

## Also in this section

58 Chinese merger reviews

59 Vincent Bolloré arrested

60 Buddhist IPOs

60 Chaebol reform

61 Brexit and cheese

62 Schumpeter: Chicago bears

For daily coverage of business, visit  
[Economist.com/business-finance](https://www.economist.com/business-finance)

## Technology companies

## DeFANGed?

SAN FRANCISCO

## America's tech giants are growing, but so is investors' caution

FOR a few years now Facebook, Amazon, Netflix and Google have behaved like sled dogs pulling the stockmarket forward with boundless energy. The ride has been mostly smooth and enriching. To many in Silicon Valley the fortunes of the FANGS—as the pack is known—seemed so entwined that they were treated like a distinct asset class. It was one in which everyone should have coveted a stake (see chart 1). The four firms have accounted for 20% of the rise in S&P 500 stocks since 2016. Yet the FANGS' fates may no longer be indivisible.

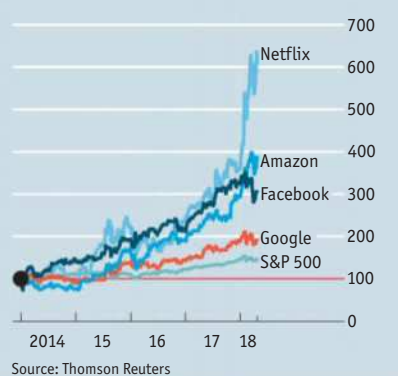
On April 23rd Alphabet, Google's parent company, reported its strongest sales growth in nearly four years, but its share price dropped by 4.5% the next day because of rising costs from investments in new businesses such as cloud computing and hardware. On April 25th Facebook posted a large increase in sales and profits, as well as a 39% rise in costs compared with last year. Investors have been most focused on the ramifications of a privacy scandal in March, when it emerged that users' data had been shared without their consent; the fallout so far seems to have been limited enough that the social network's share price rose by more than 7% after hours. Markets are still besotted with Amazon and Netflix. Netflix is the best-performing public company in 2018. But after years of being brushed aside by investors, the dif-

ferences between the four firms are now commanding greater attention.

The companies still have important things in common: dominance, scale and growth. Each is top dog in its neck of the internet: Facebook in social media, Amazon in e-commerce, Netflix in premium video-streaming, Google in search. All benefit from network effects, turbocharged by clever algorithms. The more users they have, the better their products, the more new customers are lured. This has helped them confound doubters and grow briskly despite their massive size.

## Fangtastic

Share prices, January 1st 2014=100

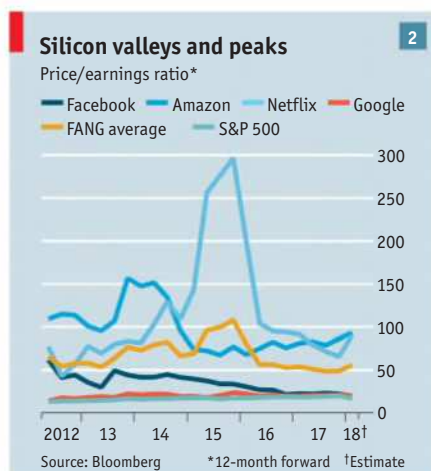


Potential markets remain enormous. Facebook and Google are already goliaths, but can expect to expand as more ad spending migrates online. All told, Amazon is now present in consumer markets worth \$4.8trn, nearly double the equivalent figure in 2015, according to Brian Nowak of Morgan Stanley, a bank. It looks well-placed to benefit from the accelerating shift away from bricks-and-mortar retailers in America. Optimists believe that Netflix can double today's 120m subscribers by 2022. It may have room to raise prices without alienating consumers.

Yet these broad similarities mask deep differences. For a start, the firms make money in distinct ways. Netflix and Amazon, which recently announced it has 100m "Prime" members who pay an annual fee for free shipping and online video, sell subscriptions. On top of that, Amazon sells just about everything else consumers desire, while its cloud-computing business guarantees stable, recurring revenue. Facebook and Google sell users' attention to digital advertisers.

Fearful of a political backlash provoked by the Facebook scandal, companies that do not depend on advertising are trying to distance themselves from the online ad duopoly. Netflix is more of a "media firm" than "pure tech", Reed Hastings, Netflix's boss, recently told analysts, adding that his company was "substantially inoculated" because it does not sell ads and protects users' privacy. Tim Cook, the boss of Apple, sometimes considered a fifth FAANG, has publicly derided Facebook's handling of users' data (though investors fret about weak iPhone sales ahead of its quarterly earnings report on May 1st).

The companies view profitability rather differently, too. Facebook and Google ▶



► built enormous businesses first and are re-investing the profits to develop new ones. Netflix and Amazon continue to prioritise scale and are splurging to achieve it, observes Michael Nathanson of Moffett Nathanson, a research firm. This helps explain the companies' disparate valuations (see chart 2). Facebook and Alphabet trade at a conservative 20 times earnings; the figure for Amazon and Netflix is closer to 90, more than five times the average for members of the S&P 500.

The FANGs do face common challenges, albeit to varying degrees. One is regulation. It is too soon to say how much Europe's sweeping General Data Protection Regulation, which is coming into effect in May, will hit Google's and Facebook's bottom-lines—but investors are anxious that it will. Another privacy scandal could prompt American regulators to enact onerous rules that hamper digital giants. Talk of antitrust enforcement grows louder every time Facebook notches up another 100m users or Amazon enters a new market (see Schumpeter). Netflix looks safe for now, but that may change if it ever gets as big as investors think it will. Mere threats of regulation—including in a presidential tweet—can dent a firm's share price, as Amazon has learned (Donald Trump is no fan of the *Washington Post*, a newspaper that is owned by Amazon's boss, Jeff Bezos).

A second challenge concerns margins. Facebook and Google are enormously lucrative businesses, with margins of 50% and 29% respectively in 2017. But rising costs may squeeze them. Amazon and Netflix rely on investors' unshaken belief that they are headed for world domination. Netflix may burn through \$3bn-4bn in 2018 alone in its pursuit of that goal. Mr Nathanson expects the company to generate cash only in 2021. Earlier this month his firm wrote that it "still can't justify" Netflix's stock price "under any scenario". Short-sellers now own around 4.5% of Netflix stock, more than four times as much as Amazon, Facebook or Alphabet.

The final problem is competition. One of the few certainties in the technology sector is that the giants will clash with one another. Having come to dominate a large part of their own markets, they are now striking out in search of new opportunities. Inevitably and increasingly, they will encroach on each other's territory.

Netflix looks the most vulnerable. Disney plans to launch its own subscription-based video service and withhold its blockbusters from Netflix. Amazon already offers a streaming-video service to Prime customers but if it were to announce a serious investment in this market and offer a standalone service, it could temporarily halve Netflix's share price, reckons Mark Mahaney of RBS Capital, an investment bank. Amazon is also building a digital advertising business of its own, which could grow from perhaps \$4bn today to \$22bn over the next five years. For the time being this is likelier to hurt offline media than Facebook or Google, thinks Brent Thill of Jefferies, an investment bank. One day that could change. Intra-FANG rivalry will be bad for returns, but it may also deflect accusations that the companies have grown too dominant. Lower margins could be the price the tech giants must pay to keep regulators off their backs. ■

## Merger reviews

# Command and control

## China's antitrust regulators are becoming more activist

GLOBAL deals may be growing at a rapid clip, but they seldom offer instant gratification. Qualcomm, an American chip-maker, first bid for NXP Semiconductors, a Dutch company, in October 2016. The union has since been blessed by eight regulators worldwide, but one hurdle remains: China. With no decision yet from its regulator, the companies, which were expecting to have closed the \$44bn deal this week, now hope to conclude it by July. The purchase of the chip unit of Toshiba, a troubled Japanese company, by a consortium led by Bain Capital, an American private-equity firm, is similarly awaiting sign-off from China.

Some suspect the delays stem from the threat of a trade war with America. Holding back regulatory approval, particularly on sensitive high-tech deals, could be part of the arsenal in any trade conflict. Organisational change may also be to blame. Fay Zhou, who works in Beijing for Linklaters, a law firm, points out that a recent reshuffle, which took merger reviews away from the commerce ministry and put them un-

der the same roof as other competition authorities, may have contributed to lags. Either way, the delays bring home the importance of the Chinese authorities to international deals.

They are now one of the three big regulators to reckon with, together with the Americans and Europeans, says Mark Furse of Glasgow University. Research by Allen & Overy, a law firm, shows that Chinese regulators sought remedies on seven deals in 2017 (see chart). Though fewer than American and European interventions, that is a record for China.

As with much else, China's approach to mergers is distinctive. Like in other jurisdictions, foreign businesses must seek approval for a merger if their sales or assets in the country cross a certain threshold. But in addition to protecting consumers, the Chinese authorities are required by law to promote "the healthy development of the socialist market economy". That industrial-policy objective means that regulators can intervene even when competition is not strictly a concern, notes Charles Pommies of Allen & Overy (although plenty of cases are judged purely on competition grounds).

Deals tend to attract scrutiny if they involve industries where China wants to catch up with the West, such as high-tech sectors, or where it has interests to protect, such as commodities. Although the European Commission was relatively relaxed about Microsoft's takeover of Nokia in 2013, for example, the Chinese authorities fretted that its firms would lose access to intellectual property as a result. They also intervened in a merger between two mining firms, Glencore and Xstrata, even though their combined market share was less than 20% in each of their product markets in China. Mr Furse points out that, in contrast, it typically takes market shares of over 40% to raise concerns in Europe; thresholds are even higher in America.

Chinese authorities also seek distinctive conditions before clearing a deal. Some divestments have been known to directly benefit the state. The Glencore and Xstrata merger, for example, was approved on the condition that a mine in Peru was sold off; soon afterwards it was snapped up by a consortium of Chinese state-►

