

TrimTabs Free Cash Flow Investment Research

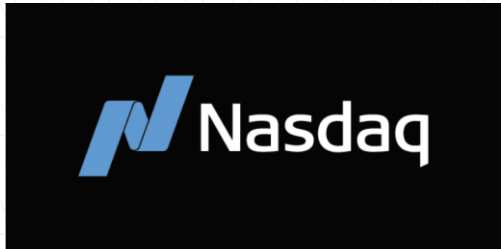
Nasdaq 100: Today vs. The Dotcom Bubble

A Note From Our Research Desk | May 16, 2019

Free Cash Flow Investing



TRIMTABS
Asset Management



Is it fair to ask whether or not we are facing another tech bubble? The Nasdaq 100 has risen an unprecedented 18 times in 19 weeks. Noticeable IPOs, such as Uber and Lyft, have been issued without a clear path to future profitability. Amid concerns of an economic slowdown, and rising tensions between the US and China on trade and intellectual property issues, the US stock market sold off sharply in late 2018. All eyes have been on the high-flying technology sector, and its potential exposure to a US-China trade war.

At TrimTabs, we focus on interpreting a company's Free Cash Flow condition to examine its fundamental strength. Based on our research, the Free Cash Flow condition for Nasdaq 100 companies is quite different this time, as compared to the Dotcom bubble. From an aggregate level, Free Cash Flow Margin for Nasdaq 100 companies reached a 13% peak in late 1999 before the bust. Today's aggregate margin is 15.11% as of April 2019.

We can see an even clearer picture by looking at the trimmed average Free Cash Flow of the Nasdaq 100. From 1999-2001, the trimmed average Free Cash Flow margin ranged from -12% to -3%, meaning the average company in the Nasdaq 100 was not profitable. Nowadays, the trimmed average Free Cash Flow margin is nearly 19% with an uptrend, displaying a much better picture of profitability. Moreover, over 90% of the Nasdaq 100 companies reported positive Free Cash Flow in the trailing-twelve-month period, compared to about 65% during the Dotcom bubble.



Judging profitability from a Free Cash Flow perspective, the Nasdaq 100 companies are much healthier today. Our research suggests that for investors who are concerned about the market environment but still want to get exposure to Nasdaq 100 companies, an evaluation using Free Cash Flow may help differentiate outperformers.

From March 1999 to April 2019, the average company in the Nasdaq 100 with positive Free Cash Flow generation, defined as the trailing-twelve-month Free Cash Flow reported, generated a 13.17% annualized return compared to 11% for the average Nasdaq 100 company. More importantly, companies with positive Free Cash Flow generation outperformed companies with negative Free Cash Flow generation by 13.88%, along with reduced volatility and a lower drawdown.

Using Free Cash Flow growth, calculated as the year-over-year growth of the trailing-twelve-month Free Cash Flow, companies with positive Free Cash Flow growth produced 12.79% annualized return on average, outperforming companies without Free Cash Flow growth by 5.67%.

Our mission is to provide investors with Free Cash Flow based investment products and services to contribute to their long-term investment success.

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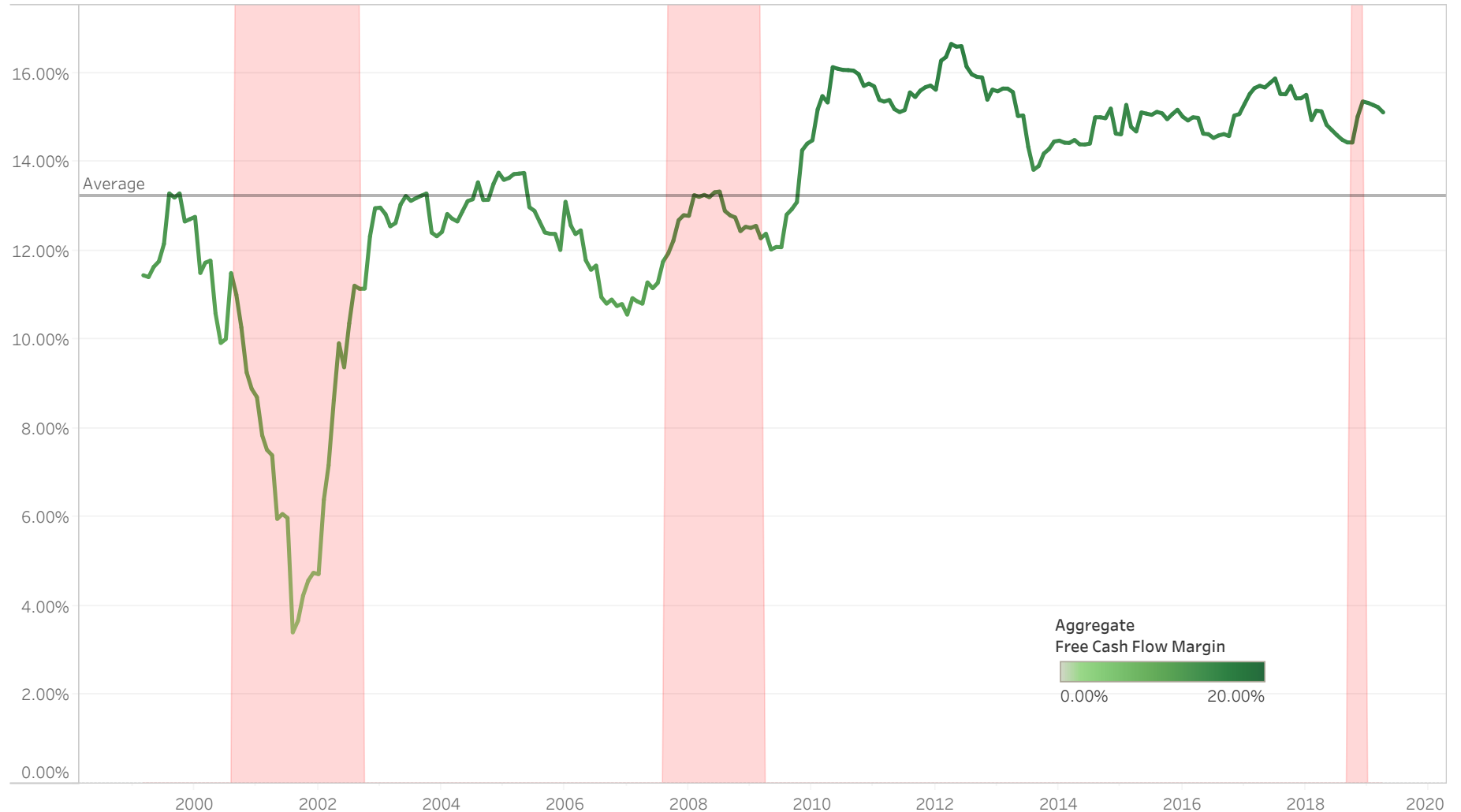
Free Cash Flow conditions and their applications for the Nasdaq 100 Companies



Nasdaq 100 Companies Profitability from a Free Cash Flow Perspective

Aggregate Level Free Cash Flow Margin TTM

03/31/1999 to 04/30/2019



Source: TrimTabs Asset Management, FactSet

Aggregate Free Cash Flow Margin TTM is measured by trailing-twelve-month total Free Cash Flow divided by trailing-twelve-month total revenue for Nasdaq 100 companies. The shaded areas represent market drawdown periods which are larger than 10%.

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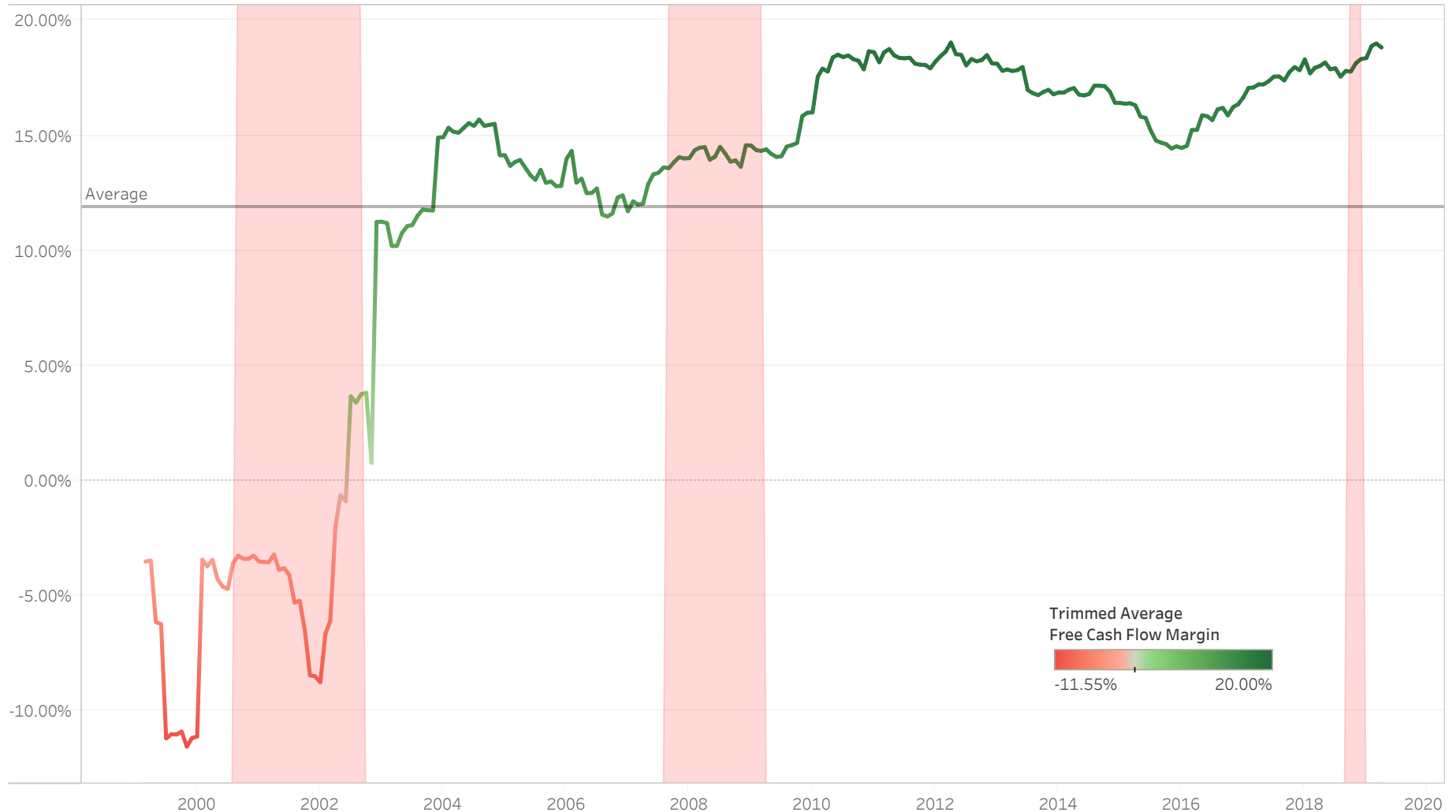
Free Cash Flow conditions and their applications for the Nasdaq 100 Companies



Nasdaq 100 Companies Profitability from a Free Cash Flow Perspective

Trimmed Average Free Cash Flow Margin TTM

03/31/1999 to 04/30/2019



Source: TrimTabs Asset Management, FactSet

Trimmed Average Free Cash Flow Margin TTM is measured by the average trailing-twelve-month Free Cash Flow margin, calculated as Free Cash Flow divided by revenue, for Nasdaq 100 companies, trimming distribution from both tails with a 5% proportion to cut. The shaded areas represent market drawdown periods which are larger than 10%.

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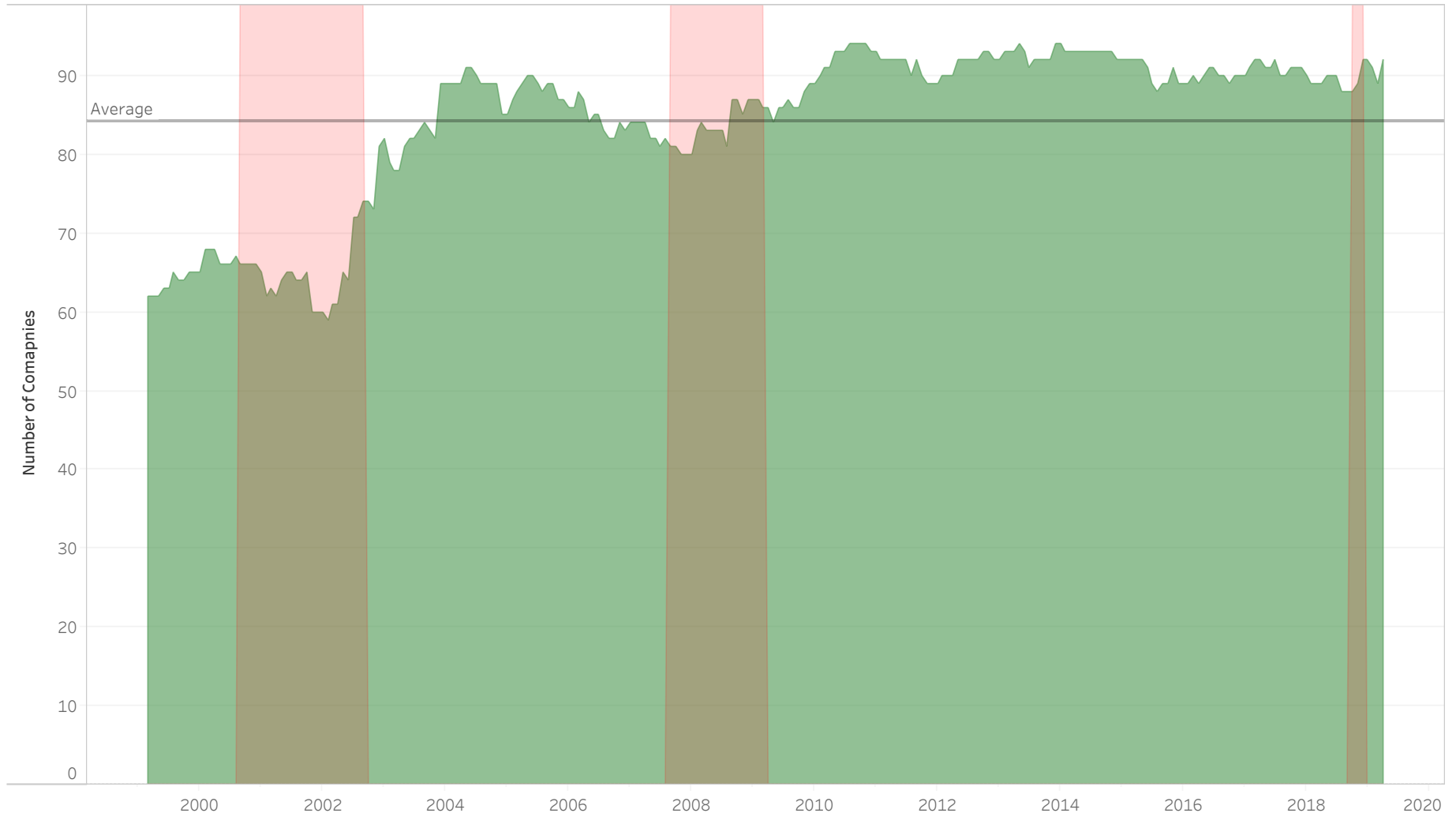
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Nasdaq 100 Companies Profitability from a Free Cash Flow Perspective

Number of Companies with Positive Free Cash Flow Generation

03/31/1999 to 04/30/2019



Source: TrimTabs Asset Management, FactSet

Free Cash Flow Generation is the trailing-twelve-month Free Cash Flow reported by the companies.

The shaded areas represent market drawdown periods which are larger than 10%.

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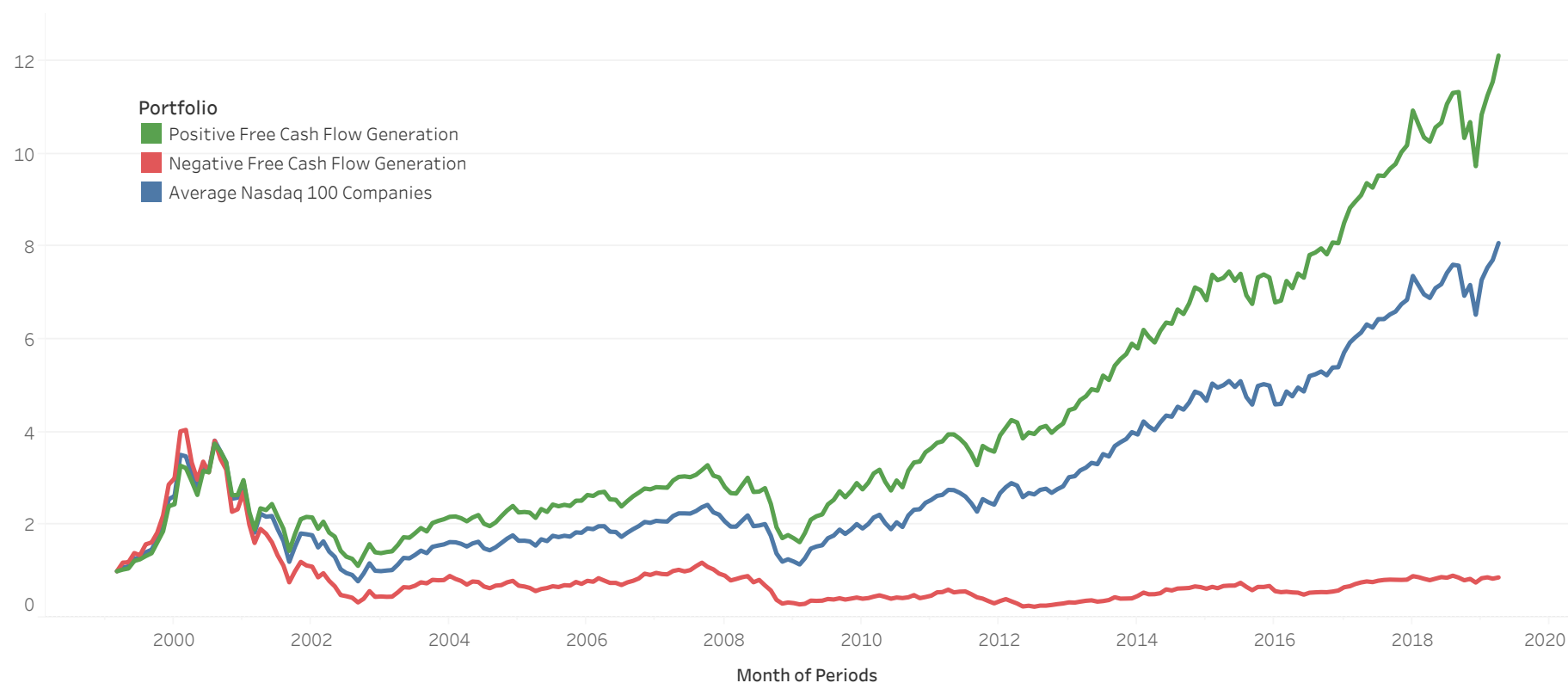
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Free Cash Flow conditions and their applications for the Nasdaq 100 Companies



Free Cash Flow Generation Application for Nasdaq 100 Companies

Cumulative Growth of \$1 for Average Nasdaq 100 Stock Return with Positive/Negative Free Cash Flow Generation
03/31/1999 to 04/30/2019



Portfolio	Annualized Return	Annualized Volatility	Excess Return	Sharpe Ratio	Information Ratio	Maximum Drawdown
Positive Free Cash Flow Generation	13.17%	26.46%	2.25%	0.50	0.65	70.25%
Negative Free Cash Flow Generation	-0.71%	37.98%	-11.62%	-0.02	-0.65	94.18%
Average Nasdaq 100 Companies	11.00%	28.00%	0.00%	0.39	0.00	79.46%

Source: TrimTabs Asset Management, FactSet

Free Cash Flow Generation is the trailing-twelve-month Free Cash Flow. Free Cash Flow Growth is the year-over-year growth of the trailing-twelve-month Free Cash Flow. The hypothetical portfolios are constructed in an equally weighted, monthly rebalanced approach. They do not represent actual fund or portfolio performance.

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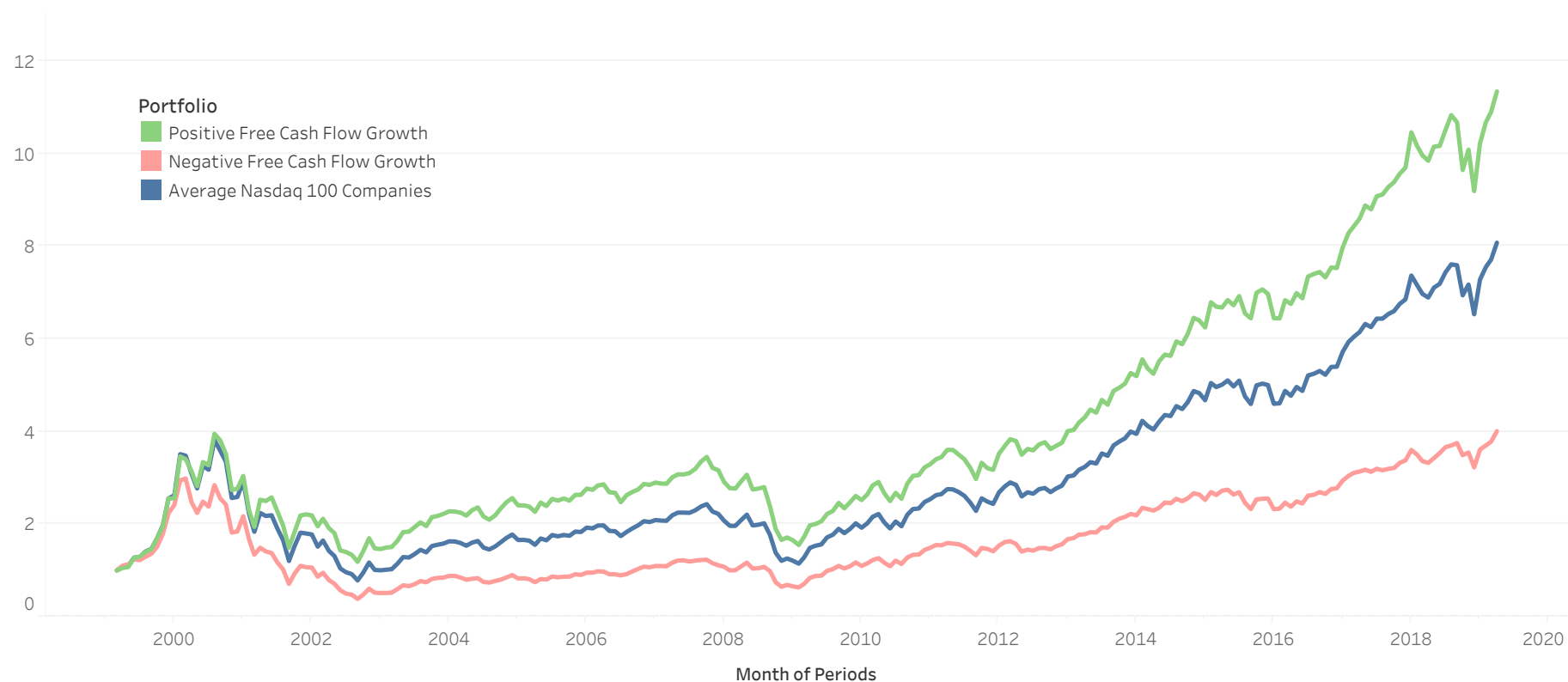
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Free Cash Flow conditions and their applications for the Nasdaq 100 Companies



Free Cash Flow Application for Nasdaq 100 Companies

Cumulative Growth of \$1 for Average Nasdaq 100 Stock Return with Positive/Negative Free Cash Flow Growth
03/31/1999 to 04/30/2019



Portfolio	Annualized Return	Annualized Volatility	Excess Return	Sharpe Ratio	Information Ratio	Maximum Drawdown
Positive Free Cash Flow Growth	12.79%	27.23%	1.88%	0.47	0.44	69.99%
Negative Free Cash Flow Growth	7.12%	28.85%	-3.79%	0.25	-0.55	87.11%
Average Nasdaq 100 Companies	11.00%	28.00%	0.00%	0.39	0.00	79.46%

Source: TrimTabs Asset Management, FactSet

Free Cash Flow Generation is the trailing-twelve-month Free Cash Flow. Free Cash Flow Growth is the year-over-year growth of the trailing-twelve-month Free Cash Flow. The hypothetical portfolios are constructed in an equally weighted, monthly rebalanced approach. They do not represent actual fund or portfolio performance.

Definitions, Risks and Disclosures

Performance data quoted represents past performance; past performance does not guarantee future results. Index performance is not illustrative of fund performance. One cannot invest directly in an index. Please call 1-800-617-0004 for fund performance.

The fund's investment objectives, risks, charges and expenses must be considered carefully before investing. The prospectus contains this and other important information about the investment company, and it may be obtained by calling 1-800-617-0004. Read it carefully before investing.

Investing involves risk. Principal loss is possible. There is no guarantee that TTAC will achieve its investment objective. Investing involves risk, including the possible loss of principal. Because the Fund is an ETF (rather than a mutual fund), shares are bought and sold at market price (not NAV), may trade at a discount or premium to NAV, and are not individually redeemable. Owners of the shares may acquire those shares from the Fund and tender those shares for redemption to the Fund in Creation Unit aggregations only, consisting of 25,000 shares. Brokerage commissions will reduce returns. Investments in the Fund include risks associated with small and midcap securities, which involve limited liquidity and greater volatility than large-cap securities. Past performance does not guarantee future results. To obtain fund performance call 212-217-2514 or visit www.trimtabsfunds.com.

The TrimTabs All Cap US Free-Cash-Flow ETF is distributed by Quasar Distributors, LLC.

Free Cash Flow (FCF) represents the cash that a company is able to generate after accounting for capital expenditures.

The Nasdaq-100 Index includes 100 of the largest domestic and international non-financial companies listed on The Nasdaq Stock Market based on market capitalization.

Fund holdings are subject to change at any time and should not be considered a recommendation to buy or sell any security. Click here for fund holdings.

Volatility is a statistical measure of the dispersion of returns for a given security or market index.

Sharpe ratio is the measure that indicates the average return minus the risk-free return divided by the standard deviation of return on an investment.

The information ratio (IR) is a measurement of portfolio returns beyond the returns of a benchmark, usually an index, compared to the volatility of those returns.

Max drawdown is an indicator of the risk of a portfolio chosen based on a certain strategy. It measures the largest single drop from peak to bottom in the value of a portfolio (before a new peak is achieved).