December 2021

COP26 and the emergence of an international carbon market

Overview

Although the press is now focusing on the new Omicron coronavirus variant, which has rekindled fears of a new chapter of the pandemic, November also brought disappointment over COP26. The fact is that the 26th UN Climate Change Conference, to give it its full name, came close to complete fiasco. The reason was the thorny issue of coal: it is an alternative to natural gas, whose prices have risen 130% so far this year.

Concomitant with COP26, the magnitude of the recent surge in international carbon prices surprised observers. Many thought it unimaginable that an energy resource often described as outdated and thought to be without any future could feature at all amid the unprecedented and international awareness over climate change.

So far, the main weapon in limiting greenhouse gas emissions has been the establishment of a carbon market, but outside Europe it has had limited success. The most powerful engine of change may prove to lie elsewhere: the ability of the financial system to direct investment towards more ‘virtuous’ actors via the environmental, social and governance (ESG) criteria that originated in the 2006 Principles for Responsible Investment (PRI). Although discrimination in favour of ESG criteria was long seen as marginal, this is clearly no longer the case. Most institutional investors now regard them as a necessary factor in investment decisions. There are now more than 4,000 PRI signatories that can certify their funds as ESG-compliant, and the assets under ESG management rose to a record level at over $120 trillion this year. Does this mean that the financial system can play a leading role in changing business models in a way that limits global warming? It all depends on the credibility of these criteria and the markets’ ability to avoid ‘greenwashing’.

With 97.5% of the S&P 500 having published at the time of writing, the Q3 results season for US companies is all but finished. It has undoubtedly been an exceptional quarter. Profits largely exceeded analysts’ expectations: EPS growth came in at 39.6%, compared with an end-September forecast of 28.5%. The same was true of sales, which were up 17.8% compared with 14.9% expected at end-September. This was the second-largest increase since FactSet started publishing this series in 2008.

Investors are clearly delighted with this good news and drove American share prices to new highs before fears over the Omicron variant and new restrictions aimed at tackling the fifth wave of the pandemic undercut the main indices. All in all, the US market ended November virtually unchanged on the month (-0.8% for the S&P 500); European markets corrected by more (-3.3% for the Euro Stoxx). 30-year yields eased 20bp in the USA and by 10bp in Europe, offering reassurance to investors over the sustainability of historically high multiples.

Notwithstanding this combination of good microeconomic news and lower borrowing costs, our valuation model still suggests that consolidation is possible in the US market. In contrast, European equities appear undervalued irrespective of the economic scenario, with upside potential worth around 15%. Just like last month, therefore, we continue to overweight European markets against their American counterparts.

Michaël Sellam

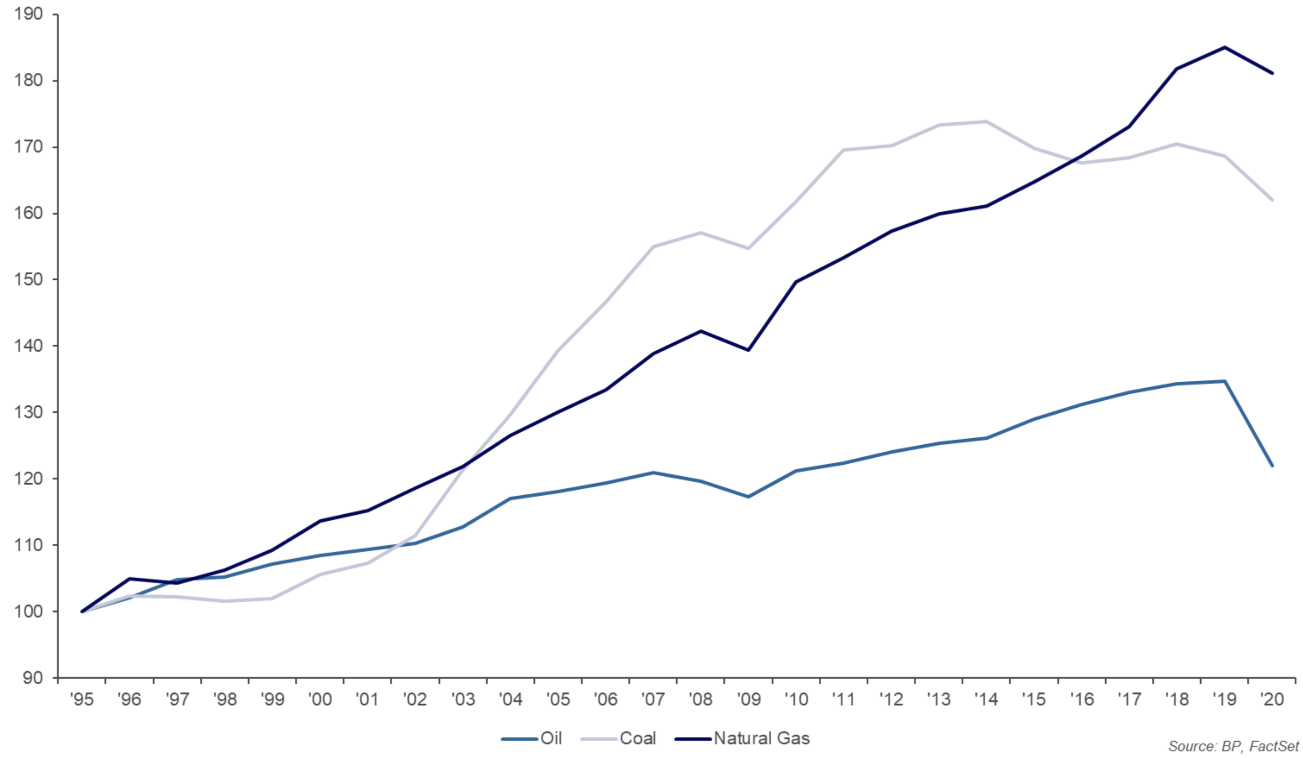
Coal all but sinks COP26

Although the press is now focusing on the new Omicron coronavirus variant, which has rekindled fears of a devastating new round of the pandemic, November also brought disappointment over COP26. The fact is that the 26th UN Climate Change Conference, held over 1-13 November in Glasgow, came close to complete fiasco despite growing public insistence worldwide for radical change. The thorny issue of coal was the reason: it is an alternative to natural gas, whose prices have risen 130% so far this year. The major problem with this non-renewable resource resides in the fact that coal emits twice as much CO_2 as natural gas for any given amount of energy. Moreover, coal has the dubious distinction of being highly polluting when it is mined (ground and water) as well as when it is burned in power stations (the atmosphere).

For these reasons, most of the COP26 participants wanted to make drastic reductions in the use of coal. But China, the world's largest producer (2 billion toe[1] per year), and India, the second largest (although well behind China at around 280 million toe per year), eventually opposed an agreement that they felt was too restrictive on this point. Once again, international politics are to the forefront, heightening fears over the state of international relations in the future, particularly regarding China versus the rest of the world.

Soaring natural gas prices could drive coal consumption higher… the worst-case scenario for COP26

**Non-renewable energy consumption since the Kyoto Protocol - World
(1995:1 = 100)**



All that being said, the 2010s were encouraging in terms of coal use. As the chart shows, world consumption slowed in the first part of the decade and declined from 2014 onwards. It contracted 2.9% in the five years preceding the Covid pandemic, while oil and natural gas consumption increased by 6.8% and 14.8%, respectively. Environmental campaigners would have wanted to see confirmation of the trend as a long-term or even definitive phenomenon, but the strategic vision of the world's two largest coal producers puts these outcomes in serious doubt.

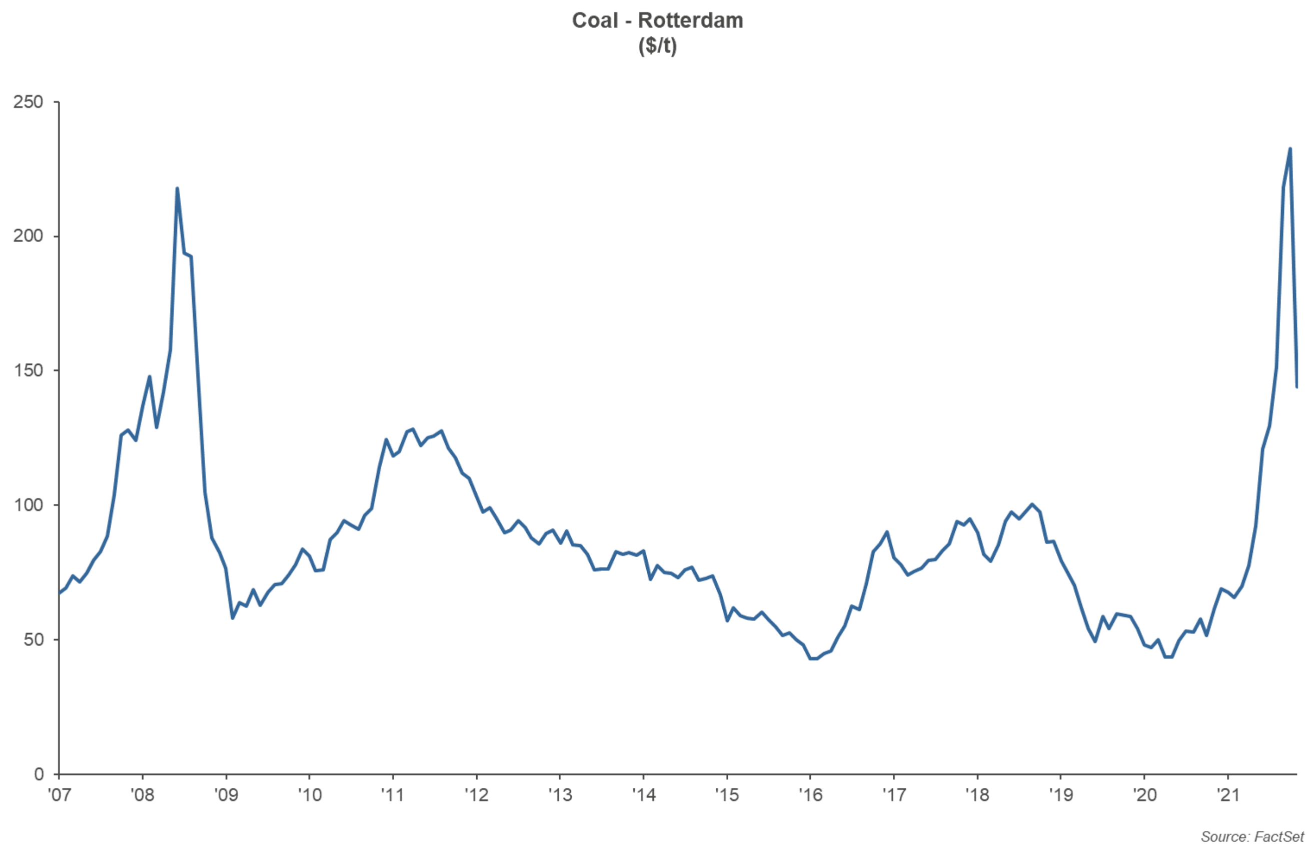
[1] Tonne of oil equivalent: 1 toe is the rough equivalent of 1.5 tonnes of high-quality coal (and 1,100 m^3(n) of natural gas).

Note also that the big coal-producing countries are also the biggest coal consumers. Neither China nor India have any intention of exporting significant quantities of coal, as both are well aware that secure energy supply is a necessary condition for their continued economic development. China exported the annual equivalent of just 140,000 toe in Q3 2021, compared with 470,000 toe from India; both totals clearly represent a small fraction of their output. In both countries, production in both countries is destined mainly for the domestic economy and aims to protect local firms' competitiveness via unrestricted energy supplies (like oil and shale gas in the USA in the 2010s). Changes in international coal prices will make very little difference to consumption – and therefore to the associated CO_2 emissions.

Coal prices at their highest levels for years

Concomitant with COP26, the magnitude of the recent surge in international carbon prices surprised observers. Many thought it unimaginable that an energy resource often described as outdated and thought to be without any future could feature at all amid the unprecedented and international awareness over climate change.

European coal prices exceeded 2008 highs this autumn

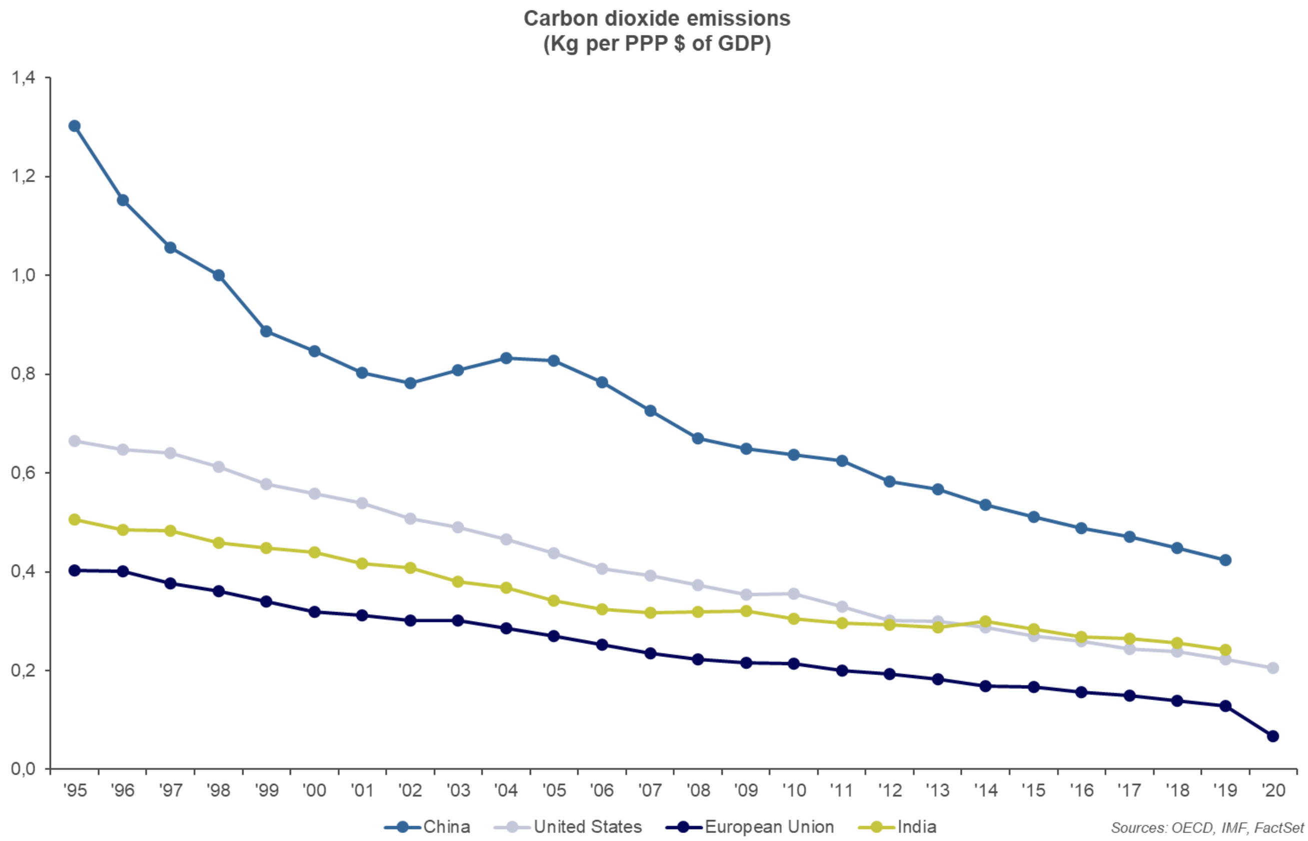


This is exactly what has happened, however. In Rotterdam, coal peaked at over $230 per tonne at end-October, which was above its 2008 peak (see chart). It was still trading at $145 per tonne at end-November, some 110% more expensive than it was at the start of the year. Unfortunately, given the fact that China and India are consuming their own resources, higher prices will not have any dissuasive effect in these two countries. In this case at least, market forces are completely powerless to prevent environmental damage.

Will the international unification of carbon markets at last make a difference?

As the chart below shows, the European Union is well ahead of other major economic powers in terms of reducing CO_2 emissions. Does this reflect the presence of a carbon market that is more advanced than any others? Perhaps, and that helps to brighten the gloom felt by so many COP26 observers. The so-called Glasgow Pact provides for the unification of the world's various carbon markets[2] (sometimes referred to as 'pollution rights' markets) within an international system that would enable countries to offset their greenhouse gas emissions with each other. This assumes of course that a market mechanism is capable of tackling climate change, and the more sceptical NGOs are unhappy with that assumption. But at the end of the day the Glasgow Pact does reflect a real and quantifiable will to decarbonise economies via an international policy instrument that has worked reasonably well in Europe.

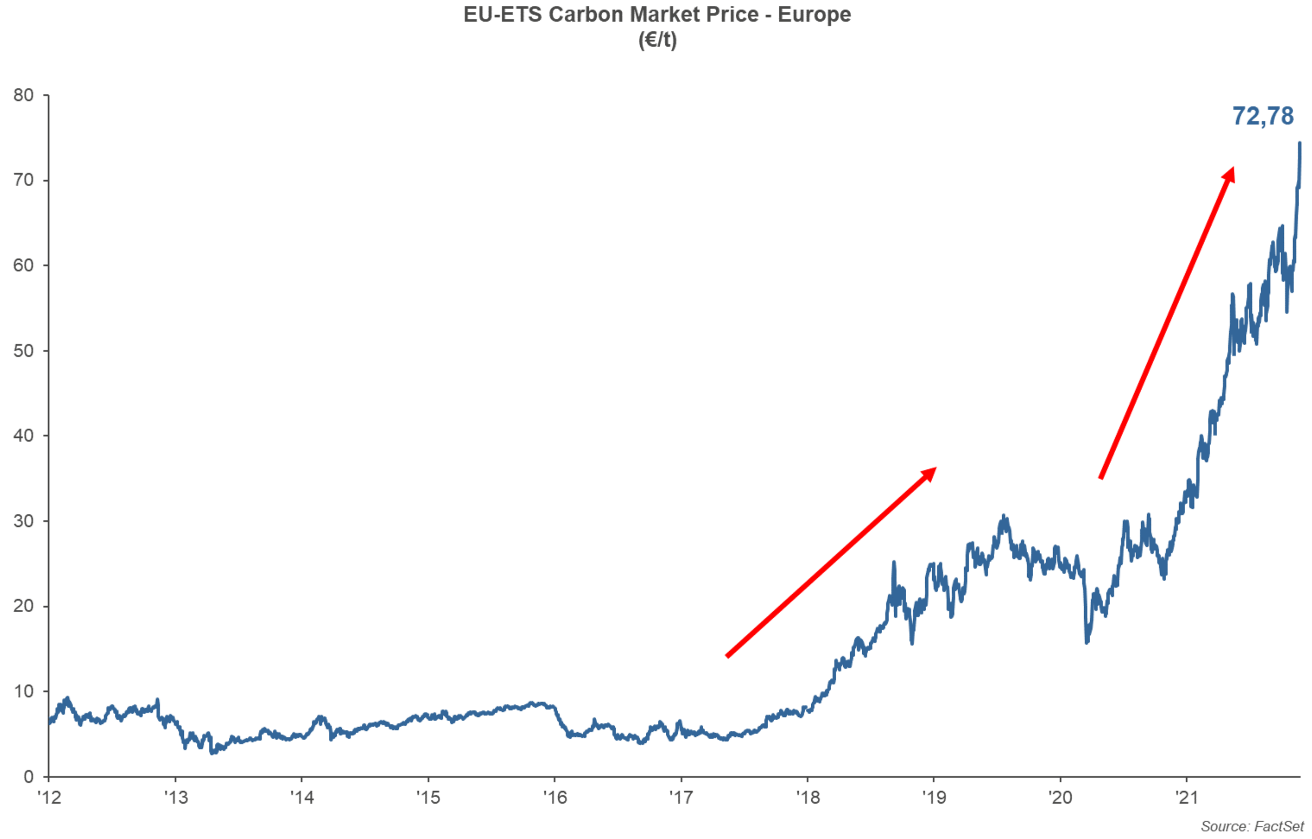
Europe leads the rest of the world on CO2 emissions



The European Union is the undisputed leader in carbon market development. In 2005, ten years after the Kyoto Protocol, it launched the EU Emissions Trading System (EU-ETS), which is still the world's biggest carbon market with over 11,000 users, from power stations to cement manufacturers. Auctions of carbon credits raised around €69 billion between 2013 and 2020, usually earmarked for climate-related measures. This market accounts for 90% of the world's secondary trading in carbon credits, estimated at some $280 billion in 2020. By way of comparison, secondary trading on the US market amounted to around $24 billion that year.

[2] Carbon markets work on the principle that the government constrains the biggest producers of greenhouse gases (notably the energy, industrial and transport sectors) with thresholds and pollution rights. Companies exceeding those thresholds are required to cover the excess by buying additional pollution rights; companies operating below their quotas can sell rights surplus (credits) to requirements. Funds raised through this mechanism are supposed to be earmarked for tackling climate change but in practice this is far from the case. The Glasgow Pact ensures that the offset mechanism is extended from companies to countries.

Up until now, Europe has provided the international carbon price benchmark



Logically enough, the European market has always provided the world's international carbon price benchmark (see chart). That may be about to change, however. China launched a carbon market in July 2021 that is likely to exceed Europe's in terms of size, and as we have just mentioned, COP26 agreed on an international market anyway[3].

The carbon market may not have a long history but it is a fairly instructive one. It was pretty lifeless until 2017, when the Stern-Stiglitz report pointed out than at excessively low carbon price (then systematically below $10 per tonne of CO_2) completely undermined its effectiveness. Prices then shifted up a step, although this was nowhere near comparable with their recent performance. The return of coal in 2021 sent CO_2 prices sharply higher over the three quarters preceding COP26 and they broke the €70 per tonne barrier when the Glasgow Pact was signed in November. This momentum was confirmed when the only aggregate international carbon price index – Markit's Global Carbon Index – hit a record $46.50 per tonne, a gain of 87.8% since the start of the year. Analysts estimate that it will range between €70 and €105 between now and 2030; this is slightly higher than the Stern-Stiglitz recommendation ($50-100 per tonne) but observers believe that significant speculation on the market since that report has been at work and could take prices higher still.

The international carbon market will be worth following closely in the future, as it will assume considerable importance as energy transition gathers pace. Carbon prices could weigh on production costs if they deviate significantly from their target, for example, with consequences for firms that are still difficult to evaluate.

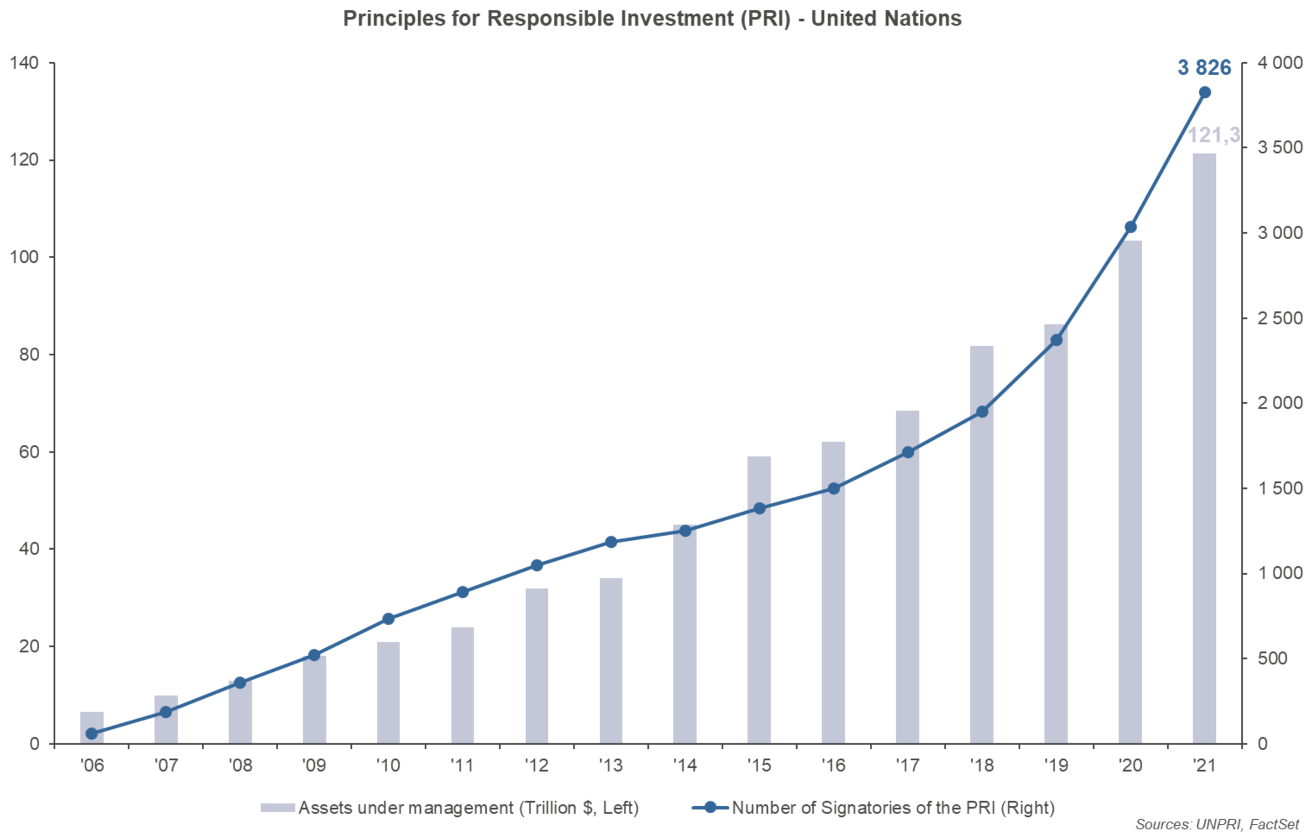
[3] In 2015, meeting in Paris, COP21 provided for an international carbon market as well, but nothing actually happened.

ESG criteria: a passing fad or fundamental change?

It is an open question why COP26 declined to make more of environmental, social and governance (ESG) criteria in responsible finance.

The fact is that the carbon market and ESG criteria were both launched by the UN at the same time. Specifically, ESG criteria originated in the 2006 Principles for Responsible Investment (PRI), and they have clearly made an impact in the financial markets. Most institutional investors now make them a required feature of their operations. There are now more than 4,000 PRI signatories that can certify their funds as ESG-compliant, and the assets under ESG management rose to a record level at over $120 trillion this year. Does this mean that the financial system can play a leading role in changing business models in a way that limits global warming? It all depends on the credibility of these criteria.

Demand for ESG-certified funds continues to grow

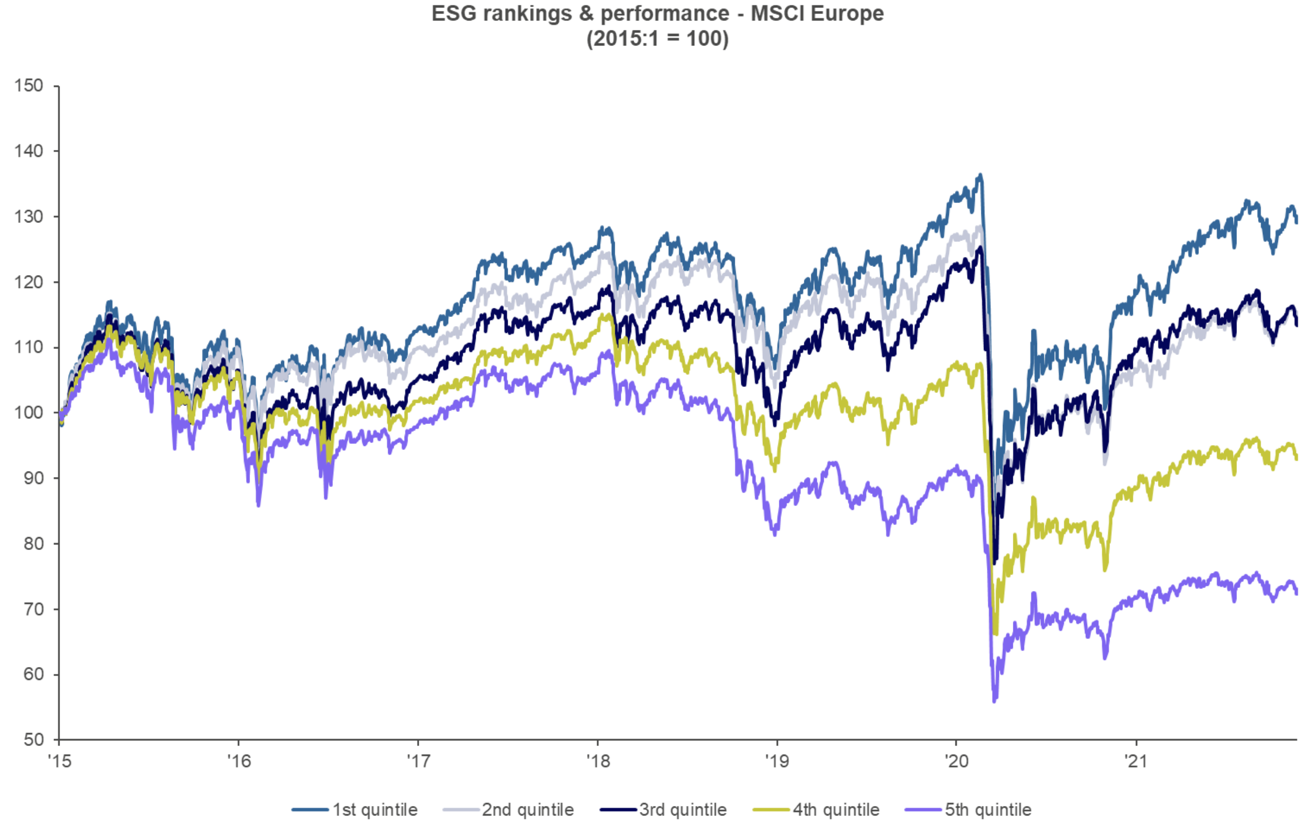


The two initiatives each have strengths and weaknesses but they do complement each other.

Firstly, they do not have the same objective. ESG criteria have a wider scope than the carbon market; they are potentially aimed at almost all financial products rather than the most polluting industries.

Secondly, the carbon market appears more relevant to the climate emergency at the moment than ESG criteria do. It is still a struggle to convince climate campaigners of the merit of responsible finance initiatives, and research on the subject is not very optimistic. According to the EDHEC Scientific Beta research chair, the climate theme accounts for no more than 12% of the equity weight of funds that claim to be ‘durable’. In a more general sense, according to the Carbon Disclosure Project, responsible finance represents a drop in the ocean composed almost entirely of non-durable finance: less than 1% of listed securities are compatible with successive COP objectives to limit global warming to below 1.5°C. And all observers readily agree that ESG criteria create a non-negligible risk of private sector greenwashing.

Reflecting investors' new concerns, the best-performing stocks also have the best ESG ratings



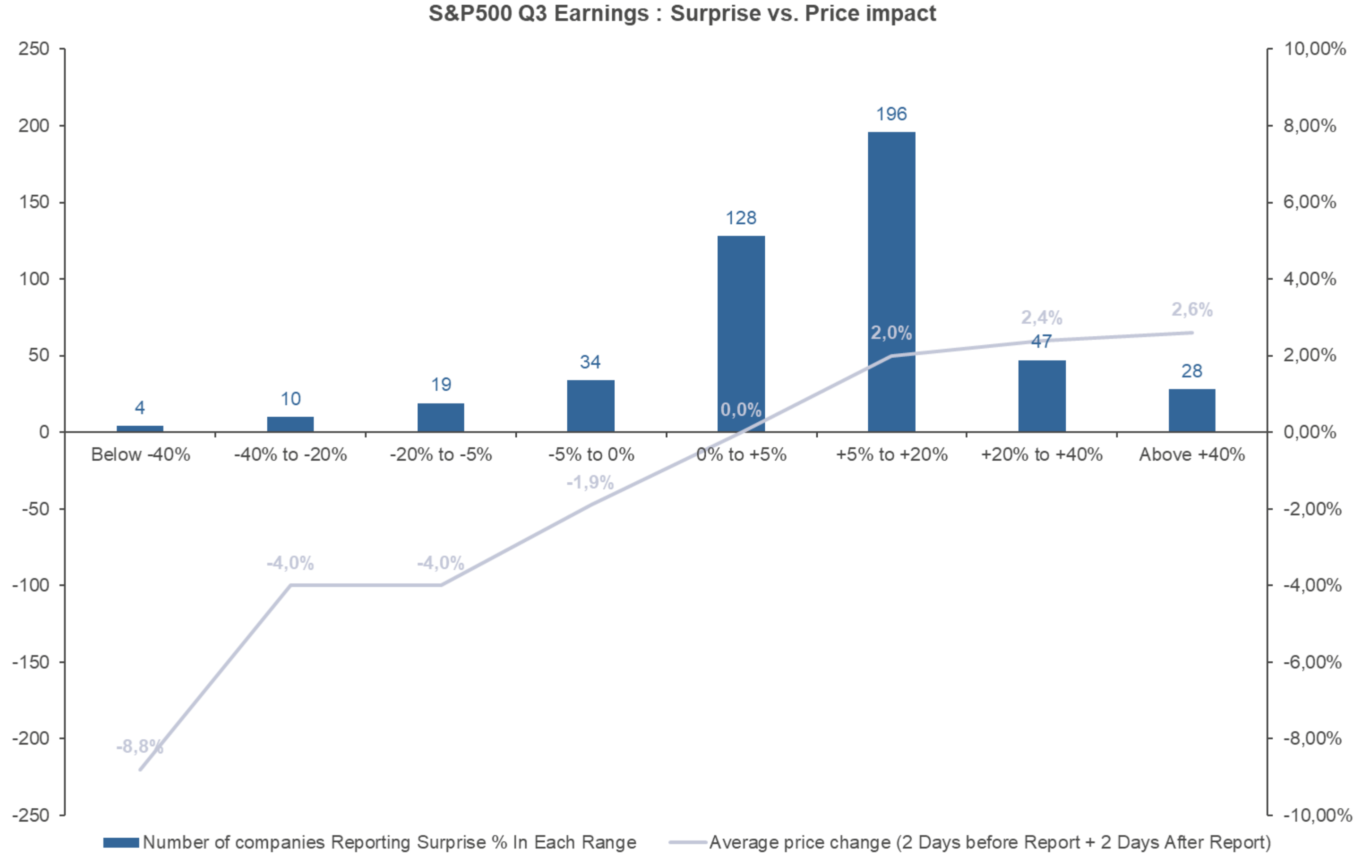
Source: FactSet

The real challenge behind this increasingly relevant story, i.e. that the companies with the best ESG ratings (at least the European companies rated by MSCI) are posting the best median performance, will be to define objective and sufficiently constraining targets to ensure that funds invested in this theme actually serve energy transition. It will only be then that finance can become a major lever for the transformation of our societies into more sustainable models. ESG funds already amount to over a hundred trillion dollars, compared with only a few billion in the carbon market, and the effective use of this weight could help improve the public image of financial markets in general.

2021: an exceptionally good year for profitability

With 97.5% of the S&P 500 having published at the time of writing, the Q3 results season for US companies is all but finished. It has undoubtedly been an exceptional quarter. Profits largely exceeded analysts' expectations: EPS growth came in at 39.6%, compared with an end-September forecast of 28.5%. The same was true of sales or revenues, which were up 17.8% compared with 14.9% expected at end-September. This was the second-largest increase since FactSet started publishing this series in 2008. Investors are clearly delighted with this good news and drove American share prices to new highs before fears over the Omicron variant undercut the main indices.

Numerous positive surprises kept Wall Street bullish, despite high multiples

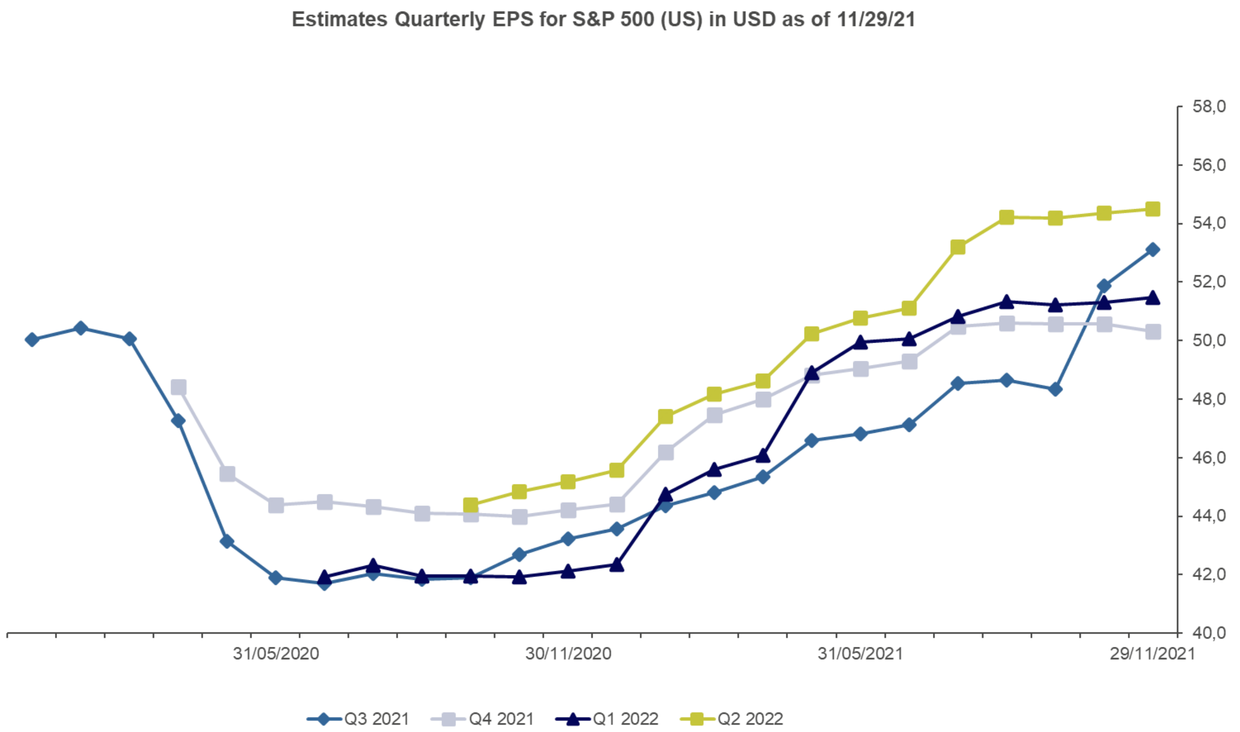


Source: FactSet

As we said last month, it is interesting to note that investors seem increasingly sensitive to the quality of earnings announcements. Good surprises are rewarded more than they used to be, and vice versa for disappointments. In this latest results season, US firms that published profits more than 40% below those predicted by analysts suffered an average 8.8% correction to their share prices (see chart). Fortunately, the high rate of positive surprises (about 82%) resulted in an appreciation in share prices of between 2% and 2.6%, depending on the magnitude of the surprise, and enabled the market to stabilise at around its highs.

Following this third successive quarter of strong earnings growth – the first three quarters of the year generated the biggest increases in S&P 500 profits since 2010 – the year as a whole should see EPS growth of about 44.9%, with sales or revenue growth of 15.8%. Those gains would largely make up for the pandemic-related losses of 2020. And contrary to all expectations, profits in 2021 will be almost 25% greater (!) than they were in 2019.

More upward revisions for Q3 but little change to coming quarters



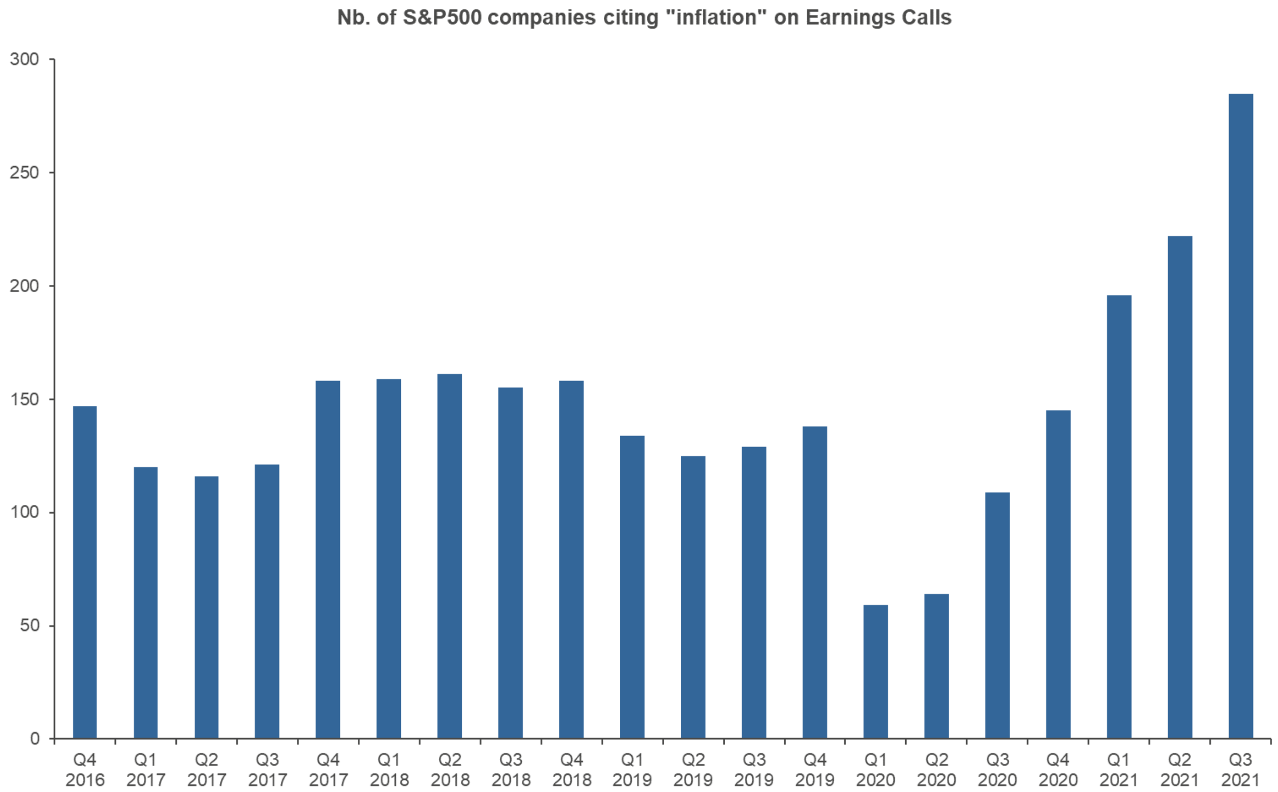
Source: FactSet

2022: a year of truth

So what can we expect in the quarters ahead? Although momentum is positive for Q4 (analysts expect earnings to be up 21.1%, thanks mainly to the energy, basic materials and industrial sectors), the pace of upward revisions has slowed for the first time in several quarters. Less optimism reflects the gradual disappearance of the positive base effect related to the pandemic (see chart below).

As we pointed out some months ago, there are points of friction that could hamper further corporate progress. Many firms themselves mentioned them during Q2 or Q3 results announcements. The first is obviously inflation, and we saw a sharp rise in the number of S&P 500 firms referring to it in Q2 announcements. Even more did so in Q3: 222 companies cited the word ‘inflation’ in relation to Q2 and 285 in relation to Q3 so far (using the current composition of the S&P 500 as our reference sample), a new record.

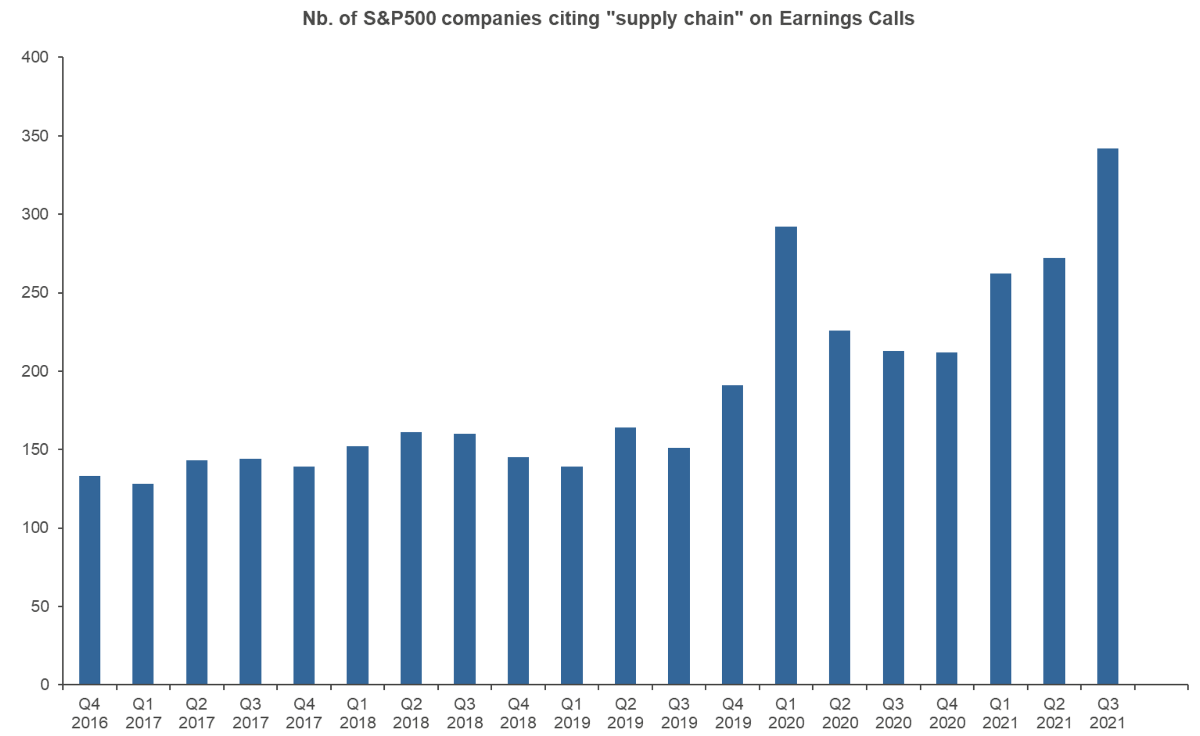
Rising inflation continues to worry US firms



Source: FactSet

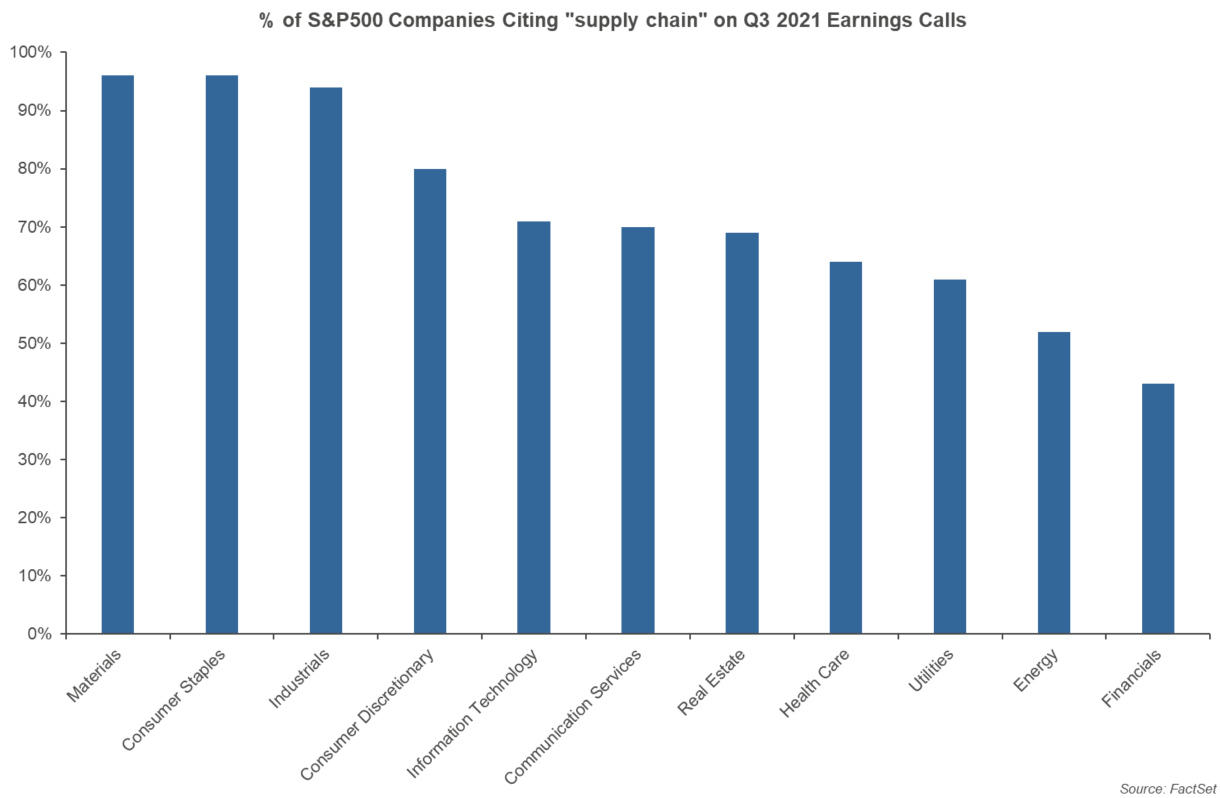
That said, a second theme – the international supply chain issues we discussed last month – appears to be more of a worry for S&P 500 companies. Almost 350 of them used the words ‘supply chain’ in their Q3 announcements; this is more than the record set in Q1 2020, when the pandemic halted production in a great many factories all over the world. Naturally, the sectors most affected are consumption, industry and basic materials.

International supply chain problems are US companies' main concern



Source: FactSet

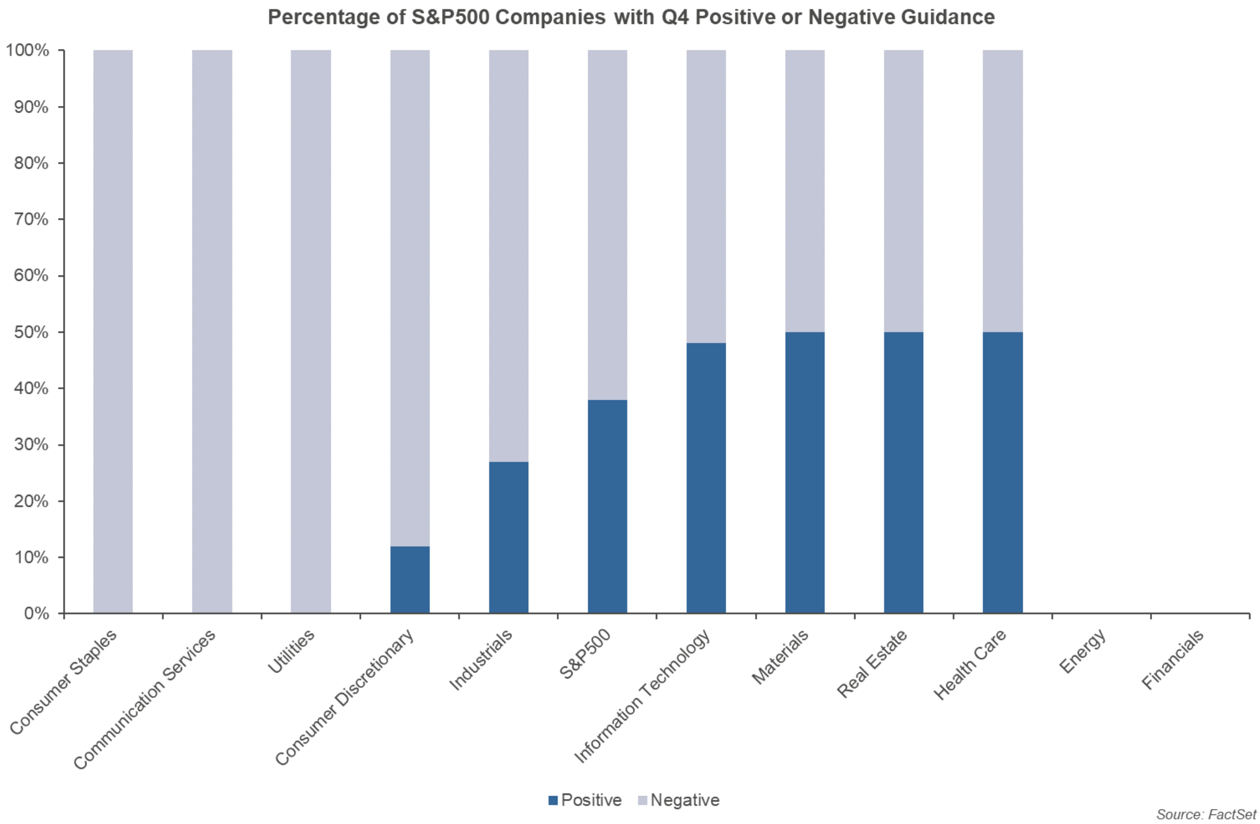
Some sectors are more sensitive to supply chain issues than others



Source: FactSet

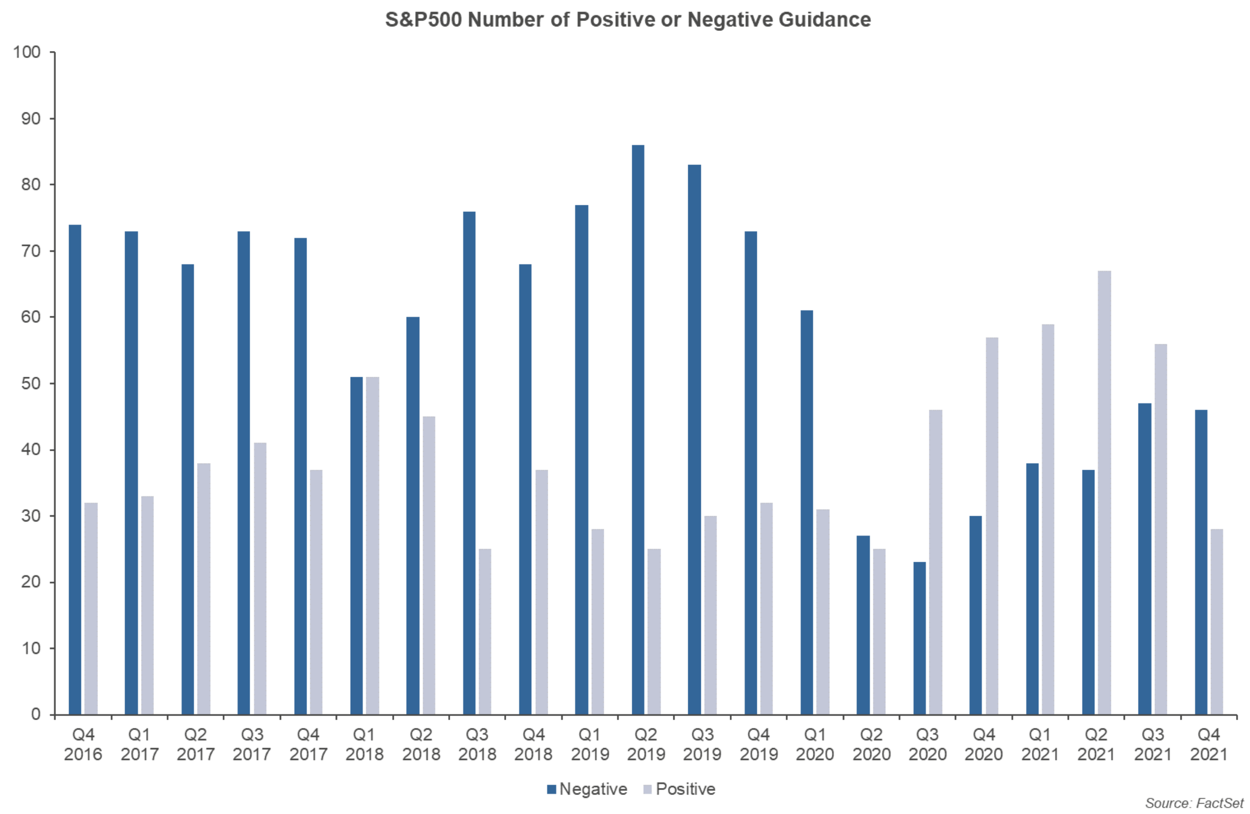
In the coming quarters, therefore, firms will face two sets of problems that could eat into their margins. More S&P 500 companies have issued negative guidance than positive guidance for Q4: the negative guidance percentage is currently 62%, above the long-term average and much higher than that for the past three quarters, which enjoyed a particularly high share of positive guidance.

Positive guidance no longer in the majority



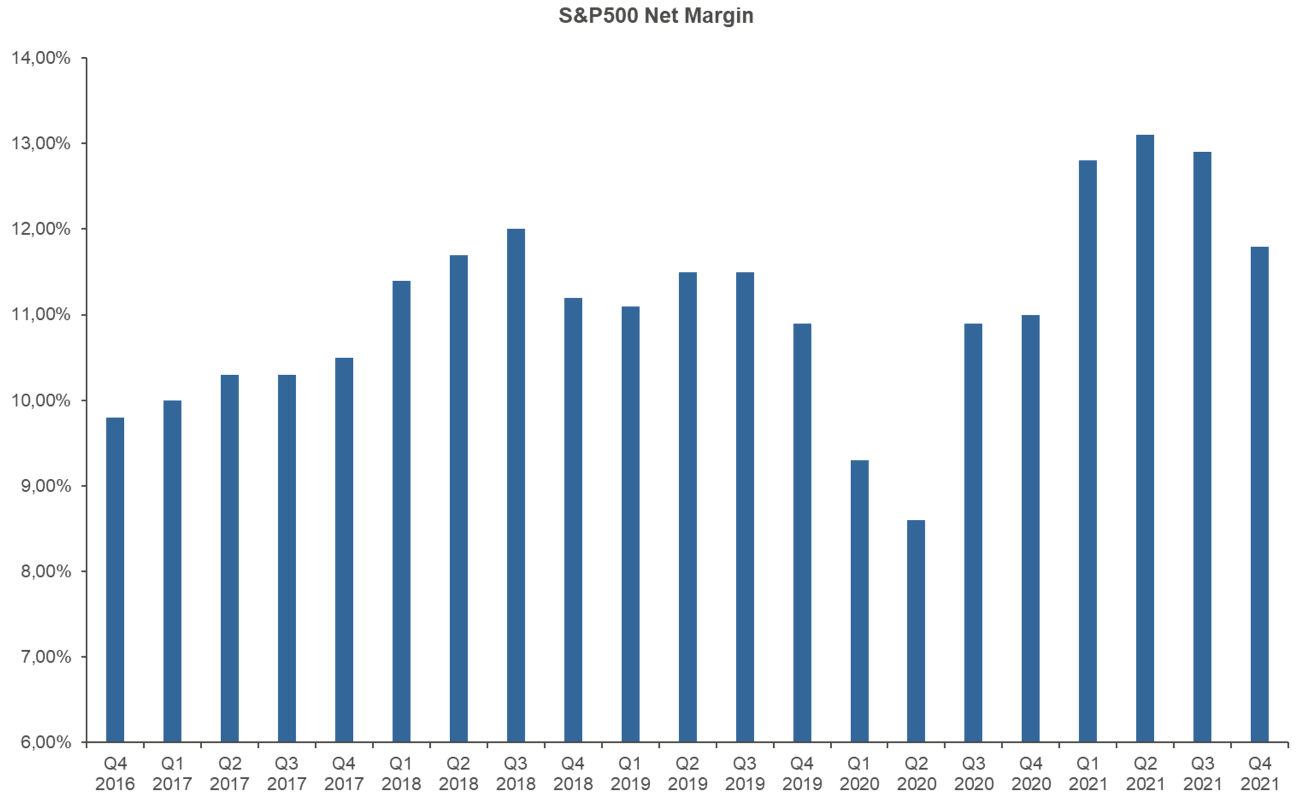
Source: FactSet

With Covid-19 base effects behind us, positive guidance is tailing off



It will be a struggle to maintain existing profit margins in this context, especially as inflation appears to be slipping out of the Fed's control and taxes are set to rise. The start of 2022 is therefore likely to reveal the ability of US firms to maintain their excellent performance to date. We'll be watching closely…

US corporate margins likely to normalise in the coming quarters



Source: FactSet

Valuation model: no major changes, a preference for European equity markets

The US market ended November virtually unchanged on the month (-0.8% for the S&P 500); European markets corrected by more (-3.3% for the Euro Stoxx), amid fears related to the Omicron variant and uncertainty over the fifth wave of the pandemic that is forcing several European countries to severely tighten existing restrictions. 30-year yields eased 20bp in the USA and by 10bp in Europe, offering reassurance to investors over the sustainability of historically high multiples.

As far as earnings forecasts are concerned, we believe that 2021 will turn out as good overall as analysts expect. But expectations for earnings growth are optimistic for the coming years, especially on Wall Street at 9.5% in 2022 and 9.1% in 2023.

Taking these factors into account, our valuation model indicates that consolidation is still possible in the US market. Were long rates to stabilise at current levels, the appropriate correction would be 3-4%. Our scenario with tax hikes in 2023 does not appear to have been priced into the market; were it to materialise, it would indicate a slightly bigger correction (8-9% if rates stabilise). Our recommendation to exercise a selective approach over US equities is unchanged.

S&P 500 - Valuation end 2021 except implied scenario

CAGR Compounded Annual Growth Rate from 2021	30 Years Gvt bonds				
	1,50%	1,75%	1,88%	2,00%	2,50%
Tax increase to 25% (approx. -5% impact on EPS) - CAGR 3.3%	4 637	4 340	4 198	4 074	3 618
Implied Scenario CAGR 4.8% over 8 years	5 146	4 814	4 655	4 517	4 006
Return to normal: 41% in 2021, 7.7% in 2022 - CAGR 4.2%	4 959	4 642	4 490	4 357	3 867
Current Index S&P 500			**4 655**		

In Europe, our model indicates that equities are undervalued irrespective of the economic scenario (in the event of a slow recovery, interest rates would inevitably sink towards zero). The market's upside potential amounts to around 15% in all scenarios. Just like last month, therefore, we continue to overweight European markets against their American counterparts.

MSCI EMU - Valuation end 2021 except implied scenario

CAGR Compounded Annual Growth Rate from 2021	30 Years Gvt bonds				
	0,00%	0,50%	0,58%	0,75%	1,00%
Slow recovery: 67% in 2021, 3% in 2022	179	153	149	142	133
Implied Scenario	178	152	148	141	132
Return to normal: 67% in 2021, 3.7% in 2022	210	178	174	166	155
Current Index MSCI EMU			**148**		

Main ratios for markets and sectors as of 30/11/2021 (in local currency)

CHAHINE CAPITAL
PERFORMANCE ENGINEERING

Data as of	Weight vs	Perf		Weighted P/E		% Wted EPS Chge			Div Yield	Revision vs M-2%	
11/30/21	World	2021	2020	2022	2021	2022	2021	2020	2021	Fiscal 22	Fiscal 21
World - Developed	**100,0%**	**9,49%**	**15,04%**	**17,8 x**	**19,6 x**	**10,49%**	**65,18%**	**-19,08%**	**1,9%**	**0,0%**	**0,3%**
United States	57,4%	17,94%	20,22%	21,8 x	24,3 x	11,53%	60,56%	-15,57%	1,3%	0,7%	0,5%
Japan	7,3%	-3,57%	11,46%	14,2 x	16,1 x	13,30%	34,07%	-8,89%	2,2%	1,7%	1,9%
Eurozone	10,5%	5,36%	8,66%	15,3 x	16,6 x	8,63%	100,87%	-38,93%	2,6%	0,1%	2,5%
Europe	19,6%	6,56%	7,19%	15,5 x	16,7 x	7,78%	88,93%	-35,70%	2,8%	-0,6%	0,7%
Austria	0,2%	18,75%	-3,26%	10,4 x	11,1 x	6,78%	112,20%	-41,33%	3,2%	0,9%	1,4%
Belgium	0,4%	-0,92%	-2,41%	18,3 x	19,8 x	8,37%	29,33%	-25,07%	2,5%	0,5%	-0,6%
Denmark	0,7%	6,99%	40,90%	21,1 x	22,0 x	4,24%	66,74%	-7,16%	2,0%	2,4%	-0,7%
Finland	0,4%	-0,53%	27,09%	18,0 x	18,6 x	3,32%	38,02%	-13,69%	3,0%	-1,2%	-0,8%
France	3,6%	12,62%	6,34%	17,2 x	19,8 x	14,83%	168,87%	-55,00%	2,4%	-1,5%	0,1%
Germany	2,7%	-0,73%	13,28%	13,5 x	14,4 x	6,66%	80,43%	-20,06%	2,9%	0,7%	2,8%
United Kingdom	3,8%	4,77%	-8,98%	12,8 x	13,8 x	8,26%	94,52%	-40,09%	3,8%	-1,9%	-1,1%
Ireland	0,1%	6,99%	11,11%	18,3 x	26,9 x	46,67%	5303,40%	-105,07%	1,3%	-1,8%	-0,2%
Italy	0,9%	6,90%	1,91%	11,5 x	12,9 x	12,21%	73,63%	-41,54%	3,8%	-1,1%	-0,1%
Netherlands	1,4%	9,56%	21,86%	19,1 x	19,9 x	4,22%	96,40%	-27,12%	1,5%	7,3%	15,0%
Norway	0,5%	9,64%	5,88%	14,2 x	15,8 x	11,05%	250,88%	-55,05%	3,2%	-1,8%	-3,8%
Spain	0,7%	-6,01%	-4,61%	13,7 x	13,0 x	-5,46%	98,83%	-42,81%	3,6%	-1,7%	-1,6%
Sweden	1,5%	15,46%	31,77%	20,5 x	20,6 x	0,59%	91,47%	-38,44%	2,4%	-2,3%	-3,5%
Switzerland	2,6%	9,26%	10,73%	18,9 x	20,1 x	6,27%	28,55%	-7,91%	2,5%	-1,0%	-1,2%
Europe / Commercial Services	0,6%	4,52%	3,13%	21,2 x	25,0 x	17,99%	62,91%	-29,26%	1,8%	-2,8%	-2,8%
Europe / Communications	0,5%	-2,04%	-3,23%	14,2 x	11,7 x	-17,73%	4,65%	4,86%	4,7%	-3,5%	-0,4%
Europe / Consumer Durables	0,9%	14,31%	18,46%	9,0 x	9,8 x	7,96%	295,87%	-58,41%	3,5%	-1,4%	0,2%
Europe / Consumer Non-Durable	3,1%	6,43%	8,89%	22,9 x	25,6 x	12,07%	27,24%	-21,01%	2,0%	-2,7%	-2,5%
Europe / Consumer Services	0,3%	-4,60%	-1,65%	21,4 x	138,7 x	573,33%	148,09%	-122,49%	1,6%	-7,3%	-1,9%
Europe / Distribution Services	0,2%	13,42%	22,70%	20,7 x	22,1 x	7,01%	56,36%	-15,06%	2,0%	-1,5%	-0,9%
Europe / Electronic Technology	0,8%	8,66%	8,85%	20,5 x	25,1 x	22,37%	169,93%	-51,15%	1,2%	-1,6%	-2,1%
Europe / Energy Minerals	0,7%	13,91%	-27,63%	7,6 x	8,5 x	10,81%	12992,71%	-92,11%	5,0%	4,3%	3,1%
Europe / Finance	3,5%	9,41%	-5,87%	11,2 x	11,0 x	-2,37%	80,47%	-34,78%	4,1%	-1,1%	1,3%
Europe / Health Services	0,2%	15,59%	12,06%	23,3 x	24,1 x	3,21%	20,34%	-0,81%	1,4%	-2,9%	-1,2%
Europe / Health Technology	2,3%	8,53%	8,87%	20,0 x	22,3 x	11,49%	13,16%	-0,94%	2,2%	-2,7%	-0,7%
Europe / Industrial Services	0,3%	-1,98%	-9,31%	14,4 x	19,3 x	33,75%	73,98%	-51,28%	3,1%	-4,7%	-5,7%
Europe / Miscellaneous	0,0%	25,81%	33,67%	12,9 x	10,2 x	-23,31%	148,37%	-81,20%	3,1%	0,7%	2,8%
Europe / Non-Energy Minerals	0,6%	5,15%	17,23%	7,7 x	6,5 x	-15,23%	117,96%	27,68%	7,2%	3,2%	2,3%
Europe / Process Industries	0,8%	3,66%	17,61%	18,2 x	18,7 x	2,73%	53,73%	-13,98%	2,6%	-1,3%	-1,6%
Europe / Producer Manufacturin	1,8%	13,90%	31,52%	22,3 x	27,0 x	20,93%	83,49%	-32,22%	1,7%	-3,5%	-3,7%
Europe / Retail Trade	0,5%	-2,70%	21,69%	22,1 x	27,0 x	22,20%	85,69%	-24,54%	2,0%	-4,6%	-3,6%
Europe / Technology Services	1,1%	-1,58%	23,86%	27,4 x	31,2 x	14,07%	29,51%	-5,83%	0,7%	8,0%	26,9%
Europe / Transportation	0,6%	12,57%	3,88%	12,4 x	25,8 x	107,47%	154,30%	-255,23%	3,4%	12,3%	8,5%
Europe / Utilities	0,9%	-8,78%	24,35%	15,7 x	16,7 x	6,63%	21,51%	-17,21%	4,0%	-0,9%	-1,4%