



FREE CASH FLOW

BY: DOUG SCHERRER, MANAGING MEMBER,
EFFICIENT ALPHA CAPITAL, LLC



Introduction to Free Cash Flow

Free Cash Flow has always been considered an important topic in Corporate Finance. It is, after all, the most fundamental measure of why any business should exist: to generate cash that can be distributed to its stakeholders (debt or equity holders). Why else would one want to own a stake in a company, other than to generate cash that can be put in a bank account?

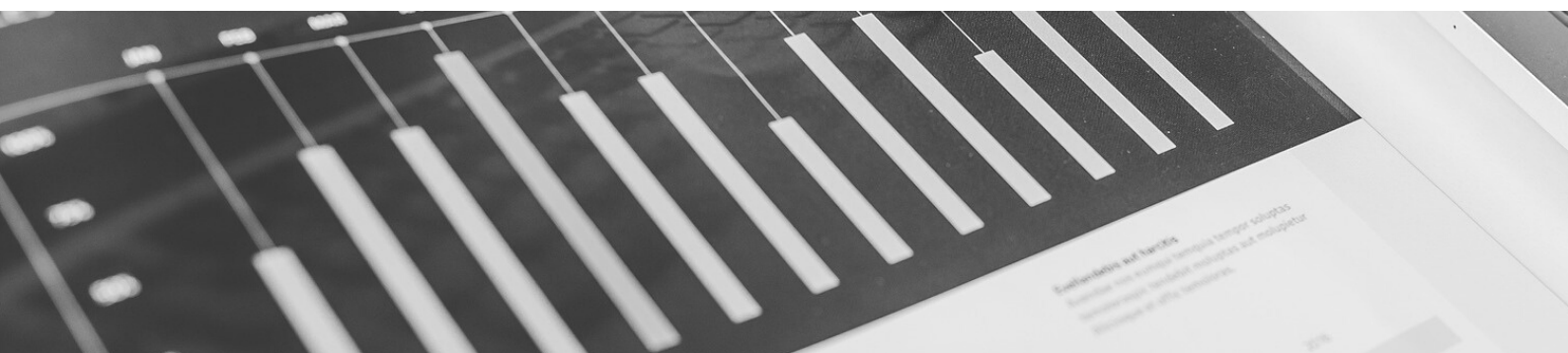
This metric is actually a straightforward calculation, that can be taken directly from any company's Cash Flow Statement; it is equal to Cash Flow from Operating Activities less Capital Expenditures (sometimes referred to as Investments in Property, Plant, and Equipment – or something similar). Here is an example of this calculation, from Apple's most recent fiscal year:

	Twelve Months Ended	
	September 29, 2018	September 30, 2017
Cash and cash equivalents, beginning of the period	\$ 20,289	\$ 20,484
Operating activities:		
Net income	59,531	48,351
Adjustments to reconcile net income to cash generated by operating activities:		
Depreciation and amortization	10,903	10,157
Share-based compensation expense	5,340	4,840
Deferred income tax expense/(benefit)	(32,590)	5,966
Other	(444)	(166)
Changes in operating assets and liabilities:		
Accounts receivable, net	(5,322)	(2,093)
Inventories	828	(2,723)
Vendor non-trade receivables	(8,010)	(4,254)
Other current and non-current assets	(423)	(5,318)
Accounts payable	9,175	8,966
Deferred revenue	(44)	(626)
Other current and non-current liabilities	38,490	1,125
Cash generated by operating activities	77,434	64,225
Investing activities:		
Purchases of marketable securities	(71,356)	(159,486)
Proceeds from maturities of marketable securities	55,881	31,775
Proceeds from sales of marketable securities	47,838	94,564
Payments for acquisition of property, plant and equipment	(13,313)	(12,451)
Payments made in connection with business acquisitions, net	(721)	(329)
Purchases of non-marketable securities	(1,871)	(521)
Proceeds from non-marketable securities	353	126
Other	(745)	(124)
Cash generated by/(used in) investing activities	16,066	(46,446)

FY2018 Free Cash Flow = \$77,434 – \$13,313 = \$64,121

FY2017 Free Cash Flow = \$64,225 – \$12,451 = \$51,774

It seems, though, that Free Cash Flow was somehow lost between the Corporate Finance classroom and Wall Street. Everyone is familiar with the classic idiom, "Cash is King," but it's remarkable how much financial analysis simply ignores the amount of cash a company is actually generating. Maybe it all started during the Internet Bubble of the late 1990s, when many high-flying start-ups were valued as a multiple of eyeballs. In addition to making the case for why Free Cash Flow should not be ignored any longer, this whitepaper will compare Free Cash Flow to other financial measures, discuss the limitations of Free Cash Flow, and review how Free Cash Flow can be used by investors today.



Free Cash Flow vs. Other Financial Metrics

Free Cash Flow is not only the fundamental element for why any investor would want to be a shareholder in a company (i.e. to receive cash distributions from that company), but also stands-out as being very difficult to paint a “rosier” picture of financial performance compared to reality. This only would occur if a company had an abnormal Working Capital-related event (e.g., upfront payment from a large customer or delayed payment to a large supplier) – but even these scenarios could be normalized by looking at Free Cash Flow across multiple periods.

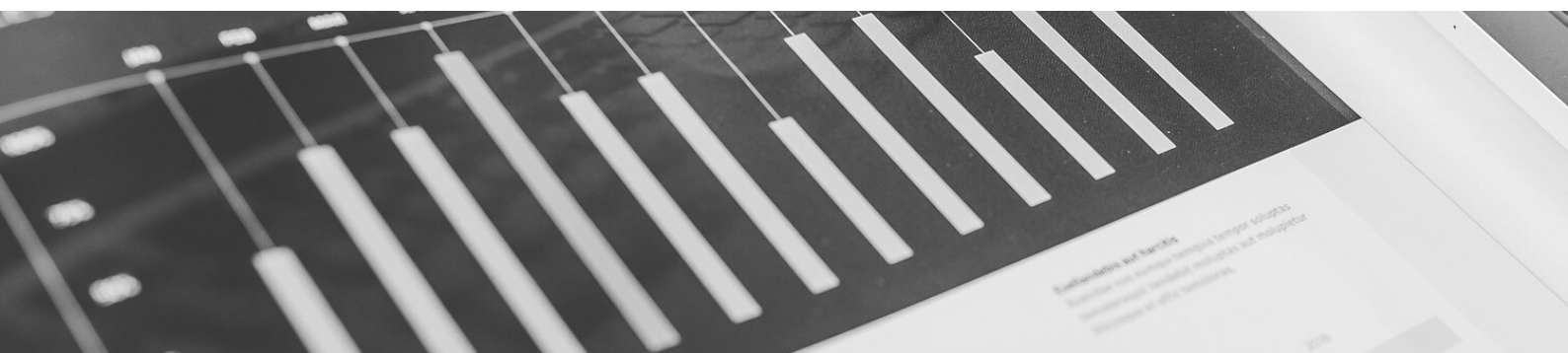
In contrast, all other common measures of financial performance can indeed “overestimate” a company’s financial profile. Most notably, by excluding key elements of a company’s financial model that could reveal a much less positive view. Examples of financial metrics that can be “false positives” include:

Financial Metric	Key Exclusions
Operating Cash Flow	Capital Expenditures
Net Income	<i>The above, plus: Working Capital</i>
Pre-Tax Income	<i>The above, plus: Income Taxes</i>
Operating Income (EBIT)	<i>The above, plus: Net Interest Expense</i>
EBITDA	<i>The above, plus: Depreciation related to Capital Expenditures</i>
Gross Profit	<i>The above, plus: Customer acquisition costs and G&A overhead</i>
Revenue	<i>The above, plus: Costs of Goods Sold</i>

It is more than a bit perplexing that while all of the metrics above are reported by every publicly-traded company (with the exception of EBITDA, though this metric is pervasive in financial analysis nevertheless), Free Cash Flow remains unreported by many – or maybe even most – publicly-traded companies, requiring an analyst to calculate this metric manually.

Uber presents an interesting example of how little emphasis is often placed around Free Cash Flow generation. In all of the discussion and analysis before and after Uber’s IPO earlier this year, did anyone ever ask this simple question: With over \$3 billion in negative Free Cash Flow over the past twelve months, how long will it take Uber to become Free Cash Flow positive – and then cumulatively generate in excess of \$80+ billion in Free Cash Flow, the equivalent of its equity value at IPO? Looking at Uber’s valuation in this way, it may not be a big surprise that Uber’s stock price has fallen so significantly since its IPO.

It seems, though, that Free Cash Flow was somehow lost between the Corporate Finance classroom and Wall Street. Everyone is familiar with the classic idiom, “Cash is King,” but it’s remarkable how much financial analysis simply ignores the amount of cash a company is actually generating. Maybe it all started during the Internet Bubble of the late 1990s, when many high-flying start-ups were valued as a multiple of eyeballs. In addition to making the case for why Free Cash Flow should not be ignored any longer, this whitepaper will compare Free Cash Flow to other financial measures, discuss the limitations of Free Cash Flow, and review how Free Cash Flow can be used by investors today.





EFFICIENT ALPHA FREE CASH FLOW INDEX

Limitations of the Free Cash Flow Metrics

No single metric is ever perfect, and Free Cash Flow can certainly have distortions – primarily by making a company's performance look worse than it actually is. Here are some examples:

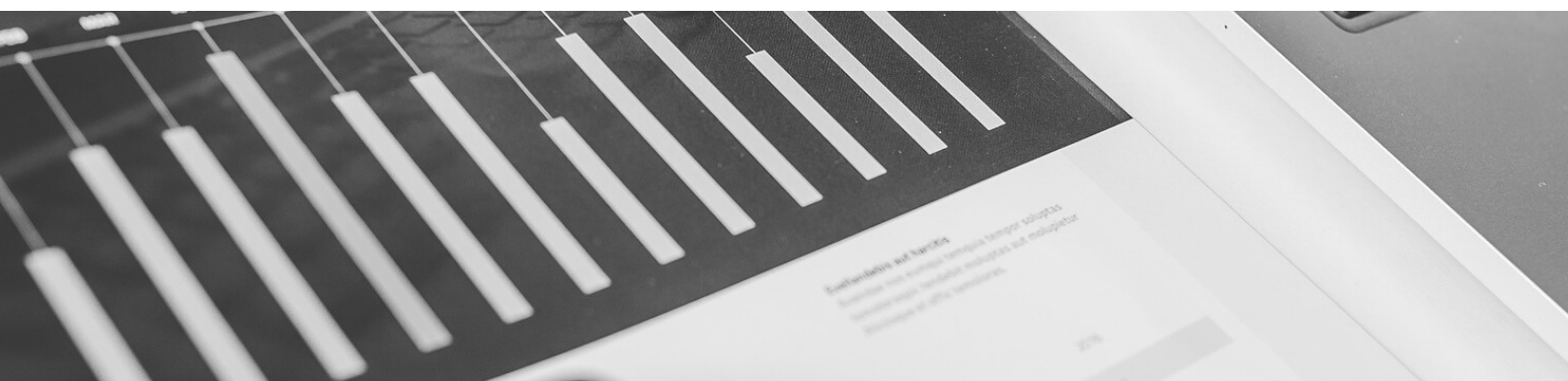
- A SaaS company that is investing all of its excess cash in new customer acquisition could have zero (or negative) Free Cash Flow. If a company like this is growing fast and has very positive unit economics associated with new customer acquisition (high Gross Margins, high retention rates, short payback periods on sales & marketing spend), then it could represent a compelling investment opportunity even with poor Free Cash Flow characteristics. For such a company, valuation metrics such as Enterprise Value to Revenue could actually be a very valid approach.
- An aerospace components company that manufactures products with high Gross margins could depress its Free Cash Flow for multiple years while building a new factory. If the payback period based on the manufacturing capacity of the new factory is reasonable and demand for the company's products is sufficient to support the additional output, then this company could certainly be an attractive investment despite low Free Cash Flow generation for a period of time. Enterprise Value to EBITDA could be a better valuation methodology for this company.
- An E-Commerce business that has high Inventory requirements, but poor terms with its suppliers (resulting in low Accounts Payable balances), would generate very little Free Cash Flow as it grows due to a negative impact from changes in Working Capital. This company could only generate meaningful Free Cash Flow when its growth slows, reducing the drag on cash generation from its increasing Working Capital needs. Enterprise Value to EBITDA would likely be the right valuation metric to use for this company. Though Free Cash Flow would still be a helpful metric in this example, since this type of company should be valued at a lower Enterprise Value to EBITDA metric than a similar business with lower Working Capital requirements that is able to generate positive Free Cash Flow as it grows.
- Of course, as with any financial metric, Free Cash Flow can distort the view of a company's financial performance with one-time changes in revenue and/or expenses.

Free Cash Flow in Today's Market

Free Cash Flow is a particularly important metric in today's market environment, which features a unique set of circumstances with many newly-public companies valued in "non-traditional" ways (as alluded to in the above Uber example), while investors overall are concerned about a potential recession, high levels of corporate debt, and how they can generate income in a low – or now negative – Interest rate environment.

Focusing on Free Cash Flow to identify stocks that have the potential to outperform the broader market has relevance across a number of different use-cases:

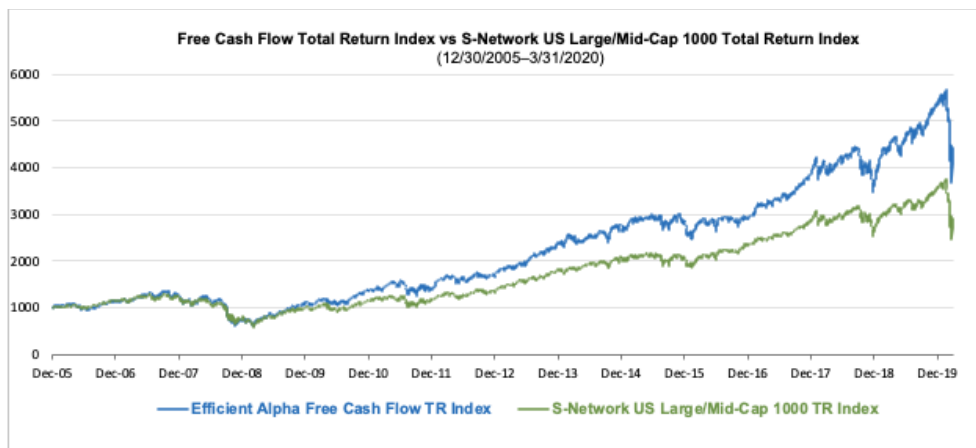
- For investors that are reticent to invest in technology companies that trade based upon (very rich) revenue multiples, investing only in companies that have favorable Free Cash Flow characteristics presents a methodology to avoid the risks associated with including these former start-ups that have yet to turn a profit in their portfolio.
- While the music is still playing during this decade-plus bull run and interest rates continue to decline, debt investors have been incredibly "generous" to companies with the amount of leverage they are willing to put on a business. I have seen this very notably in the Private Equity market, in which lenders are often willing to offer loans up to 7-8x an "Adjusted Pro Forma EBITDA" metric – that is frequently more of an "aspirational" view on the profitability of a business, rather than one that's truly rooted in reality. While publicly-traded companies, overall, are less levered than ones owned by Private Equity fund, they are nonetheless exposed to the potential risks of this corporate debt "bubble." Investing in companies with only the most favorable Free Cash Flow characteristics is therefore a way to avoid potential pitfalls with elevated levels of corporate debt, since these companies are much less likely to encounter cash flow crunches.
- When governments start to issue debt at negative interest rates – promising to repay less money than the principal at maturity – it's natural for investors to start searching for yield via dividends from publicly-traded companies. The Dividend Yield of a stock is obviously a natural metric to consider in identifying opportunities using this investment approach. However, Dividend Yield can be a misleading metric:
- Low Dividend Yields can present an opportunity for yield-focused investors if a company is able to raise the amount of excess cash they distribute to shareholder via dividends. In this way, Dividend Yield may ignore additional upside that could be available from companies that have strong Free Cash Flow generation.
- At the same time, a low Dividend Yield could indicate that a company is very richly valued, if there is not much upside to the current dividend payout.
- Companies that have high Dividend Yields could be quite attractive – but also could be a risky proposition. Often companies trade at high Dividend Yields because the market is skeptical that the business fundamentals will be able to sustain the current dividend payout.



Efficient Alpha Capital Free Cash Flow Index

The Efficient Alpha Capital Free Cash Flow Index (the “EAC FCF Index”) applies the insights above to create a stock portfolio whose returns can outperform those of the underlying benchmark index. Companies are included in the EAC FCF Index based upon their Free Cash Flow as a percentage of revenue (Free Cash Flow Margin) and EBITDA (Free Cash Flow Conversion). The EAC FCF Index also includes revenue growth and valuation overlays in an effort to include companies that are growing and not necessarily over-valued. The result is performance that is summarized below, demonstrating the potential for a positive correlation between solid Free Cash Flow generation and investment returns:

Calendar Year Ending Total Return Appreciation		
	Efficient Alpha Free Cash Flow TR Index	S-Network US Large/Mid-Cap 1000 TR Index
12/31/2006	13.42%	15.44%
12/31/2007	12.14%	6.82%
12/31/2008	-40.63%	-36.92%
12/31/2009	45.62%	27.61%
12/31/2010	24.93%	16.02%
12/31/2011	2.54%	1.52%
12/31/2012	21.39%	16.21%
12/31/2013	40.20%	34.20%
12/31/2014	14.12%	12.70%
12/31/2015	3.69%	1.00%
12/31/2016	2.40%	12.04%
12/31/2017	32.05%	22.27%
12/31/2018	-2.96%	-4.86%
12/31/2019	43.79%	31.70%
YTD (3/31/20)	15.78%	5.20%



For more information on how the lessons of this whitepaper about the power of the Free Cash Flow metric can be applied using the Efficient Alpha Capital Free Cash Flow Index, please visit <https://snetworkglobalindexes.com/indexes/efficient-alpha-indexes>