at end of period) - (Current Assets at beginning of period - Current Liabilities at beginning of period)

5. Capital Expenditures (CapEx): Found on the Cash Flow Statement under investing activities.

2. Free Cash Flow to Equity (FCFE)

FCFE represents the cash flow available to equity shareholders after all expenses, reinvestment, and debt repayments.

Formula:

FCFE = Net Income + Depreciation and Amortization - Changes in Working Capital - Capital Expenditures + Net Borrowing

Steps:

1. Net Income: Found on the Income Statement.

2. Depreciation and Amortization: Found on the Cash Flow Statement under operating activities.

3. Changes in Working Capital\*\*: Calculated using the Balance Sheet (same as above).

4. Capital Expenditures (CapEx): Found on the Cash Flow Statement under investing activities.

5. Net Borrowing: Change in debt from the Cash Flow Statement under financing activities.

* Net Borrowing = New Debt Issued - Debt Repayments

3. Levered Free Cash Flow (LFCF)

LFCF is the cash flow available after interest payments and is also referred to as Free Cash Flow to Equity.

Formula:

LFCF =Cash Flow from Operations -Capital Expenditures

Steps:

1. Cash Flow from Operations: Found on the Cash Flow Statement.

2. \*\*Capital Expenditures (CapEx): Found on the Cash Flow Statement under investing activities.

Example Calculation

\*\*Income Statement:\*\*

- \*\*Net Income:\*\* $100,000

- \*\*EBIT:\*\* $150,000

- \*\*Income Tax Expense:\*\* $30,000

- \*\*EBT:\*\* $130,000

- \*\*Depreciation and Amortization:\*\* $20,000

\*\*Balance Sheet:\*\*

- \*\*Current Assets (End of Period):\*\* $200,000

- \*\*Current Liabilities (End of Period):\*\* $150,000

- \*\*Current Assets (Beginning of Period):\*\* $180,000

- \*\*Current Liabilities (Beginning of Period):\*\* $140,000

\*\*Cash Flow Statement:\*\*

- \*\*Cash Flow from Operations:\*\* $120,000

- \*\*Capital Expenditures:\*\* $50,000

- \*\*New Debt Issued:\*\* $30,000

- \*\*Debt Repayments:\*\* $20,000

\*\*Calculations:\*\*

1. \*\*Tax Rate\*\*: \( \frac{30,000}{130,000} \approx 0.23 \)

2. \*\*Changes in Working Capital\*\*:

\[ \Delta \text{Working Capital} = (200,000 - 150,000) - (180,000 - 140,000) = 50,000 - 40,000 = 10,000 \]

3. \*\*Net Borrowing\*\*: \(30,000 - 20,000 = 10,000\)

\*\*FCFF\*\*:

\[ \text{FCFF} = 150,000 \times (1 - 0.23) + 20,000 - 10,000 - 50,000 \]

\[ \text{FCFF} = 115,500 + 20,000 - 10,000 - 50,000 = 75,500 \]

\*\*FCFE\*\*:

\[ \text{FCFE} = 100,000 + 20,000 - 10,000 - 50,000 + 10,000 \]

\[ \text{FCFE} = 70,000 \]

\*\*LFCF\*\*:

\[ \text{LFCF} = 120,000 - 50,000 = 70,000 \]

By following these steps, you can calculate the different types of free cash flow using specific terms from the financial statements.