CHAHINE CAPITAL
Performance Engineering

01/07/2021

STRATEGY OVERVIEW

China kicks off a new antitrust trend in the tech sector

The bizarre 'disappearance' of Alibaba founder and executive chairman Jack Ma for several months has got to be the Chinese Communist Party's most striking initiative yet to keep the country's tech sector under firm control. It was not an isolated event: since then we have seen China cancelling the Ant Group's IPO, banning Bitcoin and prohibiting cryptocurrency mining, for example. None of this contradicts Beijing's long-term strategic effort to catch up with the world's tech leaders (cf. its position in 5G), however. China's R&D spending is now 15 times greater than it was 20 years ago.

Given this apparently inexorable rise in a sector with strong connections to national security, Western countries are trying to respond with a common front. Taken together, their R&D spending is still twice as high as China's, which inevitably changes the picture in what used to be seen as a purely Chinese-American trade and tech war. In international strategic terms, the USA is still of course keen to maintain its leadership, even if the much-heralded collaboration with the European Union has yet to take tangible form. Either way, we are looking at another step towards the reinstatement of global power blocs – think of the RCEP in Asia, at least as far as trade goes – that carries echoes of Cold War days.

The USA is hardly a novice in antitrust matters and cannot be accused of lagging China on the issue, notwithstanding Beijing's recent drive to bring large private groups to heel. Even during the Trump presidency there was talk around the need to regulate today's 'trusts', notably GAFAM, especially as these companies now feel it is their place to stray beyond business to influencing public opinion and moral and political debate. Joe Biden's election has only increased the focus on their activities, and the coming years will see more rather than fewer attempts to regulate them.

The microeconomic news is still good, with US companies expected to generate faster earnings growth than we have seen for a very long time. Analysts are forecasting aggregate earnings growth for the S&P 500 of 62.8% in Q2, the biggest gain since the post-subprime crisis rebound in Q4 2009 (108.9%). Note that Q1 ended up with aggregate index earnings growth worth 52.5%. Taken together, 2021 is on track for a 35.2% jump in profits; this would leave aggregate S&P 500 earnings some 15% above their 2019 highs, more than making up for the damage caused by Covid in 2020.

Although we broadly agree with these upbeat forecasts for 2021, we believe that earnings growth expectations for 2022 and 2023 are far too optimistic, especially in the USA at 11.6% and 9.1%, respectively.

Michaël Sellam

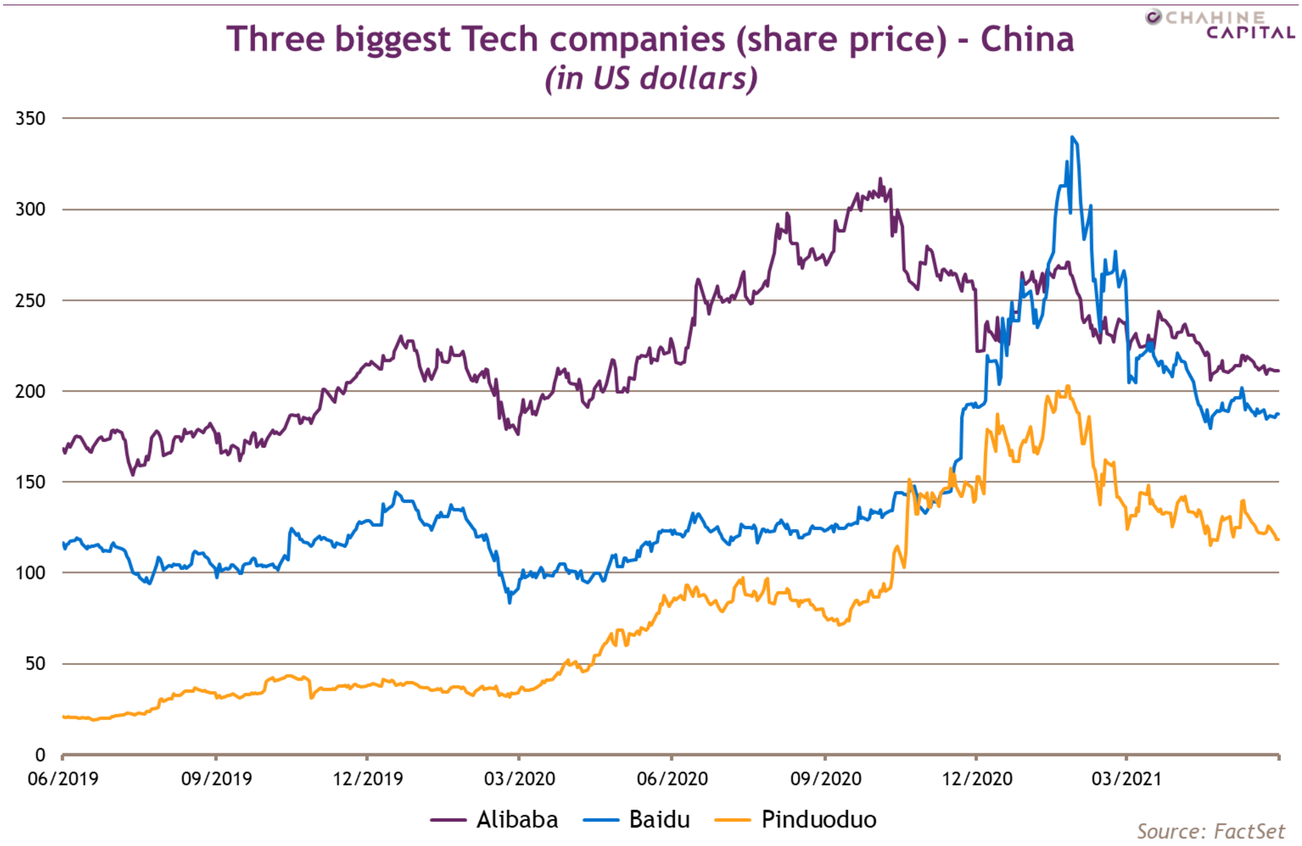
China's antitrust policy puts its own IT sector under pressure

The bizarre disappearance of Alibaba founder and executive chairman Jack Ma for several months (he was off 'travelling', apparently) has got to be the Chinese Communist Party's most striking initiative yet to keep the country's tech sector under firm control.

It was not an isolated event: since then we have seen China cancelling the Ant Group's IPO, banning Bitcoin and prohibiting cryptocurrency mining, a record 18.2 billion yuan (roughly €2.3 billion) fine for Alibaba for abusing its dominant market position and a State Administration for Market Regulation warning on anti-competitive practices directed at some 30 tech groups including Alibaba, Tencent, Baidu, Pinduoduo, JD.com, Meituan and Didi Chuxing.

Market regulation is effectively what it's all about, with tougher antitrust legislation on the way to identify anti-competitive behaviour better in the IT sector. It could go a lot further than that, too, and some Asian commentators are starting to discuss the possible nationalisation of Alibaba and Ant Group.

A trend reversal for Chinese tech firms after the State steps in

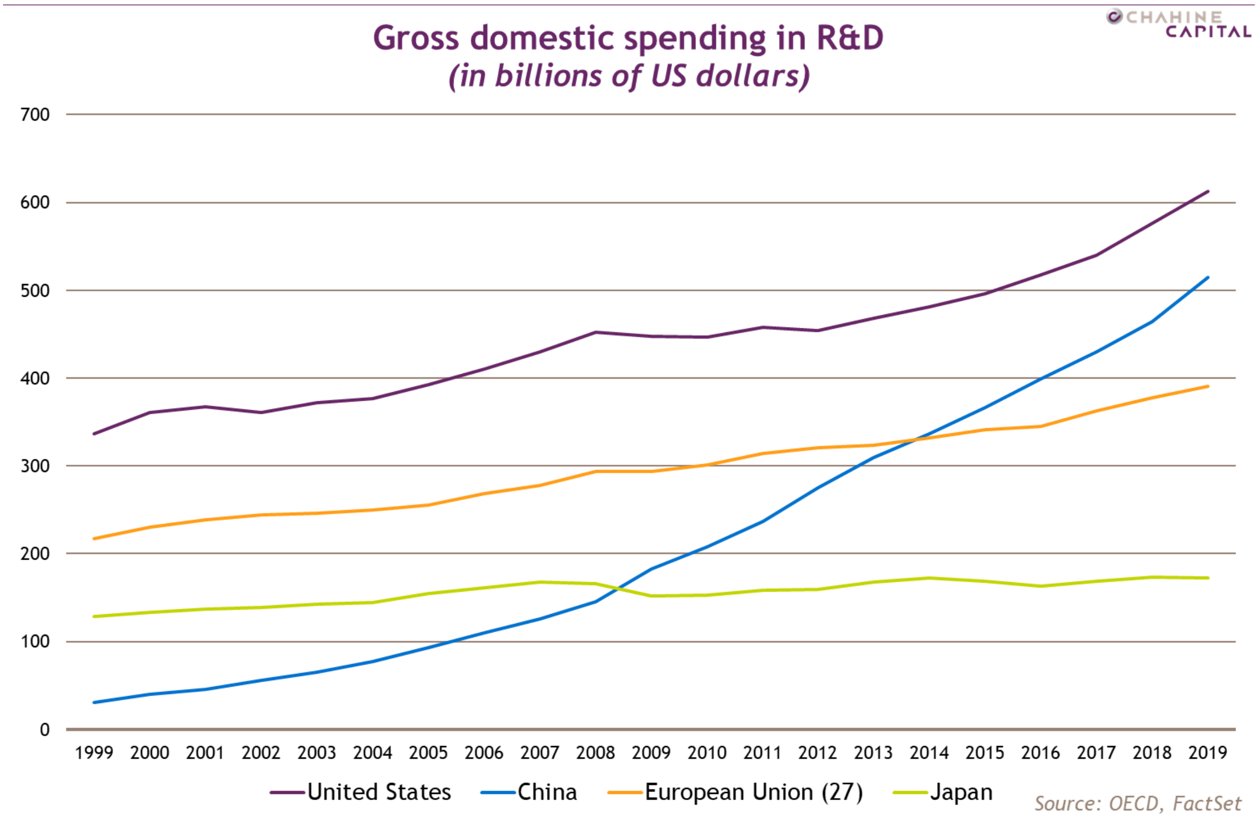


Ever since the Chinese authorities started taking more interest in the tech sector in November, the share prices of its major listed companies have dipped sharply (see chart): compared to their highs, Alibaba is down 32%, Baidu is down 45% and Pinduoduo is down 40%. Given that Chinese tech share prices had been rising steadily for the previous two years, it shows the impact the State's recent intervention has had. Given its weight in local equity markets, the Chinese tech sector's difficulties have dragged the MSCI China index 20% off its high at $129 in February.

Can the West maintain its technological lead over China?

Recent events do not contradict Beijing's long-term strategic, decade-long effort to catch up with the world's tech leaders (cf. its position in 5G), however. As the chart below shows, China's R&D spending is now 15 times greater than it was 20 years ago. Its R&D budget overhauled Japan's in 2009 and the combined EU total in 2014; it is almost up to $500 billion per year, and closing on the USA, the established world leader, at over $600 billion per year.

R&D: China's catch-up bid



The pattern is slightly different in proportion to GDP: Japan allocated 3.2% of its GDP to R&D in 2019, before the pandemic, and the USA was at 3.1%, compared with 2.2% for China. The EU R&D spend was below that, at 2.1% of GDP.

Given this apparently inexorable rise in a sector with strong connections to national security, Western countries are trying to respond with a common front. Taken together, their R&D spending is still twice as high as China's, which inevitably changes the picture in what used to be seen as a purely Chinese-American trade and tech war. This idea is taking hold among American and European leaders: on 15 June, at a EU-US summit in Brussels, Ursula von der Leyen and Joe Biden launched the Trade and Technology Council (TTC) "to coordinate approaches to key global trade, economic, and technology issues and to deepen transatlantic trade and economic relations based on shared democratic values".

With seven main objectives, the TTC has an ambitious mission. Unsurprisingly, given the tone of China-US relations since 2018, it has a bilateral trade component. But it also extends to enhanced international cooperation on such matters as tech investment and collaborative research, and aims to develop international tech standards. The standards objective is easier stated than reached, with international political discourse at an uninspiring level and countries like China and Russia unenthusiastic about the concept.

In strategic terms, the USA is still of course keen to maintain its leadership, even if the much-heralded collaboration with the EU has yet to take tangible form. Either way, we are looking at another step towards the reinstatement of global power blocs – think of the RCEP in Asia, at least as far as trade goes – that carries echoes of Cold War days.

A tougher antitrust line in America?

The USA is hardly a novice in antitrust matters and cannot be accused of lagging China on the issue, notwithstanding Beijing's drive over the past few months to bring large private groups to heel.

At the end of the 19th century, growing concern over the power of monopolies prompted US lawmakers to initiate a long process of regulation. It started with the Sherman Anti-Trust Act in 1890 and took in Theodore Roosevelt's election as president in 1901 on his reputation as a 'trust-buster' hostile to the monopolies felt to be most damaging to consumers.

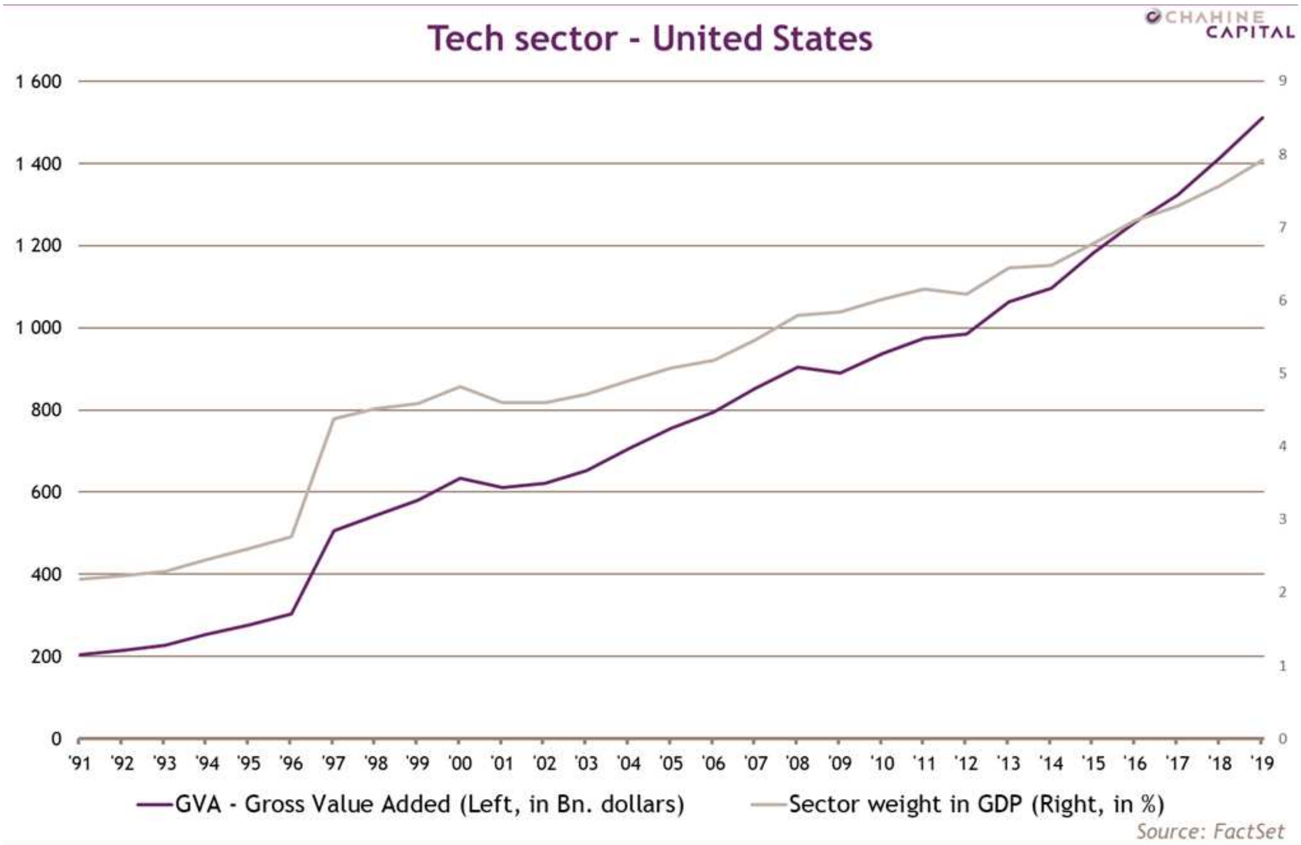
It took a number of attempts at dismantling monopolies over a decade – including JP Morgan & Co in 1904 – before the Sherman Act really bit for the first time in 1911 and led to the breakup of Standard Oil. Further legislation added to the anti-trust armoury, notably the Clayton Act and the Federal Trade Commission Act in 1914.

At the time, it was America's rapid industrialisation that led to the growth of private companies big enough to threaten the government as the source of economic power. The situation is much the same today, with digitalisation the underlying process. The pandemic has only accelerated this development.

Even during the Trump presidency there was talk around the need to regulate today's 'trusts', especially as these companies now feel it is their place to stray beyond business to influencing public opinion and moral and political debate. Joe Biden's election has only increased the focus on their activities.

In contrast with the dotcom companies of the late 1990s, today's GAFAMs owe their power to a superior business model (see micro section and chart below). It is more about their financial clout than their technological lead, as they have accumulated massive war chests that enable them to buy up any firm capable of competing with them directly or – more often – out-innovating them.

A stunning economic success story



Joe Biden's recent nomination of Lina Kahn to head up the Federal Trade Commission – the key US antitrust authority – is significant. Ms Hahn's mandate will start at the end of the summer and will be openly interventionist; she is well-known already for her antitrust credentials, having been critical of the monopoly or near-monopoly positions enjoyed by GAFAM.

In the meantime, five complementary pieces of draft legislation have been unveiled in the US Congress that aim to regulate the country's digital giants and hand the regulator more powers:

- the American Innovation and Choice Online Bill, which would prohibit tech groups from favouring their own products on their internet platforms
- the Platform Competition and Opportunity Bill, which would prevent the dominant platforms from acquiring competitors
- the Ending Platform Monopolies Bill, which would limit the ability of the dominant platforms to take advantage of their control of several business sectors
- the Augmenting Compatibility and Competition by Enabling Service Switching (ACCESS) Bill, which would encourage online competition, lower digital barriers to entry and require data interoperability and portability
- the Merger Filing Fee Modernization Bill, which would increase the merger filing fees payable to the antitrust agencies.

Although this legislative programme is bipartisan, with each Bill sponsored jointly by a Republican and a Democrat in the House of Representatives, the tech sector has been quick to mount its lobbying campaign. It may well be that the coming decade sees a rerun of the start of the 20th century, when a new regulatory, legal and tax regime eventually emerges to deal with the trusts of our own era.

Congress aside, several of the tech giants – Google, Amazon, Facebook – are already under investigation for anti-competition practices, sometimes on both sides of the Atlantic. Their defence strategy seems to be to highlight how far restrictive regulations would undermine services that consumers and businesses both hold dear. They also claim that they would be left vulnerable to international competition, and in the light of Covid the timing for legislation is not appropriate. Through their political supporters, mainly middle-of-the-road Democrats such as Nancy Pelosi, they have asked Congress to postpone debate so that they have enough time to marshal their objections.

Despite their influence, it is by no means clear that the tech giants will convince Congress. The antitrust theme has support within the tech sector itself, where smaller firms that have struggled to sustain their business models so far and see new regulations on the giants as a means of consolidating their own positions.

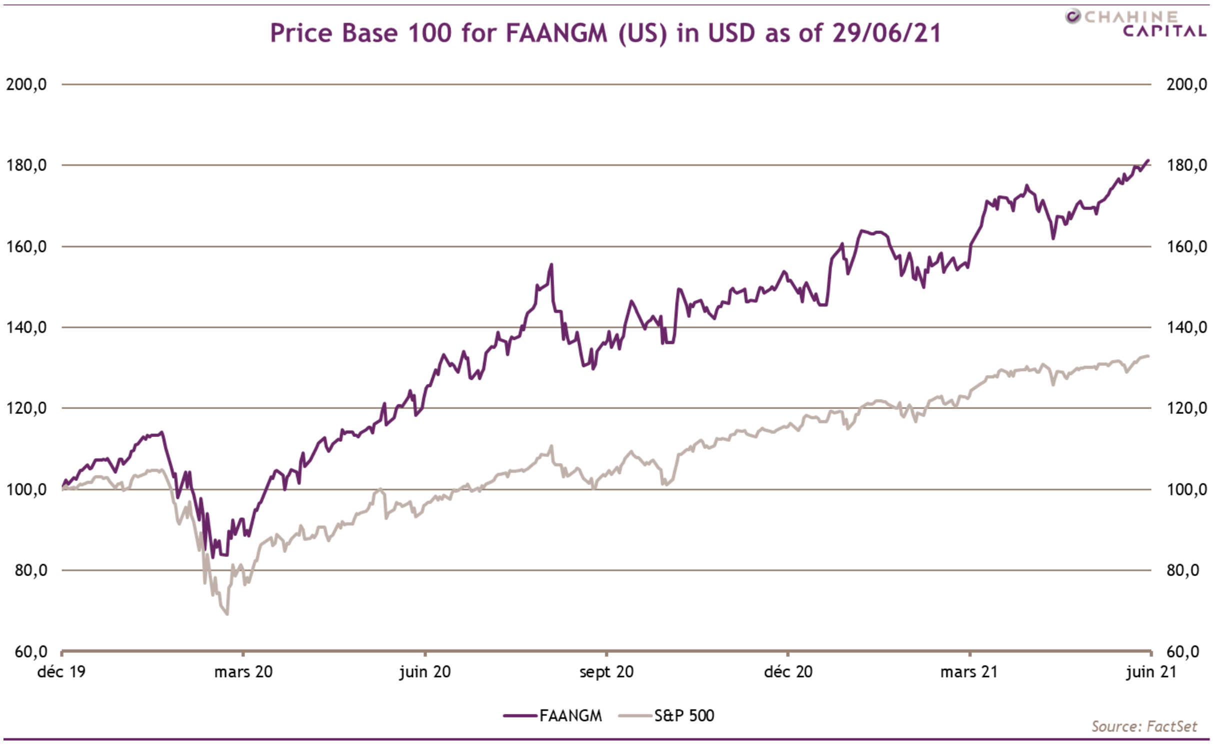
The tide of history appears to be flowing against the big US tech monopolies, with a number of factors working together to undermine their economic and political influence:

- US domestic politics. President Biden favours fairer rules around business and his new regulatory policy appears to complement the tax changes he has already proposed.
- international politics. China's antitrust drive would put the USA in a difficult position if it failed to act on its own tech sector.
- the national security agenda, whose importance in US public opinion should never be underestimated. The growing threat of cyberwar is making the public increasingly intolerant of tech giants that can act more or less independently of government control. A proposed American Cybersecurity Literacy Bill aims to increase security awareness among the American public.

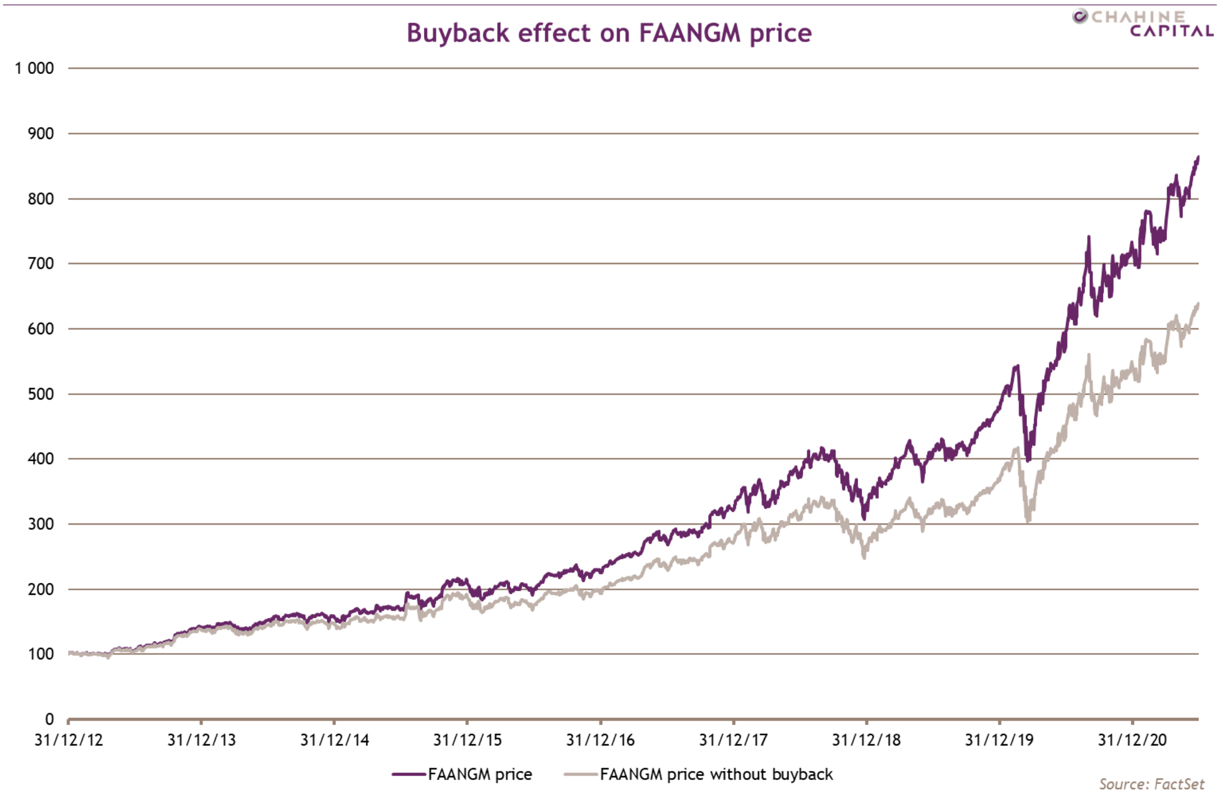
Taken together, and given how significant they are, do these trends and initiatives threaten the tech majors' share prices? We think not. Although the upside potential for these stocks is bound to be limited by ten years' worth of rapid appreciation, this does not mean that they are about to collapse. The most likely short- to medium-term scenario is fluctuation of these firms' share prices at around their current levels (i.e. remaining at high multiples) or even a continuation of their gentle uptrend so far this year. After all, fundamental changes to the rules of the game will inevitably take a great deal of time and – above all – the sector's extraordinary profitability (a 25% aggregate margin if we exclude Amazon) will enable the continuation of the share buybacks that have kept its prices high for the past decade. 35% of the 860% rise in FAANGM share prices since 2012 can be attributed to buyback programmes implemented each year (see chart).

STRATEGY OVERVIEW

Following spectacular outperformance in 2020, FAANGM stocks set to trade in line with the S&P 500



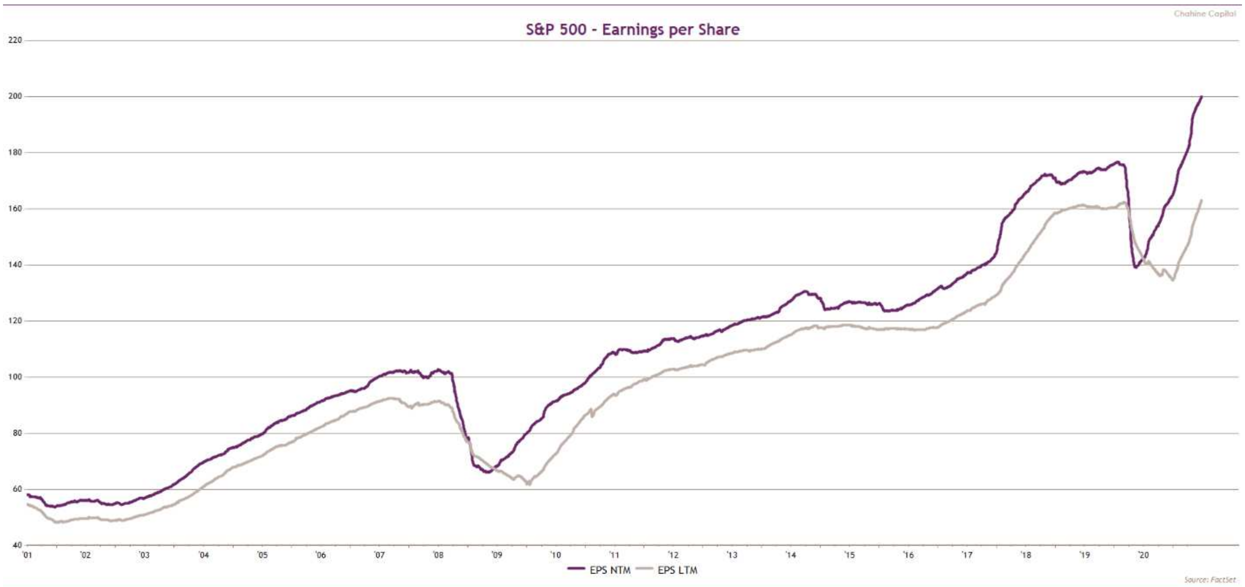
FAANGM buybacks have boosted performance by almost 35% since 2012



Q2 looking even better than Q1

The microeconomic news is still good, with US companies expected to generate faster earnings growth than we have seen for a very long time. Analysts are forecasting aggregate earnings growth for the S&P 500 of 62.8% in Q2, the biggest gain since the post-subprime crisis rebound in Q4 2009 (108.9%). Note that Q1 ended up with aggregate index earnings growth worth 52.5%. Taken together, 2021 is on track for a 35.2% jump in profits; this would leave aggregate S&P 500 earnings some 15% above their 2019 highs, more than making up for the damage caused by Covid in 2020.

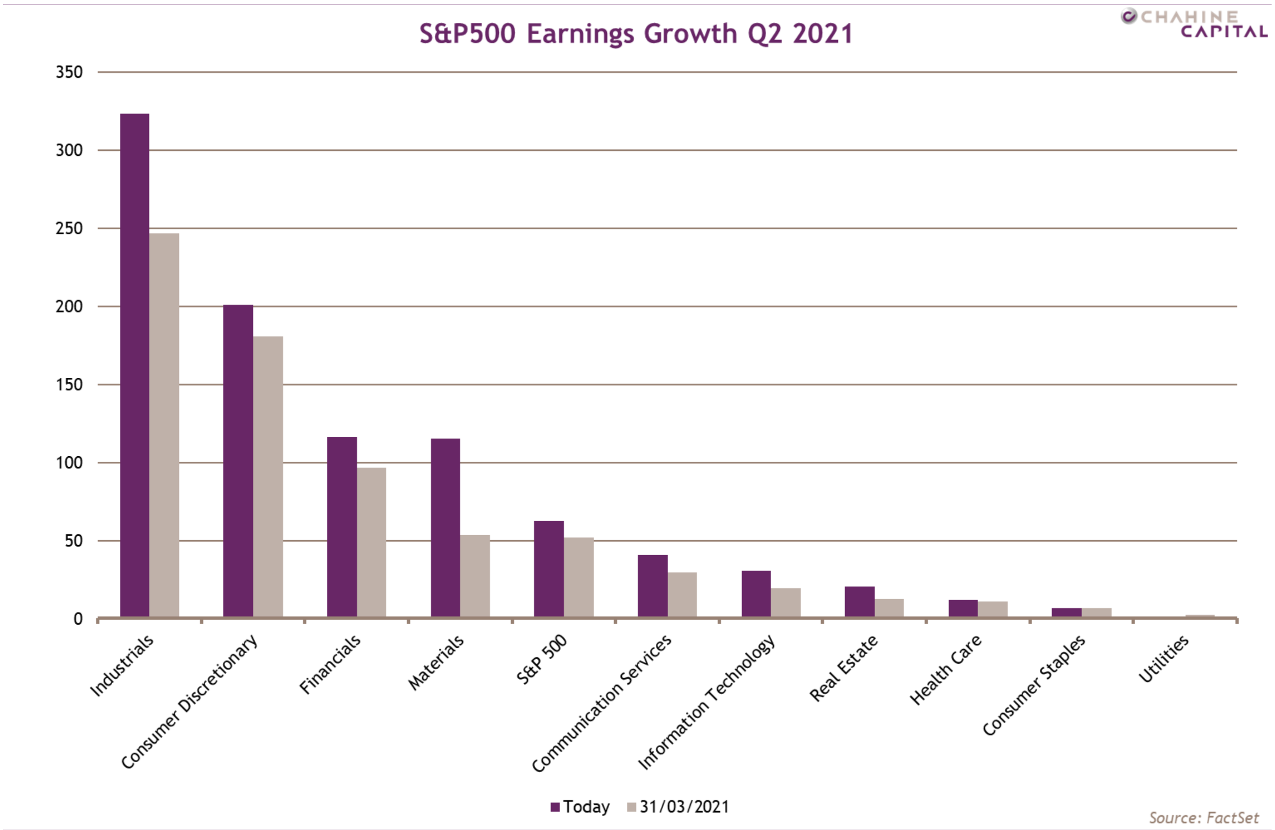
Corporate earnings way beyond catch-up mode



In sector terms, nothing has fundamentally changed in the past few months. As in Q1, the best earnings gains in Q2 will come from the sectors that suffered the most in 2020. This month the growth table is topped by the industrial sector, where analysts expect a 346.9% jump in EPS. The three sectors that drove the index forward in Q1 – financials, discretionary consumers (autos) and materials – continue to post triple-digit growth, with 116.3%, 200.8% and 115.1%, respectively, expected in Q2.

We continue to emphasise that the tech sector’s earnings prospects are very good (an expected 30.6% gain in Q2), despite gloomy commentary from several quarters in recent weeks. Its multiples may be high, led by GAFAM, but we believe they are perfectly sustainable for as long as changes in regulations remain theoretical rather than actual.

EPS growth in Q2 extends good performance in Q1



Corporate guidance for Q2 has only bolstered optimism over American microeconomic prospects. 66 S&P 500 firms have published positive guidance[1] on their earnings growth, the highest number since FactSet started recording it in 2006 (and beating the previous high set in the preceding quarter). Negative guidance is also low: only 37 firms have issued such guidance, compared with a five-year average of 63.

Interestingly, this is a persistent trend. Of the 66 companies that published positive guidance in Q1, 41 (i.e. 62%) have also published positive guidance for the current quarter.

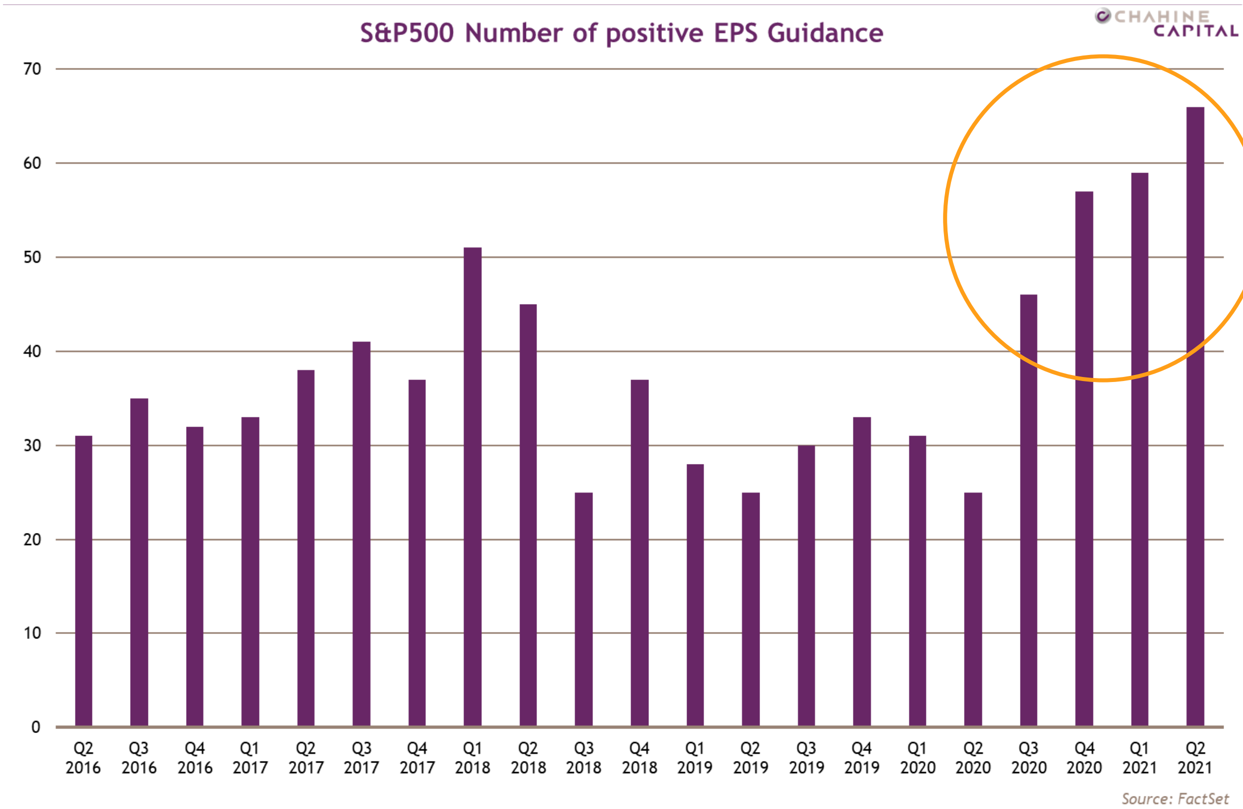
By sector, tech firms are the leading source of positive guidance: 28 on earnings and 44 on turnover. Of the 28 issuing positive guidance on earnings, 96% did so on turnover as well.

None of this has gone unnoticed among investors. Despite received opinion and downbeat commentary based on 'value' concepts, the tech sector has been the fourth-best market performer since the end of March, appreciating 9.6% compared with 7.4% for the S&P 500.

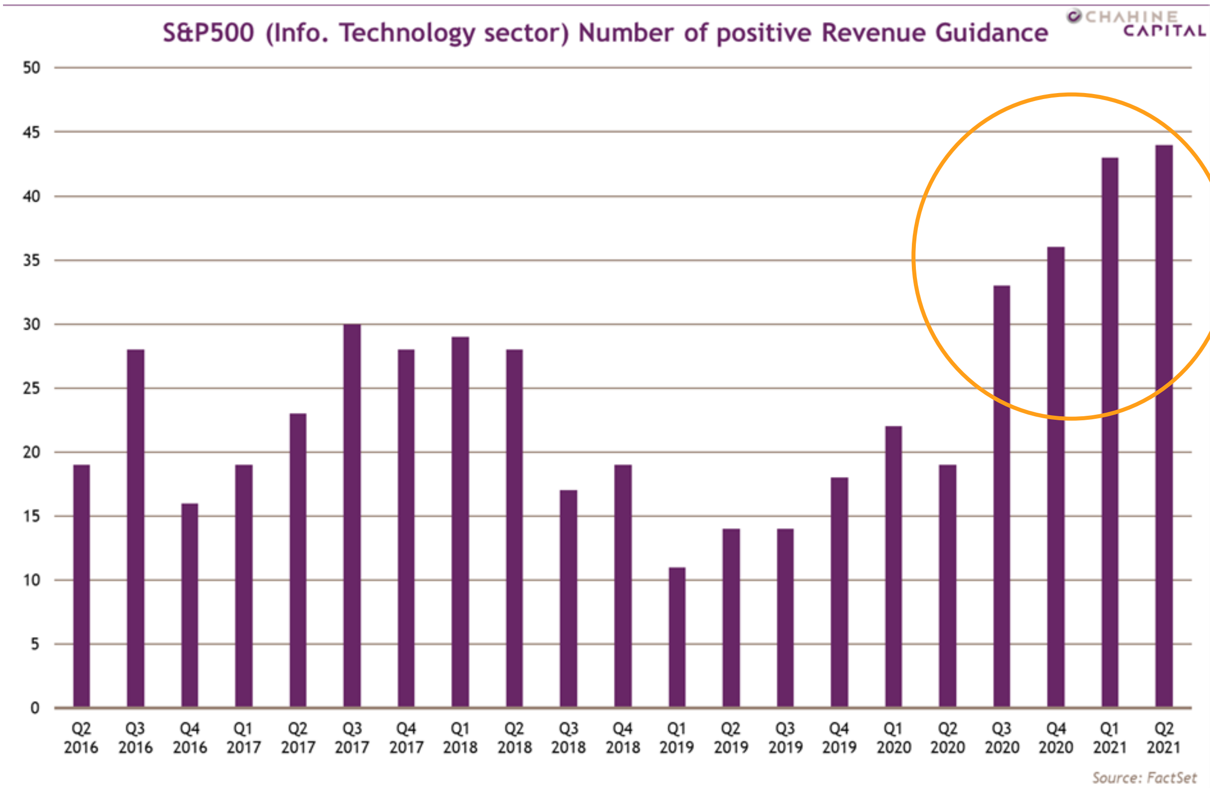
[1] 'Positive guidance' refers to the situation where projected earnings growth is greater than the consensus estimate on the day of the announcement; 'negative guidance' is the inverse situation.

STRATEGY OVERVIEW

Positive guidance at a record high



The tech sector still upbeat about its own prospects

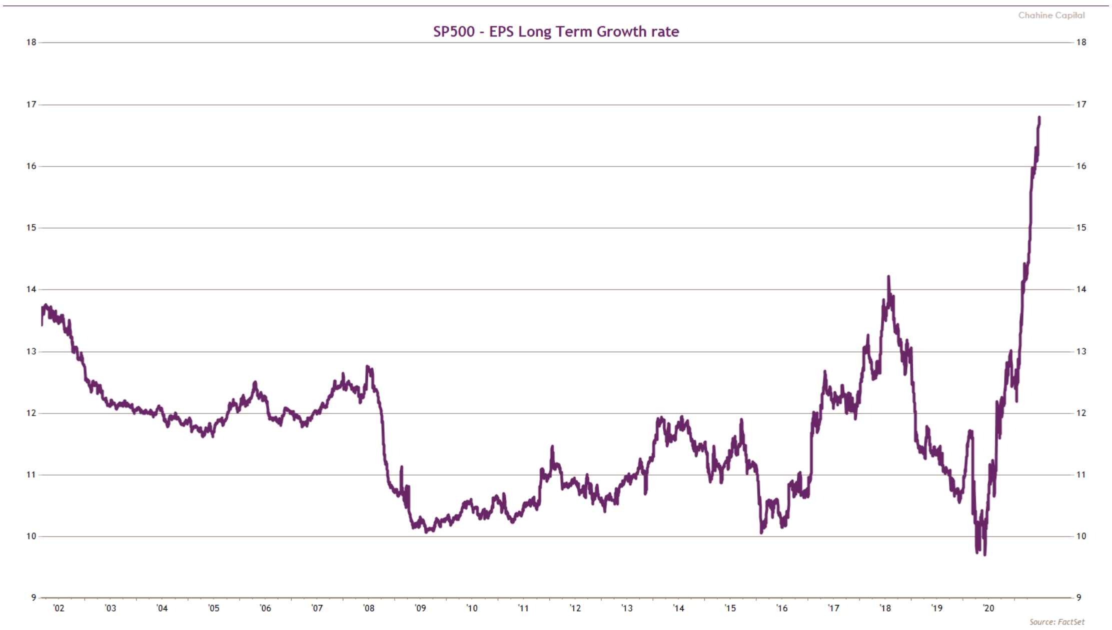


All in all, 2021 is likely to be an excellent year for American companies. Given macroeconomic trends around the removal of pandemic restrictions, there is little scope for disappointment before year-end.

The outlook beyond that point should be treated with caution. Average S&P 500 EPS growth over the past five years is just 4.1%, and consensus analysts have pencilled in double-digit growth for both 2022 (11.6%) and 2023 (9.1%). It would not be the first time that they have been over-optimistic. In fact, at the start of every quarter they tend to overestimate the earnings actually generated in that quarter, by an average 3.4% over the past 20 quarters, and by 4% over the past 40 quarters. The current tendency to underestimate earnings is unlikely to last for long and should disappear altogether once Covid-related base effects evaporate in 2022.

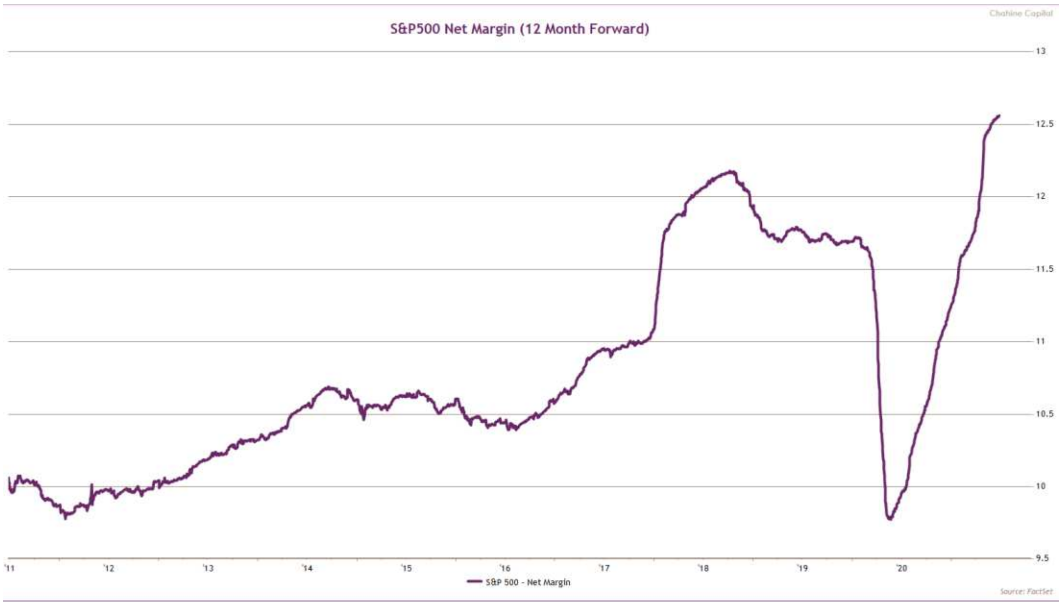
In our view, earnings growth will ease to around its average growth rate from 2023 onwards. As we have argued before, the sorts of growth rates that analysts currently expect will be unrealistic once the pandemic and its associated base effect are over and with regard to the potential growth rates we would anticipate in a context of the sizeable tax hikes likely in the years to come.

Expected EPS growth is still rising but looks unrealistic even with unchanged underlying conditions



The point is that US profit margins can hardly be assumed to stay as high as they are – the aggregate net margin for S&P 500 companies is expected to be an unprecedented 12.6% over the coming 12 months – if proposed tax changes are implemented. That said, differences of opinion even among Democrats suggest that these changes are unlikely before 2023.

Net margin stabilises at historic highs



Valuation model: Wall Street remains expensive, European markets fair value

US and European equity indices ticked around 2% higher in June. Interest rates barely moved last month and we have not seen any significant change in our model's valuations over the period. The US 30-year yield has drifted from 2.26% a month ago to 2.16%, while our weighted average eurozone long rate has remained at 0.82%. Earnings estimates are still being revised higher, especially for 2021: for the US index, analysts have adjusted their 2021 growth number from 22.6% in March to 32.6% last month and now 35.2%; for the euro zone, they are looking for 43.5%, up from 42.1% a month ago.

While we believe that consensus forecasters will be more or less correct for 2021, they are way too aggressive on earnings growth in 2022 and 2023, especially in respect of American firms (11.6% and 9.1%, respectively).

S&P 500 - Valuation end 2021 except implied scenario					
CAGR Compounded Annual Growth Rate from 2020	**30 Years Gvt bonds**				
	1,75%	2,00%	**2,16%**	2,25%	2,50%
Tax increase to 25% (approx. -5% impact on EPS) - CAGR 6.7%	**4 141**	**3 898**	3 755	3 678	3 479
Implied Scenario CAGR 9.1% over 8 years	4 737	4 450	**4 281**	4 190	3 956
Return to normal: 33.2% in 2021, 6.6% in 2022 - CAGR 7.4%	4 354	**4 098**	**3 947**	**3 866**	3 657
Current Index S&P 500			**4 281**		

STRATEGY OVERVIEW

MSCI EMU - Valuation end 2021 except implied scenario					
CAGR Compounded Annual Growth Rate from 2020	**30 Years Gvt bonds**				
	0,00%	0,50%	**0,82%**	1,00%	1,25%
Slow recovery: 43.1% in 2021, 4% in 2022 - CAGR -1%	**174**	**148**	136	129	121
Implied Scenario: CAGR 0.3% over 8 years	190	162	**148**	141	132
Return to normal: 43.1% in 2021, 6% in 2022 - CAGR 0.7%	197	168	**153**	**146**	**137**
Current Index MSCI EMU			**148**		

Conclusions

The bizarre ‘disappearance’ of Alibaba founder and executive chairman Jack Ma for several months has got to be the Chinese Communist Party’s most striking initiative yet to keep the country’s tech sector under firm control. It was not an isolated event: since then we have seen China cancelling the Ant Group’s IPO, banning Bitcoin and prohibiting cryptocurrency mining, for example. None of this contradicts Beijing’s long-term strategic effort to catch up with the world’s tech leaders (cf. its position in 5G), however. China’s R&D spending is now 15 times greater than it was 20 years ago.

Given this apparently inexorable rise in a sector with strong connections to national security, Western countries are trying to respond with a common front. Taken together, their R&D spending is still twice as high as China’s, which inevitably changes the picture in what used to be seen as a purely Chinese–American trade and tech war. In international strategic terms, the USA is still of course keen to maintain its leadership, even if the much-heralded collaboration with the European Union has yet to take tangible form. Either way, we are looking at another step towards the reinstatement of global power blocs – think of the RCEP in Asia, at least as far as trade goes – that carries echoes of Cold War days.

The USA is hardly a novice in antitrust matters and cannot be accused of lagging China on the issue, notwithstanding Beijing’s recent drive to bring large private groups to heel. Even during the Trump presidency there was talk around the need to regulate today’s ‘trusts’, notably GAFAM, especially as these companies now feel it is their place to stray beyond business to influencing public opinion and moral and political debate. Joe Biden’s election has only increased the focus on their activities, and the coming years will see more rather than fewer attempts to regulate them.

The microeconomic news is still good, with US companies expected to generate faster earnings growth than we have seen for a very long time. Analysts are forecasting aggregate earnings growth for the S&P 500 of 62.8% in Q2, the biggest gain since the post-subprime crisis rebound in Q4 2009 (108.9%). Note that Q1 ended up with aggregate index earnings growth worth 52.5%. Taken together, 2021 is on track for a 35.2% jump in profits; this would leave aggregate S&P 500 earnings some 15% above their 2019 highs, more than making up for the damage caused by Covid in 2020.

Although we broadly agree with these upbeat forecasts for 2021, we believe that earnings growth expectations for 2022 and 2023 are far too optimistic, especially in the USA at 11.6% and 9.1%, respectively.

Michaël Sellam

Main ratios for markets and sectors as of 01/07/2021 (in local currency)

CHAHINE CAPITAL

Data as of 30/06/21	Weight vs World	Perf 2021	Perf 2020	Weighted P/E 2022	Weighted P/E 2021	% Wted EPS Chge 2022	% Wted EPS Chge 2021	% Wted EPS Chge 2020	Div Yield 2021	Revision vs M-2% Fiscal 22	Revision vs M-2% Fiscal 21
World - Developed	**100,0%**	**10,95%**	**15,04%**	**18,2 x**	**20,7 x**	**13,38%**	**53,94%**	**-19,54%**	**1,84%**	**0,0%**	**0,3%**
United States	54,7%	14,03%	20,22%	21,6 x	24,5 x	13,36%	50,01%	-15,59%	1,34%	0,7%	0,9%
Japan	7,6%	-0,15%	11,46%	15,4 x	17,4 x	13,14%	26,31%	-8,89%	2,07%	0,6%	1,4%
Eurozone	10,9%	10,46%	8,66%	16,6 x	19,3 x	16,00%	72,14%	-38,91%	2,49%	-1,1%	-0,2%
Europe	20,0%	10,21%	7,19%	16,6 x	18,9 x	14,13%	65,92%	-37,12%	2,63%	-0,9%	-0,3%
Austria	0,2%	17,19%	-3,26%	11,2 x	12,6 x	13,41%	83,02%	-41,33%	3,18%	-0,2%	-0,1%
Belgium	0,4%	6,80%	-2,41%	18,7 x	21,2 x	13,52%	24,60%	-25,04%	2,46%	-0,3%	0,2%
Denmark	0,7%	7,57%	40,90%	25,2 x	25,4 x	0,94%	36,16%	-7,16%	1,64%	-1,5%	0,6%
Finland	0,4%	7,73%	27,09%	19,4 x	21,6 x	11,53%	21,91%	-13,69%	2,73%	-1,6%	-1,8%
France	3,7%	13,70%	6,34%	18,2 x	22,0 x	20,85%	135,65%	-55,01%	2,31%	-1,2%	-1,4%
Germany	2,9%	9,03%	13,28%	15,1 x	16,9 x	12,53%	57,33%	-20,06%	2,50%	-1,0%	0,5%
United Kingdom	4,0%	10,35%	-8,98%	13,8 x	15,6 x	12,91%	80,15%	-45,74%	3,36%	-0,5%	-0,3%
Ireland	0,1%	9,62%	11,11%	18,8 x	32,8 x	74,55%	12323,66%	-105,07%	1,12%	-1,8%	2,5%
Italy	0,9%	10,72%	1,91%	13,2 x	15,4 x	16,86%	42,51%	-41,55%	3,59%	0,3%	0,8%
Netherlands	1,3%	11,69%	21,86%	20,9 x	22,1 x	5,32%	66,43%	-27,01%	1,51%	-2,3%	2,0%
Norway	0,4%	9,66%	5,88%	15,8 x	18,1 x	15,37%	148,95%	-55,05%	3,12%	2,6%	3,0%
Spain	0,8%	4,61%	-4,61%	15,1 x	18,2 x	20,51%	47,96%	-42,67%	3,40%	-1,1%	-0,6%
Sweden	1,4%	14,33%	31,77%	20,2 x	21,4 x	6,31%	71,21%	-38,42%	2,28%	-1,7%	-1,6%
Switzerland	2,5%	7,80%	10,73%	19,2 x	22,0 x	14,62%	17,55%	-7,90%	2,50%	-1,2%	-1,3%
Europe / Commercial Services	0,5%	9,47%	3,13%	20,7 x	25,7 x	24,64%	52,38%	-29,30%	1,79%	-1,4%	-4,1%
Europe / Communications	0,5%	7,62%	-3,23%	14,8 x	16,8 x	13,17%	-21,34%	4,86%	4,25%	-2,6%	-2,0%
Europe / Consumer Durables	0,9%	21,49%	18,46%	9,9 x	11,3 x	13,97%	230,23%	-58,41%	3,15%	-0,1%	1,1%
Europe / Consumer Non-Durable	3,3%	12,31%	8,89%	24,0 x	27,1 x	12,96%	22,52%	-21,01%	1,98%	-1,6%	-1,5%
Europe / Consumer Services	0,4%	11,08%	-1,65%	21,8 x	61,2 x	180,79%	281,27%	-122,57%	1,70%	-0,6%	0,1%
Europe / Distribution Services	0,2%	12,65%	22,70%	21,2 x	24,7 x	17,14%	37,54%	-15,06%	1,76%	-0,9%	-0,4%
Europe / Electronic Technology	0,8%	11,83%	8,85%	21,2 x	27,4 x	29,10%	138,27%	-51,12%	1,14%	-0,8%	-0,3%
Europe / Energy Minerals	0,7%	12,60%	-27,63%	10,1 x	11,3 x	11,86%	3132,33%	-113,42%	4,77%	1,1%	2,4%
Europe / Finance	3,6%	10,64%	-5,87%	11,6 x	12,6 x	9,33%	51,45%	-34,63%	3,88%	-1,6%	-1,0%
Europe / Health Services	0,2%	12,16%	12,06%	22,0 x	24,7 x	12,35%	17,26%	-0,81%	1,47%	-1,7%	-2,0%
Europe / Health Technology	2,3%	8,58%	8,87%	20,1 x	23,0 x	14,06%	6,46%	-0,97%	2,19%	-1,5%	-2,0%
Europe / Industrial Services	0,3%	5,07%	-9,31%	14,0 x	17,8 x	26,69%	98,74%	-51,22%	2,91%	-2,9%	-2,2%
Europe / Miscellaneous	0,0%	17,62%	33,67%	7,9 x	8,3 x	4,54%	118,64%	-81,20%	5,52%	-2,2%	-2,2%
Europe / Non-Energy Minerals	0,7%	16,87%	17,23%	10,5 x	8,5 x	-19,16%	100,84%	27,70%	5,28%	5,1%	6,8%
Europe / Process Industries	0,8%	6,99%	17,61%	19,2 x	20,9 x	8,80%	36,79%	-13,99%	2,45%	-1,6%	-0,8%
Europe / Producer Manufacturin	1,8%	13,49%	31,52%	21,5 x	25,8 x	19,92%	84,86%	-32,20%	1,61%	-1,0%	-1,1%
Europe / Retail Trade	0,6%	6,01%	21,69%	22,3 x	29,4 x	30,52%	72,24%	-24,69%	1,90%	-2,7%	-3,6%
Europe / Technology Services	1,0%	2,21%	23,86%	27,0 x	31,6 x	16,81%	16,72%	-5,85%	0,79%	-4,6%	-1,9%
Europe / Transportation	0,6%	23,61%	3,88%	19,4 x	57,5 x	196,17%	125,63%	-255,23%	1,99%	6,2%	19,6%
Europe / Utilities	0,9%	-7,71%	24,35%	16,3 x	17,7 x	8,68%	10,49%	-17,22%	3,94%	-1,7%	-2,3%

Disclaimer

We do not warrant, endorse or guarantee the completeness, accuracy, integrity, or timeliness of the information provided in this publication. You must evaluate, and bear all risks associated with, the use of any information provided here, including any reliance on the accuracy, completeness, safety or usefulness of such information. This information is published solely for information purposes, and is not to be construed as financial or other advice or as an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. Any information expressed herein on this date is subject to change without notice. Any opinions or assertions contained in this information do not represent the opinions or beliefs of the publisher. The publisher or one or more of its employees or writers may have a position in any of the securities discussed herein.

THE INFORMATION PROVIDED TO YOU HEREUNDER IS PROVIDED "AS IS," AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, J.CHAHINE CAPITAL AND ITS AFFILIATES, BUSINESS ASSOCIATES AND SUPPLIERS DISCLAIM ALL WARRANTIES WITH RESPECT TO THE SAME, EXPRESS, IMPLIED AND STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, COMPLETENESS, AND NO INFRINGEMENT. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NEITHER DIGITAL ANALYTICS NOR ITS AFFILIATES, NOR THEIR RESPECTIVE OFFICERS, MEMBERS DIRECTORS, PARTNERS, BUSINESS ASSOCIATES OR SUPPLIERS WILL BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING WITHOUT LIMITATION DAMAGES FOR LOST PROFITS OR REVENUES, GOODWILL, WORK STOPPAGE, SECURITY BREACHES, VIRUSES, COMPUTER FAILURE OR MALFUNCTION, USE, DATA OR OTHER INTANGIBLE LOSSES OR COMMERCIAL DAMAGES, EVEN IF ANY OF SUCH PERSON IS ADVISED OF THE POSSIBILITY OF SUCH LOSSES, ARISING UNDER OR IN CONNECTION WITH THE INFORMATION PROVIDED HEREIN OR ANY OTHER SUBJECT MATTER HEREOF.