The Pitfalls of Free Cash Flow

Sure, free cash flow is an appropriate basis for NPV calculations that reflect long-term value creation. But, as a period measure, free cash flow can lead to systemic underinvestment.

By **Greg Milano** and **Jason Gould**

Free cash flow represents the cash available to a company after funding its operations and investments. It is calculated as net income, plus non-cash expenses, less any increases in net working capital, capital expenditures, and other investments. In essence, free cash flow (FCF) is the cash that is freely available to all equity and debt investors in a company. So, it is not surprising that investors often use it to indicate whether a company is likely, or able, to distribute excess capital to shareholders. But, over the last two decades, a troubling trend has emerged in companies like Honeywell, Pitney Bowes, and Verizon that use FCF as a period performance measure (as disclosed in 2019 proxy statements).

The logic behind using FCF to reflect profitability may seem sound. After all, FCF is used in discounted cash flow analysis and recognizes capital spending. But upon closer inspection, FCF frontloads the recognition of investment costs in the first year, which punishes current performance and, at the same time, makes the investment appear free in later periods. Managers whose incentives are linked to FCF, then, are being encouraged to turn down value-creating investments that decrease FCF in the short term. And this can lead to systemic underinvestment over the long term. Why expect a manager to undertake a project that would lower their own compensation?

In some situations, such as when a company is aiming to avoid bankruptcy, management may be willing to erode their long-term earnings power by providing incentives to delay all non-essential investment; and in such cases, FCF serves as an excellent period performance measure. But the vast majority of companies that seek to align managers' incentives with a healthy balance of short- and long-term value creation should be wary of tying annual FCF to compensation—as it can foster costly underinvestment.

Pay No Attention to FCF Yield

The increasing emphasis on FCF has led some analysts, investors, and companies to use free cash flow yield (FCF yield) as a replacement for price to earnings ratios when valuing companies. FCF yield is calculated by dividing FCF by the company's enterprise value (commonly calculated as FCF divided by market cap, or on a per share basis). Many analysts and investors, believe that FCF is an excellent fundamental indicator of a company's current performance. So, FCF yield may likewise seem like an ideal metric to value and measure shareholder return. But the truth is, FCF yield sends short-term signals that too often run counter to maximizing the long-run value of a company.

Consider a company that is evaluating an investment that would create significant value, but reduce current period FCF. The company's management team decides to shelve the investment to boost short-term FCF, and thus their annual bonus. The market, having anticipated the investment, reacts negatively to the cancelation; in turn, the company's market cap decreases.

In essence, by avoiding the investment, the numerator in the FCF yield calculation increased, while the denominator decreased resulting in a higher FCF yield. So, was canceling the investment the right decision? A manager told to use FCF yield as a benchmark may think so... and certainly it appears to be in their own personal interest to do so. But without a doubt, the answer is no. Canceling value-creating investments to increase FCF reliably destroys value. And, yet, many companies using FCF as a performance measure routinely reward managers for making decisions that predictably lead to long-term underperformance, lost growth opportunities, and lower total shareholder return (TSR).

Wouldn't it be great, then, if there were a metric that reliably rewards and encourages value-adding investments, while also incentivizing capital discipline and efficiency? Fortuna Advisors developed Residual Cash Earnings (RCE) to be the ultimate measure of value added that can inform all aspects of investment decision-making—and also serve as a reliable period performance measure, since it **explains share prices and TSR far more reliably** than other performance measures.

Unlike FCF, RCE doesn't frontload investment costs. Instead, RCE recognizes value creation more smoothly over the life of the investment. So good investments that might have been discouraged or canceled, with FCF-based performance measures, are encouraged and rewarded when incentives are linked to RCE. And investments earning insufficient returns reliably drive down RCE, so there's no incentive for overinvestment or "growth for growth's sake."

Investors Value Good Investments Over Maximizing Period FCF

It's clear that managements have been focusing more and more on FCF and FCF yield. And, as noted, FCF is commonly monitored by analysts and investors. This is perhaps one of those instances where it's important to keep in mind that, what investors say, and what they do, are often entirely different things.

This is supported by a study we conducted on members of the Russell 1000 (excluding companies in the real estate, banking, finance, and insurance industries) that found an inverse relationship between FCF yield and TSR, as well as valuation. We stratified our sample by tertiles that reflect both FCF yield and five-year TSR. Those companies with the highest five-year average FCF yield from 2014 to 2018 had the lowest five-year TSR over the same period, at 8.4%—fully 2.5% lower than the TSR generated by the lowest FCF yield tertile. If a thousand dollars were invested in 2014 in the high FCF yield tertile of companies in our sample, it would have been worth roughly $200 less than an identical investment in the tertile of companies with the lowest FCF yields. And this relationship generally held for the five years ending in 2017 and 2016 as well.

A similar relationship holds on valuation as well. In each of the three rolling five-year periods, the tertile of high FCF yield companies had the lowest median EBITDA multiple by a fair margin. So why do some investors and analysts use FCF yield, when it has such a negative relationship to both TSR and valuation? We cannot explain this enigma; but it is clear that company managers should avoid measuring and rewarding period FCF, as it will likely lead to worse results for the very shareholders that claim to prioritize the measure.

A Tale of Two Companies

Let's consider two companies from our study: Amazon, and Xerox. We want to note that, of course, most companies' performance will look lackluster when compared to that of Amazon over the period studied. But we chose Amazon because it is well known, and even roundly critiqued by some, for investing the majority of its profits back into the business. Indeed, its average FCF Yield, between 2014 and 2018, was 2.4%, which is in the bottom tertile of our study. Unsurprisingly, Amazon doesn't use FCF as a performance measure. If it did, this would likely have discouraged its high reinvestment rate and throttled the astonishing growth that has made the company a top performer for shareholders over the past decades.

On the other end of the spectrum is Xerox, with an average FCF yield of 8.3% over the same five-year period. The difference between the five-year TSRs and five-year average EBITDA multiples for the two companies is staggering. A five-year investment in Amazon, starting in 2014, would have yielded nearly four times the ending value produced by investing in Xerox over the same period.

Amazon's success has been largely driven by its appetite for investment and its ability to convert those investments into profitable growth. Unburdened by short-term FCF targets, Amazon has been able to expand in many directions. Amazon now produces movies, television content, and has even entered the supermarket industry by acquiring Whole Foods. Of course, much of Amazon's investment has been in the form of R&D, so traditional earnings aren't sufficient to explain the company's value. What is needed to understand **Amazon's "enigmatic" valuation** is a comprehensive measure, like RCE, which treats these R&D expenditures as investments rather than period expenses.

To be clear, we are not advising that Xerox acquire a supermarket chain. But companies that consider the motivations encouraged by their performance measures and target-setting processes tend to avoid the short-termism associated with period measures like FCF. On the other hand, companies that blindly emphasize imperfect measures tend to encourage their managers to focus on short-term goals that are often at odds with successful value creation over the long term. Companies that take care to ensure their performance measures are reliably correlated with value creation tend to be rewarded for their foresight.

Encouraging (Profitable) Long-Term Investment

It is of unmistakable importance, over the long term, to select performance measures that align managers and shareholders' interests. Using FCF as a performance measure, in most companies, causes systematic underinvestment. As evidenced by our research offered above, this harms shareholders. On the other hand, comprehensive measures like RCE encourage managers to make good investments, while holding them accountable for invested capital. By compensating managers based on improvements in RCE, they will be more motivated to strike an optimal balance between short-term performance and long-term growth, resulting in better TSR for shareholders, and long-term value creation that benefits all stakeholders of a company.

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