12 months on from the Brexit vote and the brief but aggressive fall in world equities that followed, European and US stock markets are back at record high levels. However, there has been a vast difference between the return profiles of various sectors within the index itself. For instance, financials have returned 26.61% whereas energy companies have fallen by 4.2% over the same time period.

One of the stand out sectors in the S&P 500 over the past 3 years has undoubtedly been technology. As the digital revolution continues to gather pace and as consumers embrace the new era of social media and online service provision, the share prices of a handful the largest household technology names, known as the FAANGs, have skyrocketed as their revenues and profits soared.

Our industry is renowned for inventing ridiculous acronyms and to our minds the 'FAANGs' is no exception. First coined by CNBC's Jim Cramer, it's an acronym for five of the largest technology companies, namely Facebook, Amazon, Apple, Netflix, and Google (now listed as Alphabet). These five stocks have seen unprecedented growth in their market capitalisation and their meteoric rise has certainly helped prop up returns for the S&P 500 index. Their combined market capitalisation is c $2.4trn – the size of the entire French economy. The five companies combined make up more than 12% of the S&P index.

They are so influential on markets that in an extraordinary ten-week period from March 1 2017, these five stocks gained a combined $260billion in market value, whilst the combined loss of the other 495 companies in the S&P 500 index was $260billion! The index was therefore flat over the period, concealing the true nature of the general market's poor performance whilst the FAANGs were marching upwards. The S&P 500 returned c 8.5% year-to-date but if you take out the performance of the FAANGS then the US index would have risen by only 1.4%! These companies are therefore not only incredibly influential because of their disruptive technology, but their sheer size enables them to disrupt stock-market returns too.

The spectacular outperformance of the FAANGS can clearly be seen in their 3-year performance numbers below, as compared with the S&P 500:

FAANGs performance vs. S&P 500

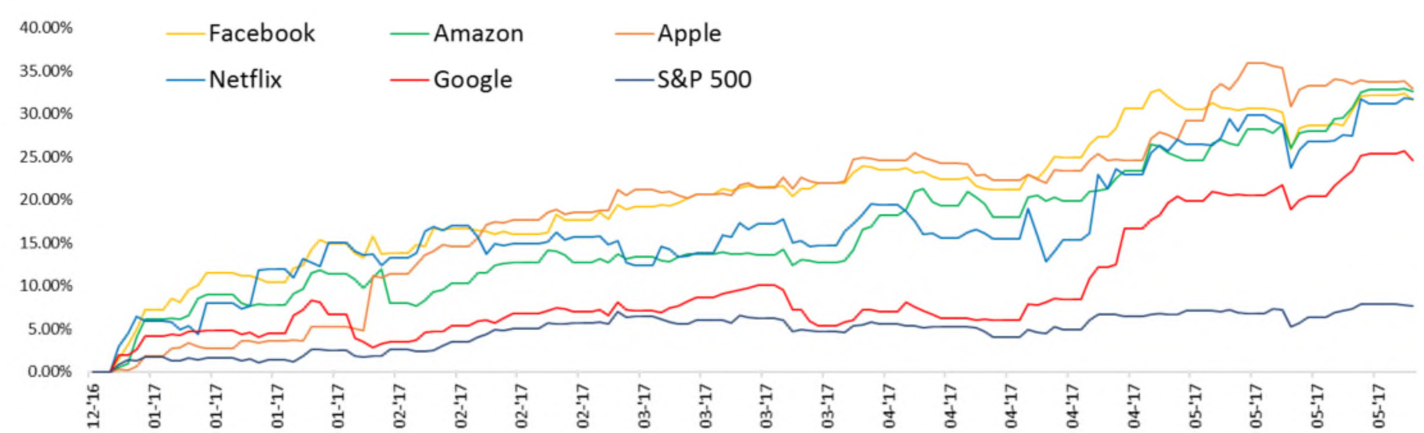
Facebook	+544%
Amazon	+268%
Apple	+170%
Netflix	+441%
Google	+124%
S&P 500	+50%

However, such stellar performance does not come without its concerns. The tech bubble of early 2000 and subsequent market crash that cost the NASDAQ 78% of its value is still in the minds of many investors. Whilst the FAANGS, with their growing revenue streams and large cash piles, are a world away from lastminute.com, pets.com and etoys.com, investors are still buying into a long-term future earnings story with these companies. Their price to earnings (P/E) ratios are, with the exception of Apple, well in excess of the market average and arguably therefore far more sensitive to negative news, not least because they are now so high profile. So, is there the potential for tech bubble 2.0 or are these technology giants likely to carry on expanding?

In the late 90's many retail and institutional investors saw the TMT stocks (Technology, Media and Telecommunications) as a one-way ticket to instant riches. Many IPOs (stock-market flotations) doubled or tripled the value of start-up companies on their first day of market trading and businesses with no discernible plan or viable product were raising millions on ridiculously hyped flotation values.

Pets.com is a good example of a much-hyped tech stock which embodied all the characteristics of this market bubble, including its sudden demise. Pets.com was an online pet superstore - an Amazon for animal lovers. Not a bad idea but fairly niche and with hindsight a few years too early. The company went from going public to liquidation in a mere 268 days and in one financial quarter, the company had net sales of $5.2m but net losses of $42.4m.

S&P 500 vs. FAANGs



Webvan was another. Their plan was for the home delivery of groceries, now a well-established service operated by the major supermarkets but revolutionary at the time. In the rush of the bubble they tried to hit the market hard and fast, buying loss-making HomeGrocer, and placing a $1bn order with an engineering company to build its delivery warehouses, buying a fleet of delivery trucks in the process. In 2000, despite sales of $178.5m Webvan had operating expenses of $525.4m! Unsurprisingly the company did not go the distance, losing $800m and folding unceremoniously in 2001.

Boo.com was an online fashion retailer founded by three Swedish entrepreneurs that raised $135million from various investors. Within 18 months they'd blown all but $500,000 of this, generating sales of a meagre $1.34m before finally going bust!

The early 2000s is littered with failed internet companies that raised billions from people who should have known better and who ended up losing all of their capital. Yet the tech bubble wasn't a crash without survivors and some companies did bounce back. Amazon floated in 1997 at just $18 per share and saw their stock price take a hammering in 2000, dropping from $107 to $7 a share. CISCO lost 83% of its market capitalisation during the tech crisis. Both had ridiculous market valuations at the time but now these two companies are amongst the biggest players in their fields. Recently Amazon reached an all-time high of $1,006 per share.

Partly as a result of the tech bubble bursting, investors are far more cautious about tech investing nowadays and two guys in their parent's garage with a dream are no longer instantly valued at a billion dollars anymore! The market for new flotations (IPOs) is vastly different now. During the peak tech year of 1999, 460 companies listed on the stock-market, of which 280 were technology companies that went public (60%). In 2015 only 275 companies listed and of these only 45 of these were technology companies (16%).

There is simply no comparison between companies that have one speculative product/no revenue and the FAANGs which, whilst they all started small of course, now have huge revenue streams from multiple channels and enormous cash piles.

Apple sits on $256bn of cash worldwide – 15 years' worth of Britain's payments to the EU or enough to buy all of Tesla, Netflix, Snapchat, Uber, Twitter and Spotify in their entirety!

	Stock price return since flotation	2016 Revenue	Current P/E
Facebook	297%	$27.6bn	39.30
Amazon	5950%	$136bn	180.41
Apple	555%	$215.6bn	16.68
Netflix	877%	$8.8bn	193.04
Google	1000%	$90.3bn	31.42

Amazon generated net revenue for 2016 of $135.9bn, making founder chief Jeff Bezos' the 3rd richest person in the world, with a net fortune of some $84bn! Amazon Prime has 80million US subscribers across 64% of US households! The company holds a 43% share of online retail sales and is currently undertaking drone trials in the UK for possible home delivery. Having just successfully bid for its own supermarket chain, Wholefoods, who needs Webvan?

Between them, Google and Facebook bring in more than 1/5th of total global advertising revenue whilst Netflix has over 100 million users across 190 countries with over 11 billion hours of content watched on TV each month!

No wonder then that these companies have dominated the headlines and the markets over the past few years. Their meteoric growth seems justified, but it could be argued that they all look expensive on a current price to earnings (P/E) ratio basis, with the exception of Apple. The average P/E ratio across the S&P 500 is 21.4 and whilst Apple is currently at 16.7, Facebook trades on a ratio of 37.8, Amazon at 179.6, Netflix at 189.8 and Google trades on a P/E ratio of 31.1. These companies are therefore more "expensive" than the index using this traditional valuation method if considering only current revenues; however, if their potential for future revenue growth is considered then current concerns over their share prices lose relevance.

In the five-day trading week of June 5th to 9th, all of the FAANG stocks traded at their highest prices ever. Goldman Sachs sent out an analyst's report shortly thereafter, comparing their momentum to the dotcom bubble in 2000 and sure enough their share prices quickly tumbled. During June the FAANGs fell an average of 6.33%, whilst the S&P fell only 0.27% and the financials sector actually rose by 8.76%. Is this then the beginning of the end of their incredible ascent? Analysts will point to high P/E ratios across the five stocks and excessive momentum in their share price growth. Yet the momentum of these stocks can be maintained as long as they continue to re-invest their massive cash piles into research, development and acquisitions of business that help them to expand. Over 16 years Google has acquired over 200 companies as it mops up competition and bolts on innovative businesses.

Artificial Intelligence has been used to beat the best players in the world at the most complex game, Go; bank account apps on your phone can be unlocked by retinal scan, driverless cars will become mainstream and our obsession with online media content delivery will continue unabated. The FAANGs are at the forefront of the creation, implementation and evolution of these technologies and whilst they need to continue to evolve to justify their current and future stock-market valuations, it seems to us that they have the will and the ability to continue to do this.

The technology giants of today are not the dotcom internet stocks of the early 2000s so investors should not expect a catastrophic collapse in their share prices. The FAANGs are undoubtedly expensive on today's revenues and after such an incredible run, negative broker consensus was bound to blow some of the froth from these companies' share prices. However, it's a brave investor who bets that the likes of Google and Facebook won't be able to adapt, grow and boost profits/revenues in the process. We believe that the sudden pause in these companies' stock-market success isn't necessarily the start of a wider slump in the sector's longer-term fortunes, even if some profit taking in the short-term has blunted the FAANGs in 2017.