Free Cash Flow Explained

Idea In Short

When you value a business, start with free cash flow [FCF], which is cash flow from operations minus capital expenditure, and read it next to earnings per share [EPS] rather than instead of it. FCF shows what the company can do with money after paying to keep itself running: pay dividends, buy back shares, repay debt, make acquisitions or reinvest. Judge it over two to three years, because capital spending is lumpy and working capital can be managed. Subtract stock-based compensation before dividing by share count. Compare FCF yield with the stock's own history, its peers and long-term government bond yields. When net income rises while FCF stays flat or falls, investigate before you trust the earnings.

Amazon reported a free cash flow [FCF] outflow of approximately $11.6 billion in 2022 while building warehouses and data centers at a pace the income statement's depreciation schedule could not capture. In 2023 it reported over $30 billion of positive FCF as that capital expenditure [CAPEX] normalized. Earnings per share [EPS] told one story throughout. Free cash flow told another, and the FCF story was the one that mattered for valuing the business. The free cash flow definition in investing is simple:

> cash generated from operations minus capital expenditure

What the metric reveals that earnings per share cannot is what the company can actually do with money, pay dividends, buy back shares, repay debt, make acquisitions or reinvest, after it has paid to keep the business running.

The gap between the two measures showed up in Amazon's own reporting. Operating cash flow rose 82% to $84.9 billion in 2023 from $46.8 billion a year earlier, and net income

reached $30.4 billion, or $2.90 per diluted share.1 Reading the cash flow statement next to the income statement explains why the reported profit and the cash the company generated moved in different directions.

The formula and what goes into it

FCF = cash flow from operations minus capital expenditure. Both figures appear in the cash flow statement, not the income statement. Read the formula as a question:

> after the business paid for the assets it needs, how much cash is left?

Cash flow from operations starts with net income, adds back non-cash charges like depreciation and adjusts for working capital changes:

> rising inventory and receivables consume cash even if the income statement shows profit

Capital expenditure is the cash spent on physical assets like factories, equipment and software. Subtract one from the other and the result is the cash the business generated after maintaining and growing its asset base.

A worked example shows how far the number can diverge from net income. A manufacturer reports $80 million of net income. Add back $30 million of depreciation and subtract $25 million tied up in growing inventory and receivables, and operating cash flow is $85 million. The company then spends $60 million on a new production line. FCF is $25 million. The same company paying a $50 million dividend has a $25 million gap it must cover by borrowing or drawing down cash reserves. The income statement showed $80 million of profit. The cash reality is a $25 million shortfall after the dividend.

Item	Amount
Net income	$80M

Item	Amount
Add: depreciation	+$30M
Less: working capital increase	-$25M
Cash flow from operations	$85M
Less: capital expenditure	-$60M
Free cash flow	$25M
Annual dividend payment	$50M
Cash gap	-$25M

The table lays out the same bridge line by line:

> profit becomes cash flow from operations, and only then does capital expenditure turn it into free cash flow.

Why FCF beats EPS for most valuation questions

EPS is calculated on an accrual basis. Revenue is recognized when earned, not when cash arrives. A $60 million factory is spread over its useful life through depreciation rather than deducted in full when the check clears. Estimates play a large role:

> accruals, reserves and management assumptions all shape the final net income number

None of those adjustments change the cash that actually left the bank account. In his 2004 letter, Bezos made the same point in valuation terms:

> shares are worth the present value of future cash flows, not future earnings, and a company can impair shareholder value by growing earnings when the capital investment that growth requires exceeds the present value of the cash it produces

FCF uses cash received and cash spent. When a customer pays slowly, FCF falls because receivables consume cash, even if the income statement records the revenue. When a company builds a factory, FCF falls by the full cost in the year of the expenditure, not by a fraction spread across 20 years of depreciation.

The two metrics should converge over long periods for a healthy, stable business. When they diverge persistently, net income rising while FCF stays flat or falls, the gap demands investigation. It usually means one of three things:

> the business is consuming working capital at an accelerating rate, capital expenditure is running above the depreciation rate that feeds into net income, or management is using accruals aggressively to front-load revenue recognition

Jeff Bezos called FCF the ultimate financial measure of Amazon in his 2004 shareholder letter, when the company was investing heavily in infrastructure and generating minimal generally accepted accounting principles [GAAP] profit. That framing turned out to be correct:

> the CAPEX being expensed through depreciation over many years was building durable competitive advantages whose cash returns eventually dwarfed the investment

The same letter reported that Amazon's free cash flow grew 38% to $477 million in 2004, a $131 million improvement over 2003.

In that letter, Bezos described a hypothetical transportation business whose income statement showed 100% compound earnings growth and $150 million of cumulative earnings, while its cumulative free cash flow over four years was a negative $530 million.2 He made the underlying point in one sentence:

Cash flow statements often don't receive as much attention as they deserve

FCF yield: how to use it as a valuation tool

FCF yield divides FCF by market capitalization. A company generating $2 billion of FCF with a $40 billion market cap has a 5% FCF yield. Like dividend yield, the right benchmark is the stock's own history, its peers and long-term government bond yields. A 5% FCF yield when Treasuries yield 5.2% is not compelling:

the equity offers no premium for the additional risk

A 5% FCF yield when Treasuries yielded 1% was a different proposition

The Federal Reserve publishes the 10-year Treasury yield daily, which makes it a convenient benchmark for this comparison.3 The same arithmetic shows how price changes the picture:

$2 billion of FCF on a $25 billion market capitalization gives an 8% yield

Unlevered FCF, calculated before interest payments, feeds discounted cash flow models that value the entire enterprise as the present value of future cash generation. Levered FCF, calculated after interest and net debt repayments, shows what is available specifically to equity holders. Both appear in professional analysis, and the distinction matters when comparing companies with very different debt levels. A company with large debt can show strong unlevered FCF and little levered FCF, because interest and principal payments take cash before equity holders see any. The yield can also be measured per share:

FCF divided by shares outstanding, the measure Bezos named in his 2004 letter

The limitations worth knowing

Free cash flow is also a non-GAAP measure, so published figures vary with the adjustments each analyst or company applies, and it pays to check the definition behind any number before comparing it. FCF can be managed, though it is harder than managing EPS. Some investors prefer it for exactly that reason, since it is more difficult to manipulate than net income.4 Delaying supplier payments inflates operating cash flow temporarily. Selling receivables accelerates cash collection in a way that does not reflect sustainable operating performance. Both inflate FCF in the short term and reverse in subsequent periods.

Capital expenditure is lumpy. A company that deferred $200 million of maintenance CAPEX in one year will show elevated FCF followed by a catch-up spending year with depressed FCF. Averaging two to three years of FCF is more informative than relying on any single year. A practical check is to compare FCF with net income across those years:

> a ratio that stays well below one deserves an explanation

Dividing FCF by revenue gives an FCF margin that lets investors compare companies of different sizes.

Stock-based compensation is added back as a non-cash charge in the operating cash flow calculation, which flatters FCF while diluting existing shareholders with new shares. A company paying its employees largely in stock can show strong FCF while continuously eroding per-share value. Analysts who care about per-share FCF subtract stock compensation before dividing by share count.

Negative FCF is not automatically a problem. Amazon's negative FCF in 2021 and 2022 reflected deliberate infrastructure investment at a scale whose returns arrived in 2023 and beyond. Negative FCF caused by operating losses in a business with no investment thesis is a different and more serious situation. The question is always whether the CAPEX being spent is building future earnings or covering present shortfalls.

- 1Amazon.com announces fourth quarter results
- 22004 letter to shareholders
- 3Market yield on U.S. Treasury securities at 10-year constant maturity
- 4Free cash flow

Summary

Free cash flow [FCF] answers the question earnings per share [EPS] cannot: how much money did the business actually generate after paying to keep itself running. EPS tells you what the accountants recorded. FCF tells you what arrived in the bank. For dividends, buybacks, debt capacity and discounted cash flow [DCF] valuation, FCF is the number that matters. Its limitations are real, capital spending is lumpy, working capital can be managed and stock compensation flatters the figure, but those are reasons to average several years and read the cash flow statement carefully, not reasons to rely on earnings per share instead.