# IQS Research Brief

# The Every Other Year FANGA

**July 19, 2017**

## Introduction

In this IQS Brief, we take a closer look at the often discussed FANG stocks. FANG refers to Facebook, Amazon, Netflix and Google (now Alphabet). Over the past few years, we have heard a lot about the FANG stocks. Why are the FANG stocks so important? See Chart 1 for the returns to FANG by year from 2013 through June 2017. The reason is simple – returns! With eye-popping returns, these stocks are all situated in a new social paradigm that didn't exist previously. Without noteworthy historical comparatives, it is not clear to investors the magnitude of the potential earnings growth and therefore how to value each of these companies.

For this analysis, Apple will also be included as it the largest technology stock, morphing "FANG" into "FANGA." For comparison purposes, we will also show the S&P 500, the most followed diversified large cap index.

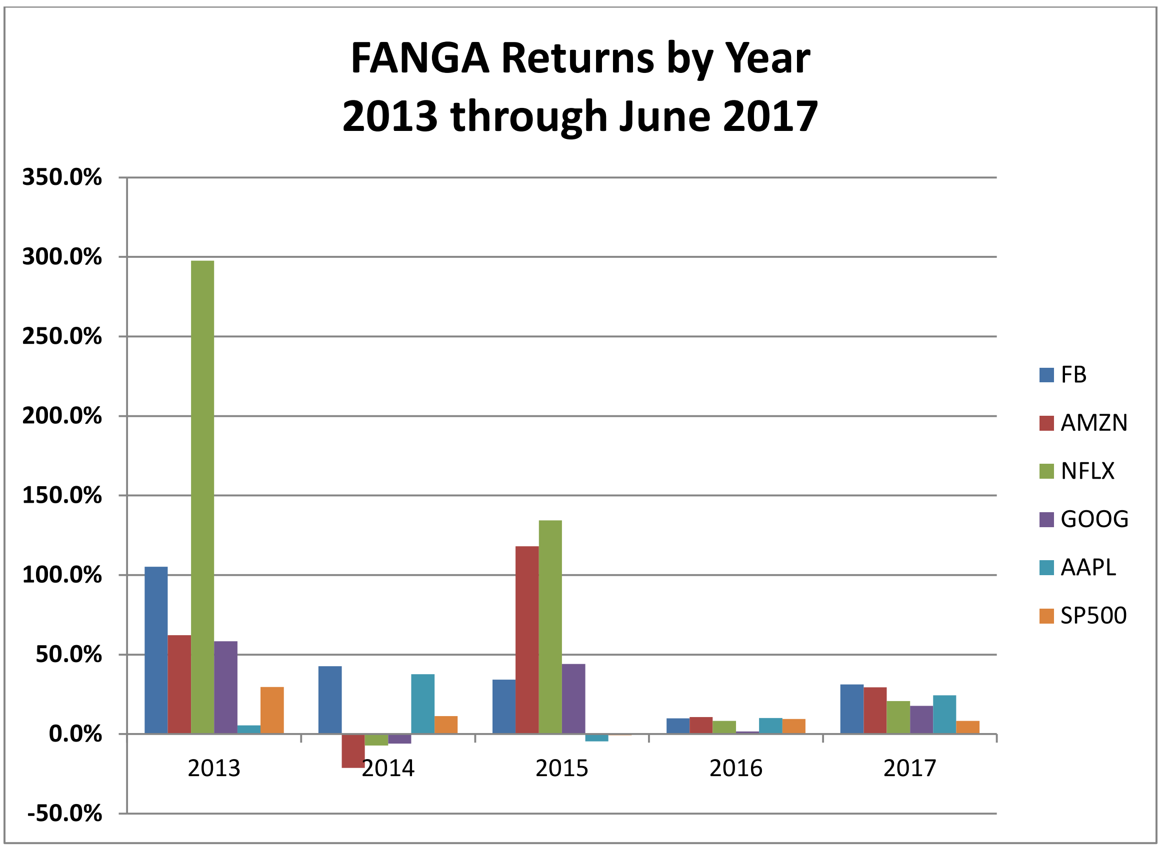
In 2013, Netflix returned over 300% and Facebook returned over 100%, while Amazon and Google each returned around 60%. In 2014, only Facebook had a positive return, while the S&P 500 was up 13.7%. But, in 2015, the FANG stocks roared back with an average return of 82.7% for the 4 stocks. 2016 saw a subpar year once again for the FANG stocks. In the case of the "every other year" FANG returns, 2017 is off to a very strong start, averaging over 24% through June, 2017.

***Chart 1: Returns by Year for FANGA 2013- 6/2017***

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| FB | 106.5% | 44.4% | 34.4% | 9.7% | 30.7% |
| AMZN | 62.2% | -21.3% | 118.0% | 10.7% | 29.3% |
| NFLX | 308.4% | -6.1% | 134.2% | 8.2% | 20.1% |
| GOOG | 58.9% | -4.8% | 44.2% | 1.6% | 17.9% |
| FANG Average | 134.0% | 3.1% | 82.7% | 7.5% | 24.5% |
| AAPL | 8.8% | 39.3% | -4.9% | 10.1% | 24.6% |
| SP500 | 32.4% | 13.7% | 1.4% | 12.0% | 9.3% |

In Graph 1 below, you can clearly view the enormous "every other year" return for the FANG stocks.

**Graph 1: FANGA Returns by Year, 2013 – June 2017**



Sometimes a graph paints a striking picture of the investment landscape, but other times it can create a visual bias due to the magnitude of some of the columns. Below, we show the annualized returns and volatility to the FANGA stocks for the 4-1/2 year period from 2013 through June 2017 using monthly returns, and calculate a simple Information Ratio (IR) as the ratio of the Return to the Risk. While the returns to all the FANGA stocks were higher than the S&P 500, the standard deviation (volatility) to the S&P 500 was much lower than all of the stocks over this period. With 30+% annualized returns for FB, AMZN and NFLX, despite the higher volatility, the IR for these stocks was still higher than the S&P 500 over this period.

***Chart 2: Return and Standard Deviation for FANGA 2013- 6/2017, Using Monthly Returns***

| | Annualized Return | Annualized Standard Deviation | Information Ratio |
|---|---|---|---|
| **FB** | 47.1% | 32.8% | 1.44 |
| **AMZN** | 36.0% | 27.5% | 1.31 |
| **NFLX** | 71.4% | 54.1% | 1.32 |
| **GOOG** | 23.4% | 20.1% | 1.16 |
| **AAPL** | 15.3% | 23.9% | 0.64 |
| **SP500** | 12.5% | 9.8% | 1.27 |

Consistency of returns can be an important barometer for stocks. Overlaying percent of up days on top of returns gives a different perspective into the volatility of a stock. In chart 3 below, we see that the S&P 500 had the best for up return percentage on both a daily and monthly basis, despite the fact its' returns were lower than all of the other stocks.

***Chart 3: Percent Up Return Days by Daily and Monthly Returns, 2013 – 6/2017***

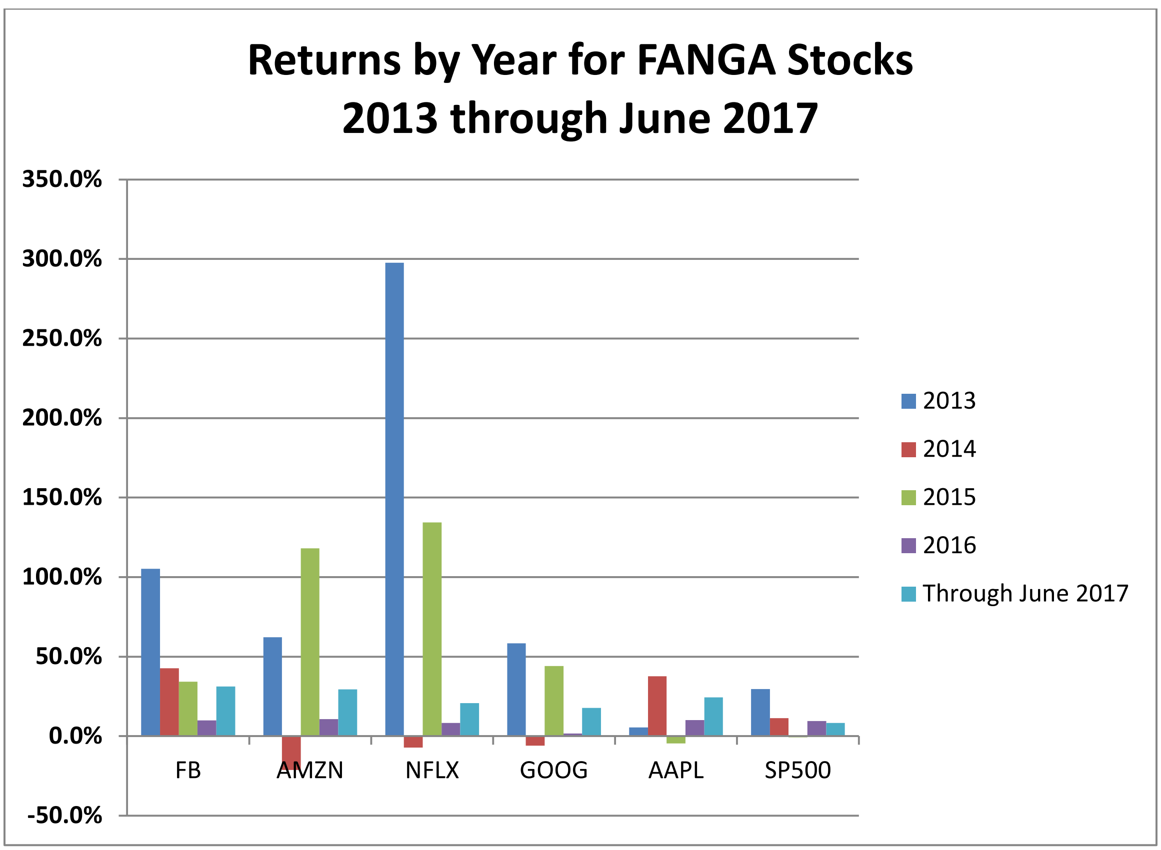
| | FB | AMZN | NFLX | GOOG | AAPL | SP500 |
|---|---|---|---|---|---|---|
| **Daily** | **53.8%** | **53.7%** | **50.7%** | **51.9%** | **51.5%** | **53.8%** |
| **Monthly** | **70.4%** | **63.0%** | **68.5%** | **61.1%** | **61.1%** | **72.2%** |

Chart 4 below calculates the maximum drawdown for each of the FANGA stocks, and the S&P 500 over the period January 1, 2013 through June 30, 2017. While the S&P 500 had the smallest drawdown, the length of the drawdown was pretty long, as measured in trading days. FB, AMZN and NFLX all had large drawdowns, but very short durations.

***Chart 4: Maximum Dradown for FANGA Stocks, 2013 – 6/2017***

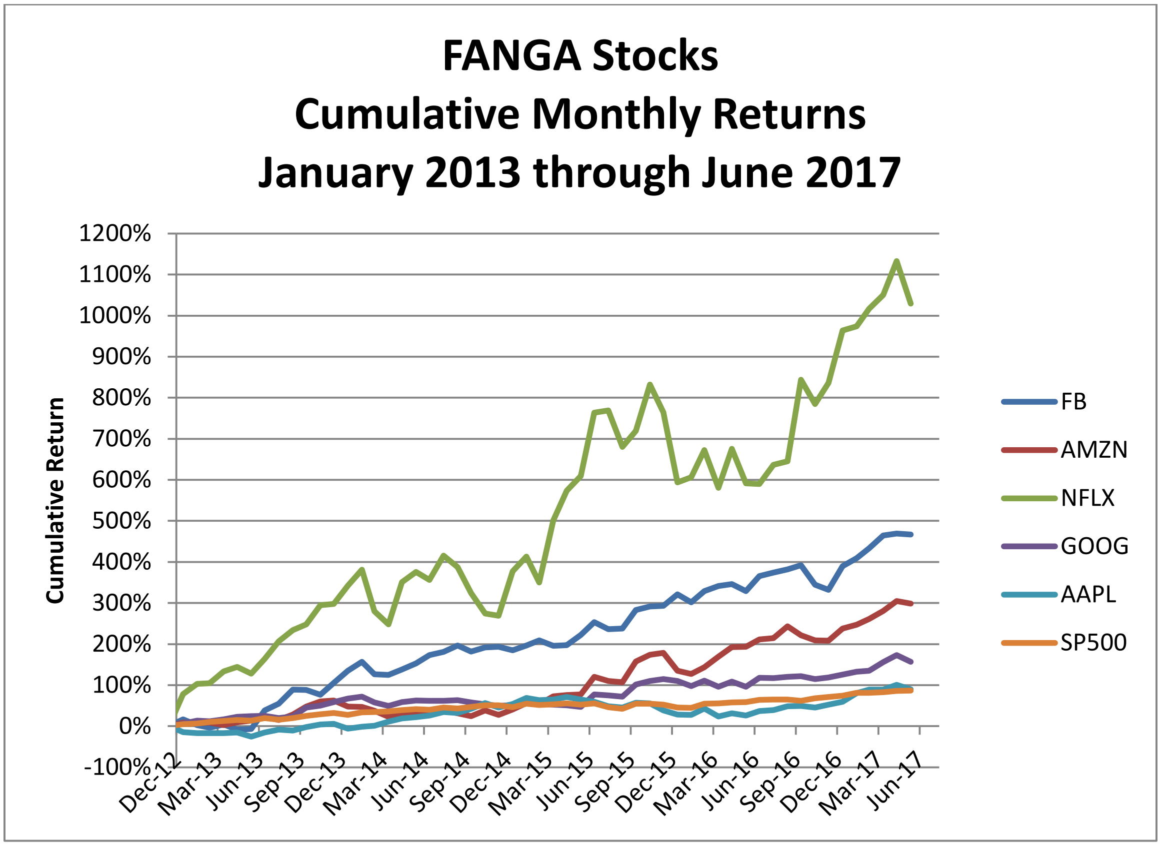
| | FB | AMZN | NFLX | GOOG | AAPL | SP500 |
|---|---|---|---|---|---|---|
| **Max Drawdown** | **-29.5%** | **-30.5%** | **-36.8%** | **-19.2%** | **-32.1%** | **-14.2%** |
| **Duration in Trading Days** | **90** | **29** | **43** | **222** | **309** | **184** |

***Graph 3: Returns by Year for FANGA Stocks***



The graph below shows the cumulative return to the FANGA stocks. Investing in the FANG stocks over this period would have created a very successful portfolio.

***Graph 4: Cumulative Returns to FANGA Stocks***



## Conclusion

While the FANG stocks have seen some incredible returns during the period 2013 through June 2017, it is noteworthy that the sleepy S&P 500 has performed pretty well in terms of volatility, return to risk, and drawdown. It's a bit odd that the FANG stocks, as a group, outperformed the S&P 500 substantially in 2013 and 2015, but underperformed in 2014 and 2016. Year to date in 2017 through June, the FANG stocks have once again outperformed. The magnitude of the returns of the FANG stocks is declining, but no one can expect the 100+% annual returns to continue forever. With the FANG stocks becoming a larger percentage of the S&P 500, it's likely that the FANG stocks are not going to outperform the S&P 500 by such a large margin in the future. We would expect the FANG stocks to act less like high-flying start-ups like in 2013, and become more like stable growth companies. It's worth following the percent up days and the maximum drawdown as a signal. The lower up day percentage with high returns indicate the large movements on the up days and smaller movements on the down days. This pattern is unlikely to persist, and may forecast a large correction if any of the company's do not meet their earnings forecast.