

Risk-return dominance of US 'big five' a myth, data shows

US stock markets less exposed to a 'Gafam factor' than assumed, say Luc Dumontier and Guillaume Garchery of La Française Investment Solutions



Until early 2018, the Gafam stocks – Google, Apple, Facebook, Amazon and Microsoft – were every investor’s darlings: lauded for their outstanding stock market performance and credited with driving much of the recent rally in US equity indexes.

Since early February, the mood has soured. The Gafams are now accused of fuelling recent episodes of spiking volatility and plunging markets. But does the data support the consensus? Are US equity markets highly exposed to a ‘Gafam factor’? The answer is no. Here’s why.

The first reason is that Gafams alone aren’t behind the S&P’s rise.

In a recent publication provocatively titled *Do Stocks Outperform Treasury Bills?* Hendrick Bessembinder, professor of finance at Arizona State University, showed that over an extended period from 1926 to 2016, 42% (or less than half) of US equities¹ outperformed the risk-free rate² and only 4% of these were responsible for all the wealth created.

To put it another way, all the other stocks combined (96% of the universe) only managed to deliver the risk-free rate². Over the long term, and contrary to common perception, only a few stocks offer the upside potential we typically associate with equities.

Over a shorter period, this study seems in line with the popular view that Gafams, and more generally the stocks comprising the tech-heavy Nasdaq Composite index, have been the main contributors to the rally in US equity markets since the end of 2014.

The truth is more nuanced, though.

Gafams³ and the Nasdaq have certainly delivered exceptional performance – 106.9%⁴ and 61.5%⁴, respectively, on average between December 2014 and March 2018 (figures 1 and 2) – but they are not alone. Over the same period, 71% of the stocks in the Standard & Poor’s 500 index, which itself is up 37.2%⁴, and all of the Global Industry Classification Standard sectors, except energy, have delivered performance above the risk-free rate².

In terms of contribution, Gafams are the top five drivers of the increase in US equities, but it takes 174 from 601⁵ stocks (29%) to explain the overall return of the S&P. That compares with 4% in Bessembinder’s study. Even without the Gafam stocks the S&P would still have delivered 30.4%⁴. Without the Nasdaq stocks, the index would have delivered 28.0%⁴ (figure 2).

The reason the Gafams’ contribution seems low compared with their performance is because their weight in the S&P is limited – 11% on average and 14% at the end of the period.

Gafams boosted the increase in US equities, but they alone did not create it.

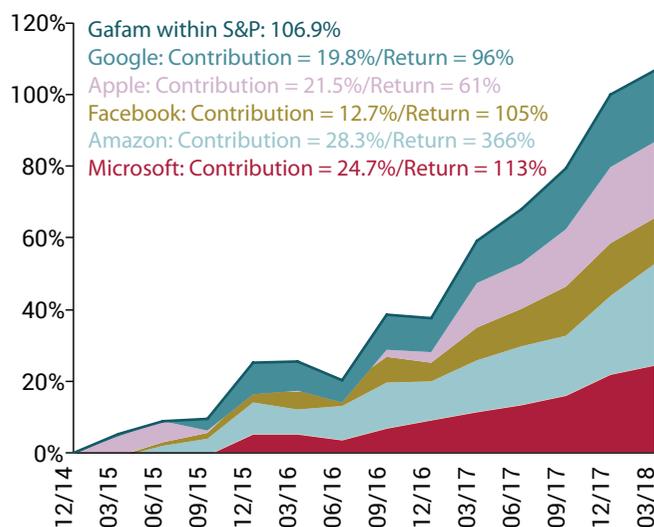
Another common belief is that Gafams alone account for a significant portion of equity market volatility and are responsible for the market dips seen so far this year.

In reality, while the volatility⁶ of the Gafam composite is 6% higher than that of the S&P over the past three years (figure 3), most of the difference is due to the diversification effect, which increases mechanically with the number of stocks in the universe. The difference in volatility⁶ between the S&P with and without Gafams is only 0.1% on average over the period (the blue area in figure 3). Having said that, the difference reached its highest level of 0.9% at the end of the period.

Gafams did not especially under-perform the S&P during the sharp drops in February. In particular, when the S&P saw its worst loss of the year, –4.1% on February 5, the Gafams lost –3.7%.

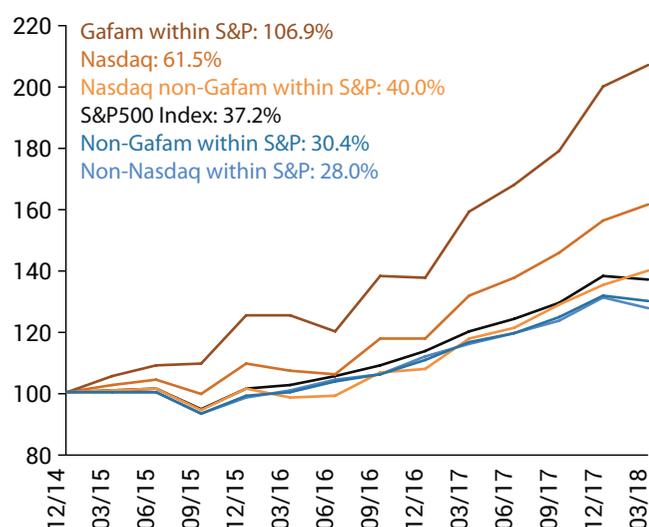
In March, however, the five days on which the S&P lost more than –1% saw the Gafams deliver greater losses. Their particular vulnerability during the second half of March can be attributed to political concerns around their increasing power – US president Donald Trump suggested reviewing the tax treatment of Amazon – and the potential misuse of confidential user information by Facebook.

1. Contributions to cumulative Gafam composite returns

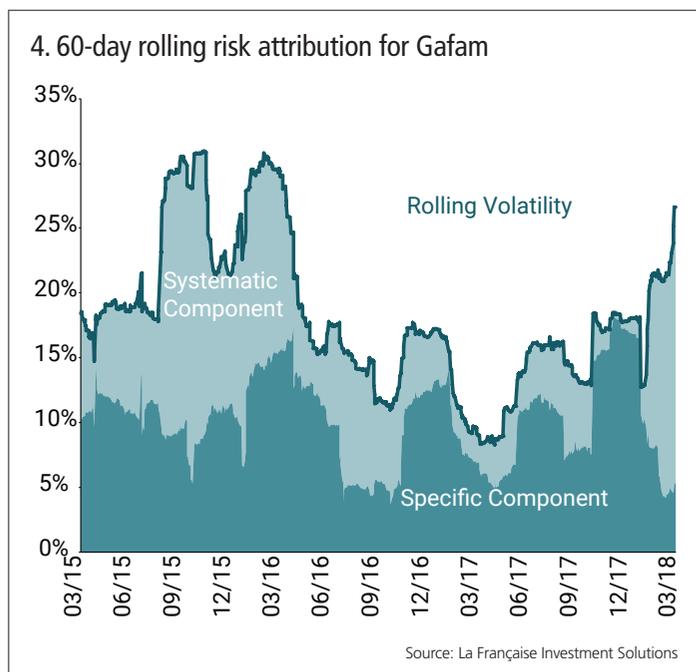
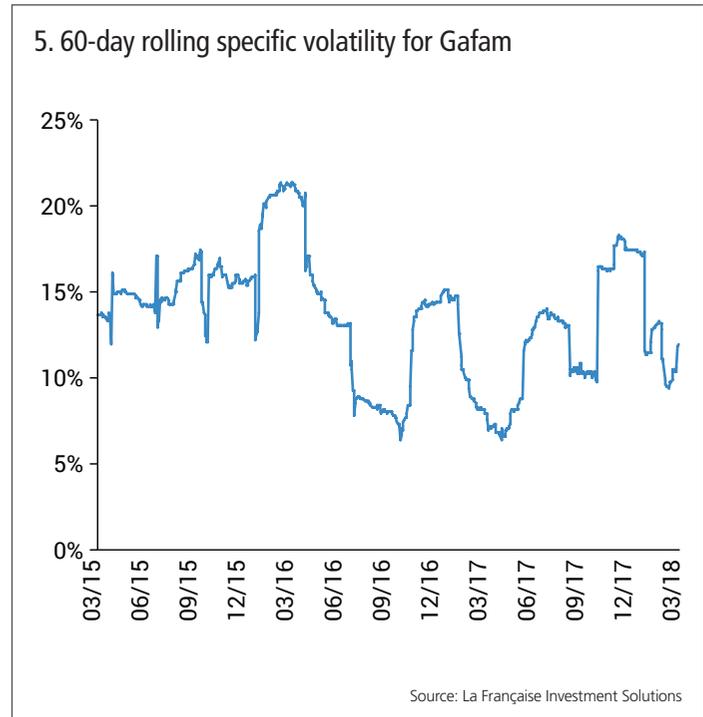
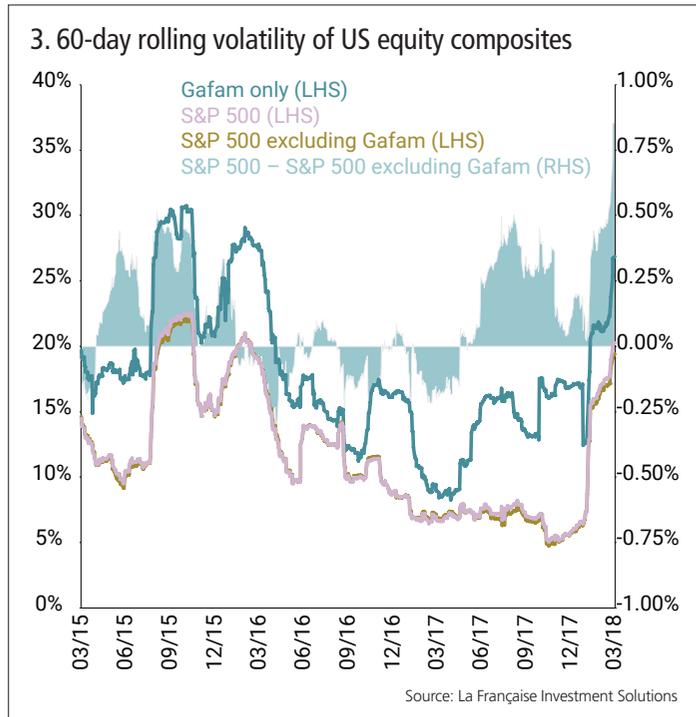


Source: La Française Investment Solutions

2. Cumulated returns of US equity composites



Source: La Française Investment Solutions



equally true for other sectors. Over the same period, the specific risk component for the five biggest stocks by capitalisation in each of the energy, financials, health care, real estate and consumer staples sectors represented 69%, 49%, 60%, 65% and 64%, respectively, of total risk.

It is also interesting to note that the recent increase in risk for the Gafams is not owed to a spike in specific risk. Specific risk has actually fallen both as a proportion of total risk (figure 4) and in absolute terms (figure 5). The increase in the level of systematic risk for Gafams is primarily due to the increase in risk for the S&P and, to a lesser extent, to their higher beta (1.2 at the end of the period, versus 1 on average).

Gafams' contribution to the risk and return profile of US stock markets is significantly overstated. Of course, that does not mean they are not risky. Their stocks are trading at high valuation multiples. The current price-to-earnings ratio for Amazon, for example, is 130 for 2018. And it is worth noting that such levels will only be justified if profitability increases markedly. That might well depend on the actions of policymakers currently looking at Gafams with the stated objective of reducing their dominance. ■

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Meanwhile, specific risk for Gafam stocks is no higher than for other sectors.

If Gafams represented a significant independent factor, their level of specific risk – risk that does not arise from their exposure to the market – should be a significant part of their total risk. Actually⁷, specific and systematic risks explain, on average, 59% and 41% of the total variance of Gafam stocks over the past three years (figure 4). Specific risk is the bigger component, but that is

¹ Universe comprised of common stocks that appeared at least once in the database of the Center for Research in Security Prices between 1926 and 2016.
² The risk-free rate is represented by one-month Treasury bills.
³ The Gafam composite comprises five companies but includes six stocks, as Google is represented by two shares (A and C) of its holding company Alphabet.
⁴ Capitalisation-weighted performance with dividends reinvested.
⁵ The universe includes the stocks that were part of the S&P at least once between December 2014 and March 2018.
⁶ Annualised volatility using daily data over rolling 60-day periods.
⁷ Results obtained by regressing the equally weighted returns of Gafams versus those of the S&P over a rolling 60-day period.