# *Financial markets and the economy* in 2019

Pareto

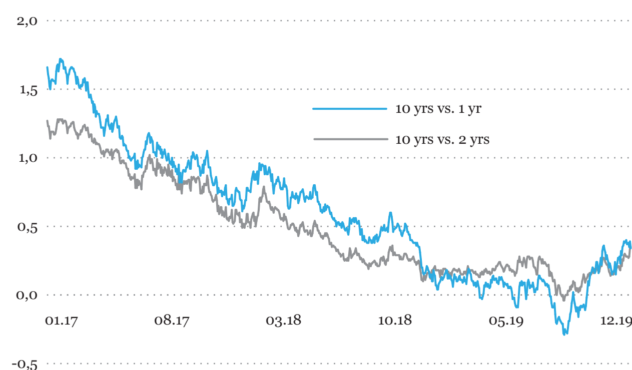
# Financial markets and the economy in 2019

*by Chief Investment Officer Finn Øystein Bergh*

*The markets once again overruled intuition: Global growth estimates were reduced by a full percentage point – and universal gloom turned to exuberance.*

Upon entering 2019, financial markets were in the grip of gloom, after major stock market declines and increasing corporate bond spreads in the last quarter of 2018. Dimming global growth prospects and an unpredictable end to the trade negotiations between USA and China put a definite damper on the market sentiment.

### *The yield curve scare*

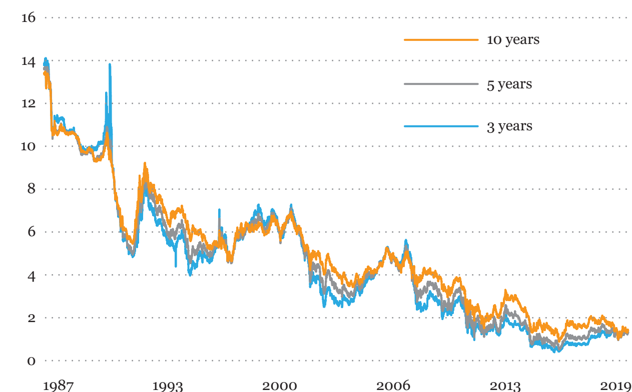



*Term spread, U.S. government bonds.*
*Source: FactSet, Pareto*

And yet, 12 more months were to pass before anyone had heard about the coronavirus.

Furthermore, the term spread – the difference between long-term and short-term government bond yields – was about to turn negative in the US, which represents roughly 60 per cent of the MSCI World Index market capitalisation. An impending inversion also in Norway, while of significantly less importance, was one of many indications of a broader phenomenon.

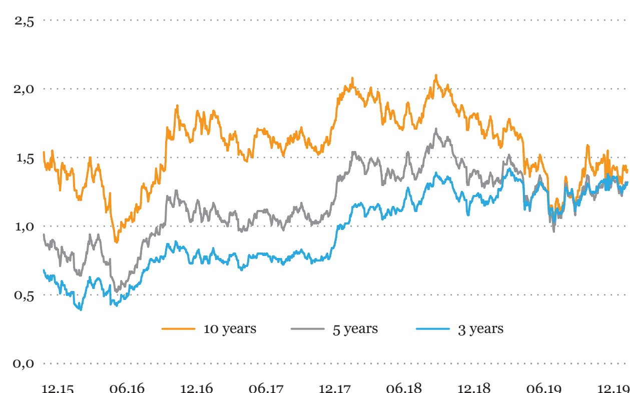
### *Recovery position?*




*Yield, per cent, Norwegian government bonds.*
*Source: Norges Bank*

Historically, a negative term spread has been a harbinger of recessions. This time, it was partly brought about by the Fed

### *Spread compression*




*Yield, per cent, Norwegian government bonds.*
*Source: Norges Bank*

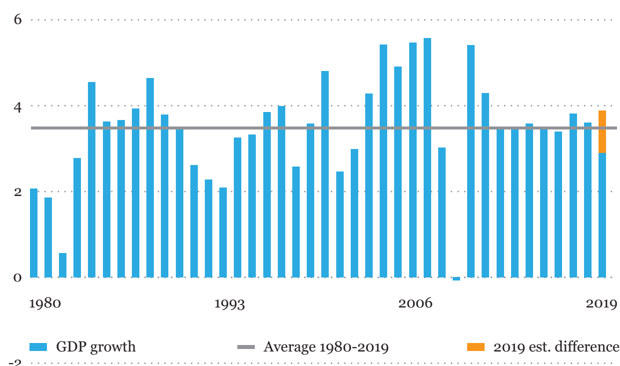
Funds rate having been hiked by a full percentage point in 2018, the latest increase as late as December 19. At that time, Federal Reserve was still convinced that real economic growth was strong.

When in fact the term spread did turn negative, a few months into 2019, there was no shortage of worried comments (nor of

### *The Viking inversion*

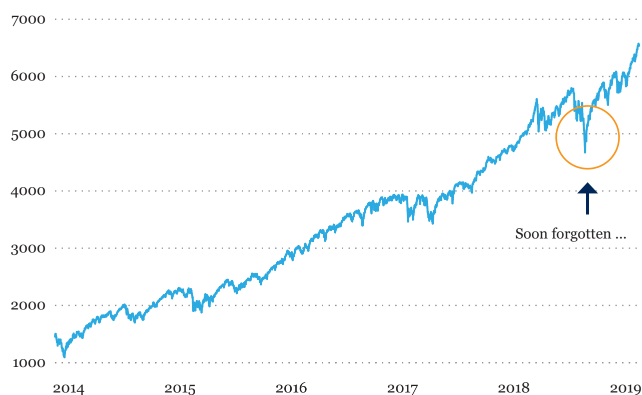
*Term spread, percentage points, yield on 10-year Norwegian government bonds less yield on 3-year Norwegian government bonds. Source: Norges Bank*

### *Disappointing global growth*




*Per cent.*
*Source: IMF*

### *S&P 500 back on track*




*S&P 500 Total Return.*
*Source: FactSet*

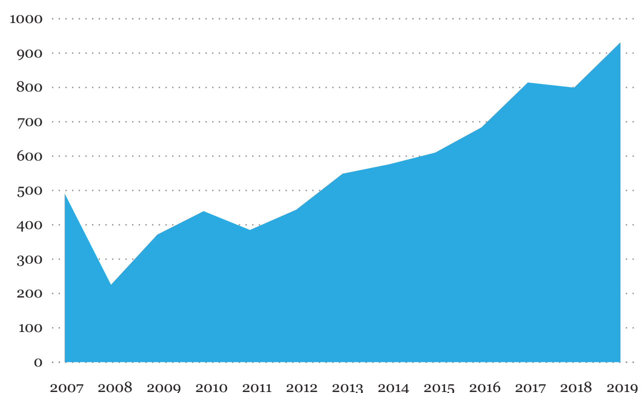
attentive listeners). From August 2018 to April 2019, the number of Google searches for "recession" nearly doubled.

There was indeed reason to worry. In just six months, IMF revised its 2019 global growth estimate from 3.9 to 3.5 per cent, only to be cut even more – down to 2.9 per cent – before the year was through.

**Action and reaction**
As 2019 progressed, expectations rose that Federal Reserve would rather cut the Fed Funds rate than enact further increases. The first cut came in July, a quarter point, followed by two cuts of the same magnitude in September and October. September also saw the European Central Bank lower its key rate from already negative -0.4% to -0.5%. A quarter point hike from the Swedish Riksbanken the same month mattered little. Confidence rose.

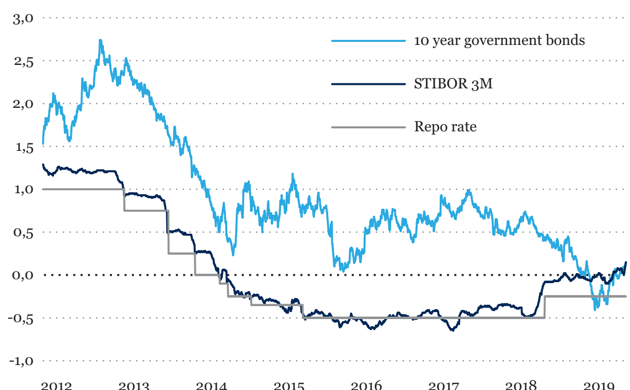
This made it all the more difficult to find sensible alternatives to equities, leading to an autumn rally in the stock market. The

### *Back on track*



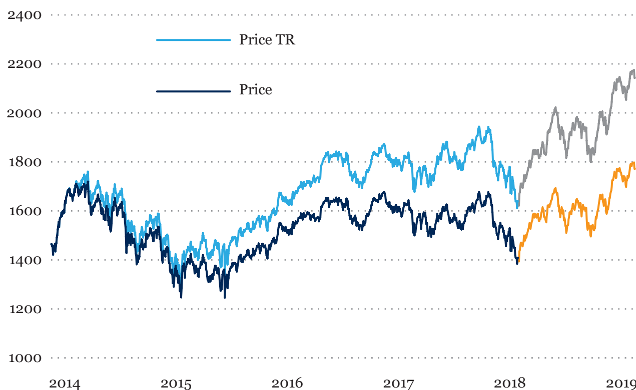

*The Oslo Børs benchmark index, year-end quotes.*
*Source: oslobors.no*

### *Up for air*




*Per cent.*
*Source: riksbank.se*

### *Back with a vengeance*

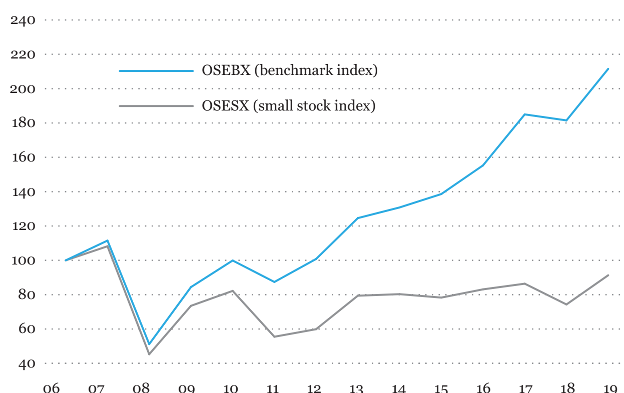



*OMX Stockholm 30 benchmark index.*
*Source: FactSet*

Oslo Børs benchmark index, which mid-August was just above its level when entering 2019, ended the year with a return of 16.5 per cent. In the US, where the rebound from 2018 was stronger, the S&P 500 closed the year with a total return of as much as 31.5 per cent.

Globally, fixed income spreads tightened by some 60–70 basis points for investment grade and 170-200 basis points for high yield. In the Nordics, which was less affected by the preceding year's market slump, the tightening was less pronounced, but still strong.

***Catching up is hard to do***




*Source: oslobors.no*

From these observations alone, several conclusions or inferences can be drawn. First, markets are indeed sensitive to monetary policy – or more specifically to expectations of changes in key interest rates. To the extent that monetary policy may influence real growth, an apparently much weaker link, it is likely to work its way through pricing of securities, building confidence and wealth effects.

Second, low economic growth does not go hand in hand with weak financial markets. Similarly, fear, unease and investor tension do not presage low financial returns. On the contrary – these are rather common fixtures of all financial markets. That's just part of their nature.

Apprehension and expectations can generally be inferred from pricing of securities. So, let's take a closer look at pricing.

**Why the market stayed so strong**

A favourite gauge throughout the year was the cyclically adjusted P/E, CAPE, more commonly known as the Campbell-Shiller P/E. This measure compares current pricing to an inflation-adjusted

***S&P 500 getting more expensive?***

*Cyclically Adjusted P/E Ratio (CAPE) adjusted for changes in the dividend payout ratio. Source: Robert Shiller, Pareto*

average of the last ten years' earnings. On this measure, the stock market was certainly not cheap, with pricing far above its 25-year average, leading to a number of anxious stock market comments.

For some time, I have maintained my own version of this measure, with a computation that takes into account the effect of changing payout ratios, but this only confirmed the impression of high pricing.

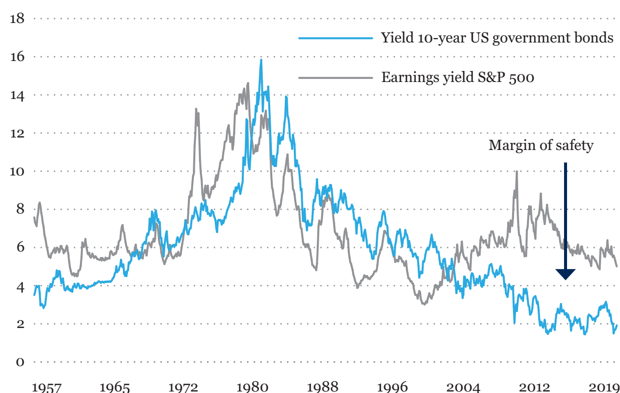
I do believe, however, that stock market multiples can not be evaluated without reference to the interest rate level. And I would contend that investors' responsiveness to changes in interest rates in 2019 provides a recent confirmation.

In my opinion, the best way of relating stock market pricing to interest rates is a simple comparison of earnings yields and bond

***Still a considerable margin of safety***

*Yield spread: Earnings yield S&P 500 as defined by the adjusted CAPE 10 less the current yield on 10 yr Treasuries. Source: Robert Shiller, Pareto*

### *Earnings card still not maxed out*




*Sources: Robert Shiller, FactSet, Pareto*

yields. If we apply this perspective to the the adjusted CAPE, letting the yield on 10-year government bonds represent the level of interest rates, we see that there is still a considerable margin of safety.

The same applies if, instead of using the decidedly long-term CAPE multiple, we use the current earnings yield, based on the forward-looking (next 12 months) earnings estimates. Whereas, for much of the last century, the two curves actually moved closely together, after the great financial crisis the current earnings yield has provided a considerable margin of safety.

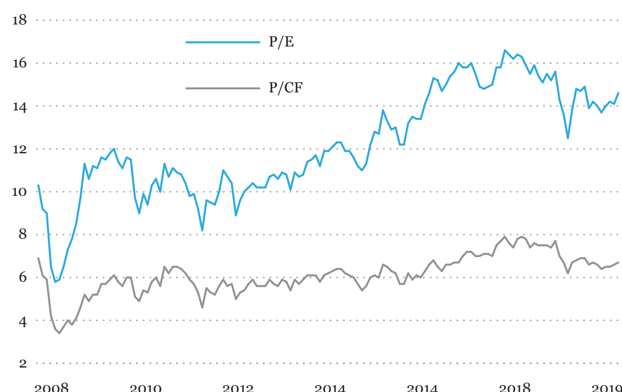
If you're still wondering why the market managed to stay so strong for so long, I dare say you need look no further. All classic multiples and rules of thumb must be calibrated to the level of interest rates (which, alas, is seldom done). Doing this exercise, you will see that the market has been reasonably priced pretty much from the global financial crisis to the end of 2019.

**Rational returns**

This conclusion holds for more markets than Wall Street. Comparing the current earnings yield to long-term government bond yields in Norway, we find an even fatter margin of safety, about six percentage points.

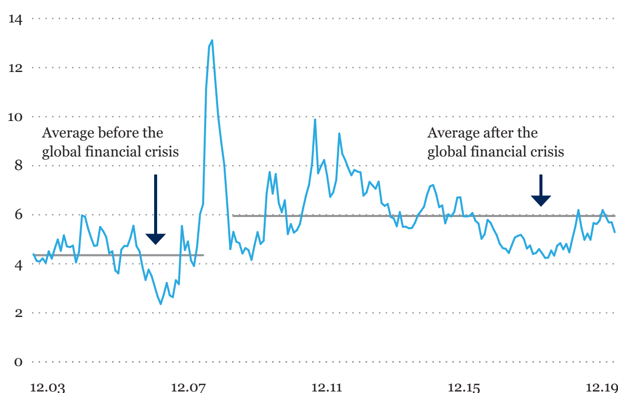
Shifting our gaze from earnings to cash flow, Norwegian stock market pricing actually looks little changed over the years since the global financial crisis. Cash flow has grown faster than earnings, meaning that for each unit of earnings there is more cash. This, too, implies that the strong markets in 2019 were in fact rationally so.

### *Little changed pricing on cash flow*



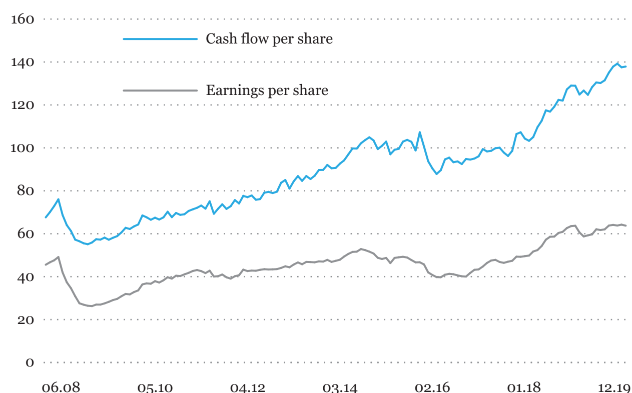

*Price to earnings and price to cash flow ratios for the Norwegian benchmark index based on estimates for the next 12 months. Source: FactSet*

### *Still fair margin of safety*




*Percentage points, difference between the OSEBX forward earnings yield (next 12 months) and the yield on Norwegian 10-year government bonds. Source: FactSet, Norges Bank, Pareto Asset Management*

### *Even more cash in earnings*



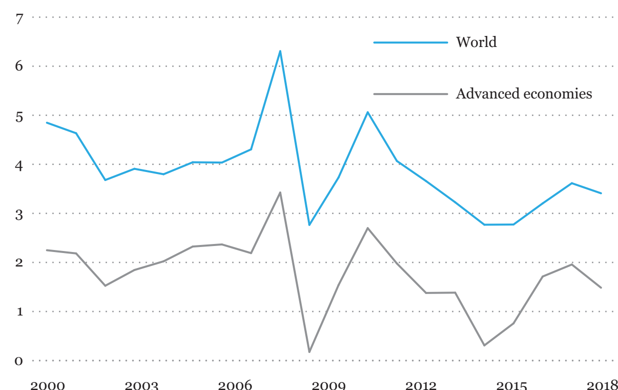

*Oslo Børs benchmark index.*
*Source: FactSet*

The above reasoning is tantamount to stating that the coronavirus has no hindsight value. Judged on coincident multiples and interest rates – remember, 2019 was an altogether different world – there was nothing inherently unsustainable in the impressive returns. It is much too easy, having observed the ensuing market crash in 2020, to conclude that the markets had gotten overstretched. There is in fact no way of knowing if that was actually the case.

**Facilitating returns**

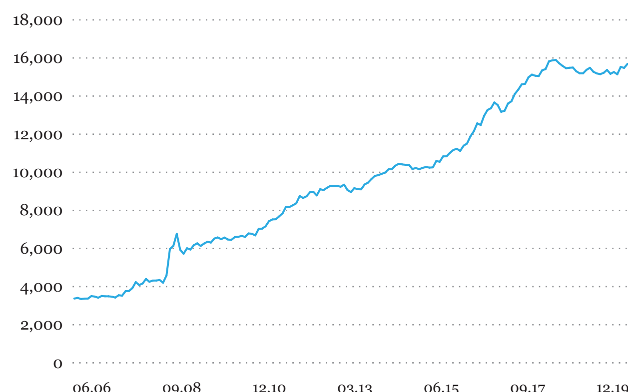
Of course, while there is no concurrent relationship between growth and financial returns, a high-growth environment obviously provides better conditions for future returns. Hence, financial markets' obsession with monetary policy may be interpreted as concern for future growth.

***Not really picking up ...***



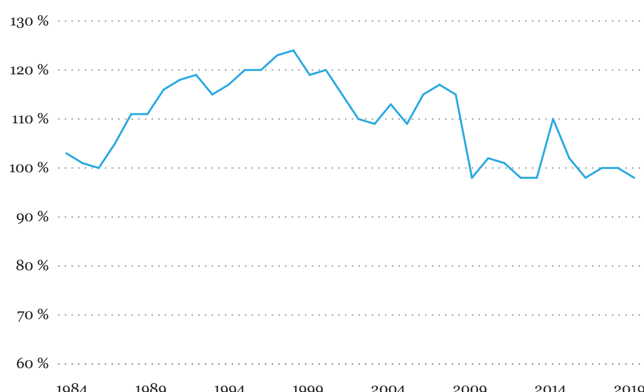

*Inflation, average consumer prices. Per cent change.*
*Source: IMF*

***Tightening? That's just so last year***




*Total central bank assets (FED, ECB, BOJ, SNB and Riksbanken), billion dollars.*
*Sources: FRED (FED), FactSet, central banks*

***Falling trade elasticity***



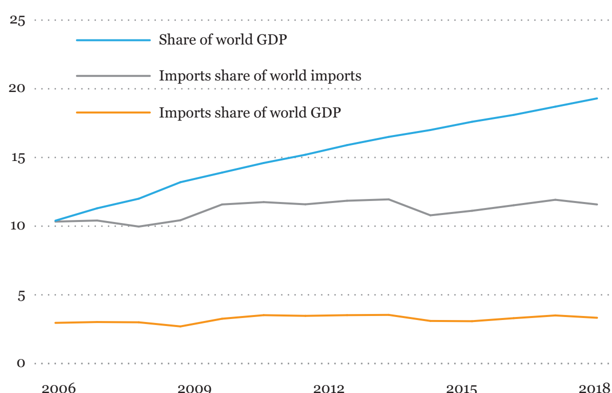

*Five-year growth in global trade relative to five-year growth in global GDP.*
*Source: IMF, Pareto*

Besides rates being lowered, we saw a distinct reversal of quantitative tightening. After somewhat feeble attempts to reverse the massive quantitative easing in the aftermath of the global financial crisis, easing again picked up globally towards the end of 2019. Central bank assets came close to reaching their record level from two years before.

A recurring concern has been the potentially inflationary effects of the massive monetary stimuli over the past decade. There is, however, little sign of inflation resuming in the global inflation numbers from the IMF. (And, now knowing how the coronavirus measures limited consumer demand, little reason to believe it will be picking up in the foreseeable future.)

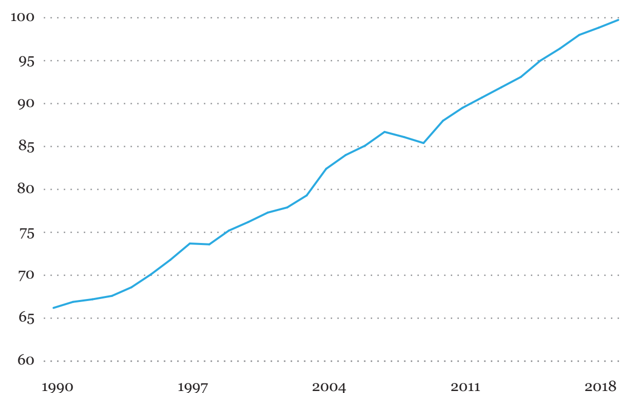
A particular reason for concern might be that global trade now appears to be less responsive to global growth; tradeable goods

***How important is China?***



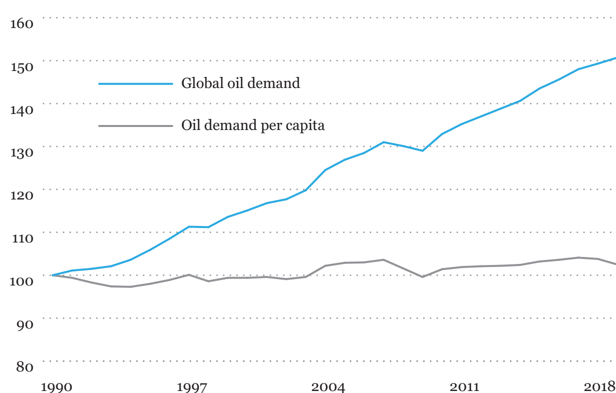

*Source: IMF, World Bank*

## Still thirsty




*World oil demand, million barrels per day.*
*Source: IEA*

## Oil demand flat per capita




*Indexed, 1990 = 100.*
*Source: IEA, OPEC, World Bank, Countrymeters, Pareto*

and services represent a smaller part of the incremental GDP. This impacts e.g. Norwegian shipping companies. Some would also take it to be a sign that globalisation is slowing down, although it might as well reflect changing demand structures.

Do note, however, that trade patterns are less of a yardstick than they used to be. Chinese figures provide an interesting example. On the one hand, China's share of global GDP probably overstates China's importance for growth in the rest of the world, simply because China is still a relatively closed economy. On the other hand, trade figures most likely understate its importance. While China's share of global GDP has roughly doubled in little more than 15 years, Chinese imports make up about 3 per cent of global GDP – practically unchanged over these 15 years.

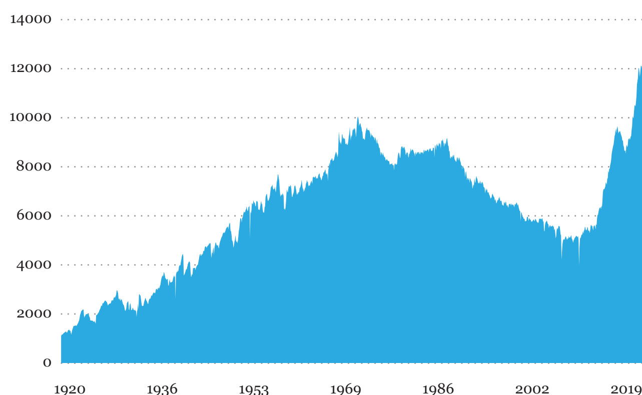
It is hardly worth disputing that China has grown in importance. What's missing here are e.g. logistics networks and – of particular importance for the Norwegian economy – the impact of Chinese demand on prices of commodities like crude oil.

**Increased energy efficiency**

Investment-led growth in China has been a major factor in sustaining oil demand growth. Having peeked into 2020, we now know that global oil demand is more malleable than anyone had thought. In 2019, however, demand inched even closer to the 100 million barrels a day mark.

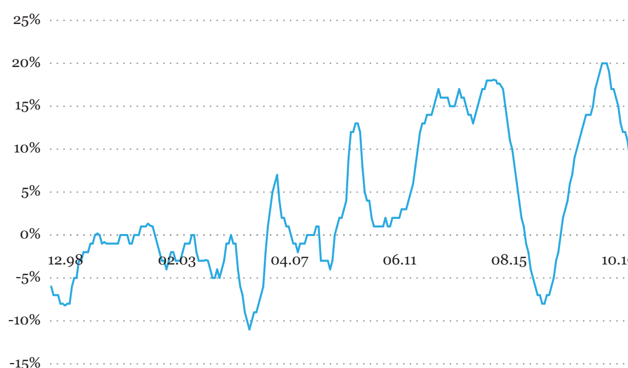
An interesting aside is that the demand growth belies the progress made in energy efficiency. Over the last three decades, global oil demand has risen by about 50 per cent, while global GDP has almost tripled. Per unit of GDP, then, oil demand is appreciably lower. Measured per capita, the demand curve is strikingly flat. Wealthier global citizens do not consume more oil than previous generations.

## Another all-time high for US crude oil production …



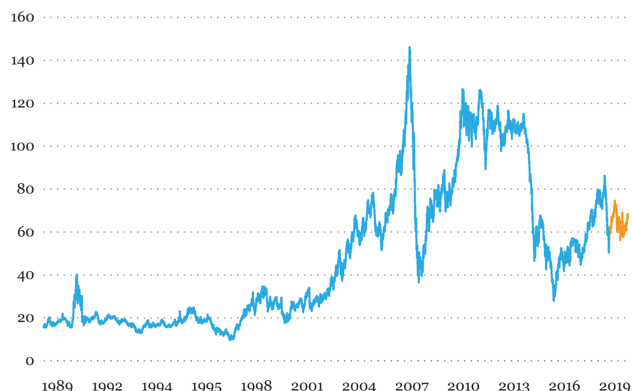

*US field production of crude oil (thousand barrels per day).*
*Source: US Energy Information Administration*

## … but growth tapering off



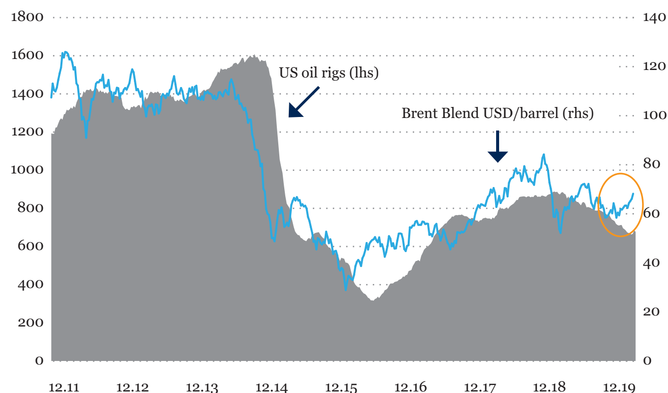

*US crude oil production rolling six months, per cent change year on year.*
*Source: US Energy Information Administration*

### Finding a new price interval?



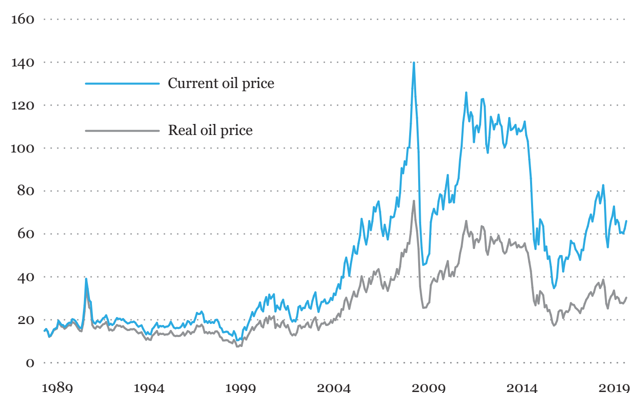

*Brent Blend for immediate delivery, USD per barrel.*
*Source: FactSet*

### Responding to the oil price?



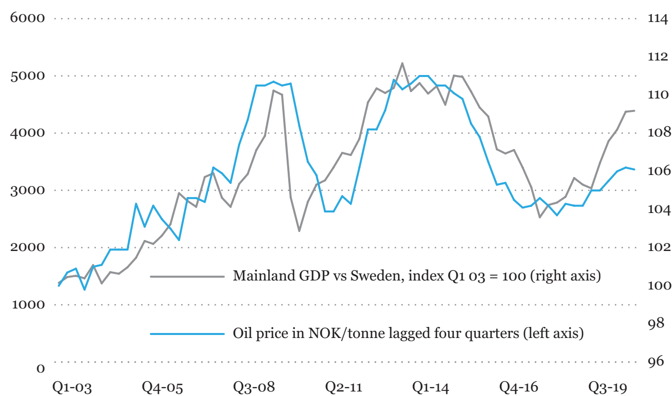

*Source: Baker Hughes rig count.*

### Real oil price: $30




*Oil price (Brent Blend), current quotes and adjusted for American CPI.*
*Source: FactSet, US Bureau of Labor Statistics, Pareto*

### Oil still firing the mainland economy?

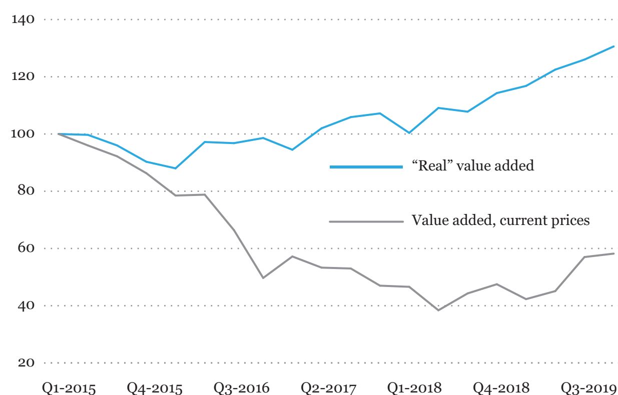



Historically, supply-side factors have been more important in determining the short-term path of the notoriously volatile oil price. In 2019, US crude oil production reached yet another all-time high, bringing the American market share to about 1/8 of global output.

Despite the fact that USA is neither a member of OPEC nor of the larger OPEC+ alliance, the country is clearly a central player in setting the oil price. This year, the price was fairly stable, wavering about 60 plus dollars per barrel, believed to be bounded by marginal profitability among American shale oil producers.

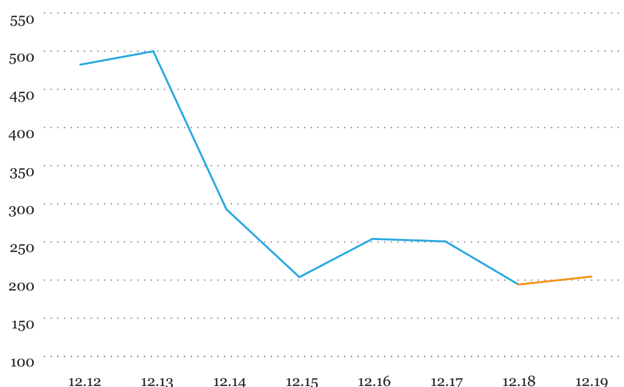
**The best oil service quarter ever?!?**
For the Norwegian economy, a somewhat stronger oil price should bolster activity both directly and indirectly, especially

### Oil service on a roll??




*Service activities incidental to oil and gas.*
*Source: SSB, Pareto*

### *Happy days not here again*




*The OSE101010 Energy Equipment & Services index. Source: Oslo Børs*

when translated into an even weaker Norwegian currency. Calculations that span a couple of decades clearly indicate that even the mainland economy moves in tandem with the oil price, albeit with a lag of some four to five quarters.

Domestic GDP growth did not change much from the preceding year, however, and there was no resemblance of a boom in the oil service sector – although just that seemed to be the case in the official figures. According to the national accounts, the last quarter of 2019 was the best quarter ever in the oil service industry, followed by, yes, the preceding quarter. For anyone with but the faintest knowledge of the industry, it is indisputably clear that this was not the case.

The problem, especially when dealing with segments of the economy, is finding the correct price adjustment data. From one revision to another, these numbers may be unrecognisably altered. As they now stand, prices in this industry fell by 65 per cent from Q1 2015 to Q2 2018 and then stood at pretty much the same level a year later. The following quarter apparently saw an increase of 23 per cent.

In the Norwegian stock market, the oil service index did indeed record an appreciation of about 30 per cent. However, at year-end, it was still at only 40 per cent of its pre-crisis levels.

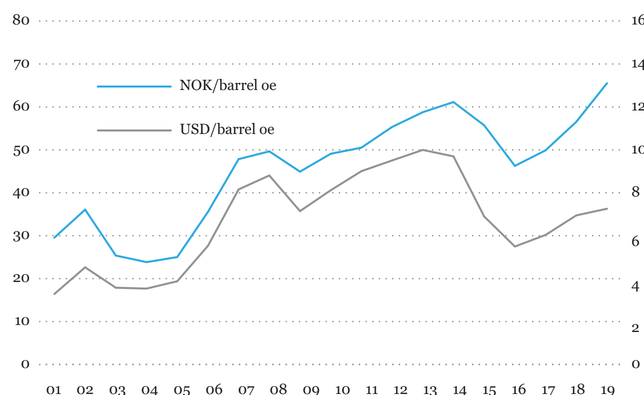
Incidentally, cost cuts at the oil exploration and production companies, having brought about tougher times for their suppliers, seemed to have peaked. For Equinor's activities on the Norwegian continental shelf, operating costs per barrel of oil equivalent actually reached an all-time high, at least when measured in Norwegian kroner.

Given the appreciating oil price, Norway's weak currency may seem puzzling. One likely conclusion, reinforced by succeeding events (the dramatic depreciation during the coronavirus crisis), is that exchange rate movements are driven primarily by capital flows rather than trade flows.

One obvious consequence, to the benefit of unitholders in our global funds, is that the NOK value of their units increases when the krone depreciates. This typically occurs in global bear markets or in times of market unease. Logically, then, unhedged global securities should provide excellent diversification for holders of otherwise domestic securities.

This holds empirically as well. For unitholders in our domestic stock fund Pareto Aksje Norge, unhedged units in the stock fund Pareto Global provide better diversification than if these units

### *Most expensive ever*




*Equinor in Norway, operating costs per barrel of oil equivalent. Source: Pareto Securities*

### *NOK even softer*

*TWI, trade weighted effective krone exchange rate (reversed scale). Rising index values indicate a depreciating krone. Source: Norges Bank*

were to be hedged. Mathematically, the correlation between the two funds would increase if the global stock fund were to be hedged, reducing the diversification effect.

**Side effects of passive management**

While on the topic of correlation, let's make a detour into the consequences of the spread of passive management. Towards the end of 2019, assets in US equity index funds surpassed assets in traditional active funds. Globally, including exchange-traded funds (ETFs), assets under passive management climbed above the $11tn mark, according to the Financial Times. In terms of fund flows, the change was even more dramatic. Massive inflows into index funds were financed by large redemptions at active fund management companies, at least in the US.

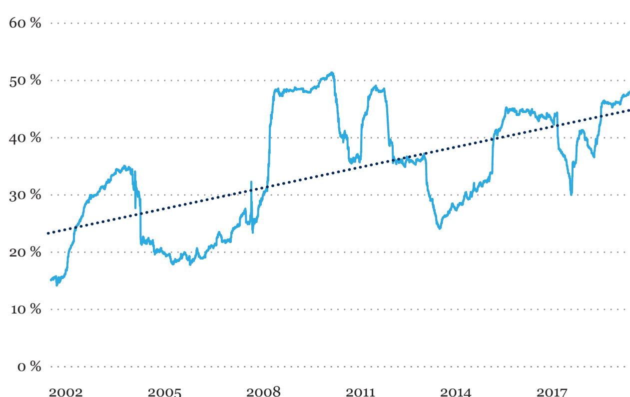
Couldn't care less?

Please do. In a sense, it's all about the price tag. In grocery stores, higher prices lead to lower volumes sold. In the stock market, it's not that straightforward. If you manage an index fund, you make no assessment whatsoever of the individual stocks and their prices. You just buy a given basket of stocks, weighted according to the reverse price tag principle – in the stock market, higher pricing translates into higher market values, i.e. higher index weights (unless of course other stocks appreciate even more).

There is a lot to be said for index funds, not least cost efficiencies. But if enough investors choose passive investment vehicles, who'll be bothered with making sure that price tags are not blown out of proportion?

A few months ago, the Swedish business daily Dagens Industri pointed out that Apple and Atlas Copco had a correlation this

***Tango, anyone? Everyone?***



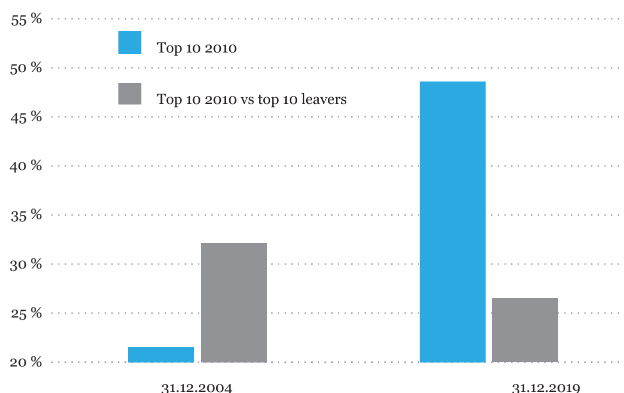

*Average of pairwise daily return correlations current top 10 S&P 500 companies, trailing two years. Source: FactSet, Bloomberg, Pareto Asset Management*

past year of 97 per cent (!). A bit of cheating there, as correlating prices for high-beta stocks is bound to reflect their exposure to the same underlying trends and cyclicality. But do feel free to raise an eyebrow – there are some interesting forces at work here.

A more appropriate measure would be correlating returns, not prices. So, out of curiosity, I downloaded daily returns for the current top 10 stocks in the S&P 500, the top 10 stocks ten years ago and the 10 largest stocks back then which are no longer part of the index but still listed. On average, the top 10 make up about 1/5 of the total market cap and their share has been rising.

Well, would you know: The average correlation of today's index giants has been going up in leaps and bounds since the start of the millennium, rising from some 15 per cent in 2002 to almost 50 per cent over the past two years.

***Pulling the leavers***




*Average of pairwise daily return correlations top S&P 500 companies, trailing two years. Source: FactSet, Bloomberg, Pareto Asset Management*

In contrast, the correlation between the top 10 stocks at the end of 2009 and the top 10 leavers – companies that are no longer part of the index – has been falling. They don't move in tandem anymore.

It's fairly well established in financial research that betas tend to go up when stocks are included in an index and vice versa. A similar pattern might be expected for individual correlations, but it doesn't necessarily follow. During the second half of the last century, correlations were generally falling, perhaps due to individual stocks being better researched. In the mid 1990s, however, it seems the trend shifted.

Why? Most likely because increasing inflows into index funds and other passive investment vehicles are being invested in index

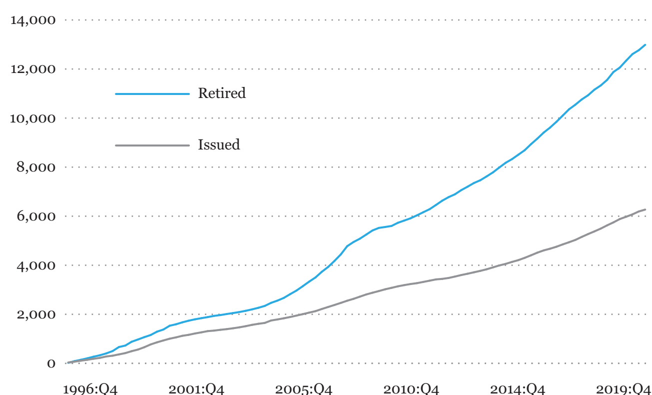
companies in proportion to their respective index weights. To the extent that net demand is being determined by index investors, these stocks are simply riding the same currents – amplified, perhaps, by algorithm trading.

**A world of cheap capital**
The above is a reminder that whatever subtle calculations we apply in order to be a bit wiser about financial markets, it really comes down to capital flows. Liquidity moves markets.

Towards the end of 1996, the US Federal Reserve started compiling data on the issuance of equity in US companies – and the opposite, i.e. cash retirement of equity through repurchases and mergers and acquisitions. A strikingly clear picture emerges from these data: Over the following years, US corporations have distributed a lot more money in buybacks, acquisitions and mergers than they have collected through issuing new equity. A year ago, I noted that the difference – the negative net issuance – amounted to approximately 6,000 billion dollars. This time, only one year later, we can put the figure at 7,000 billion. And please note: Dividends are not included. Aggregated, they amount to more than 12,000 billion dollars.

Again, this represents a tremendous supply of liquidity that cannot possibly have failed to influence the price level of American stocks – and, indirectly, of stock markets around the world. In general, pricing is somewhat higher in the American stock market than in the European market. For the companies in question, this represents a lower cost of equity capital. As the cost of debt has fallen even more (recall the margin of safety for investors), these developments confirm the picture of a world with cheap capital.

*Negative net issuance of equity*



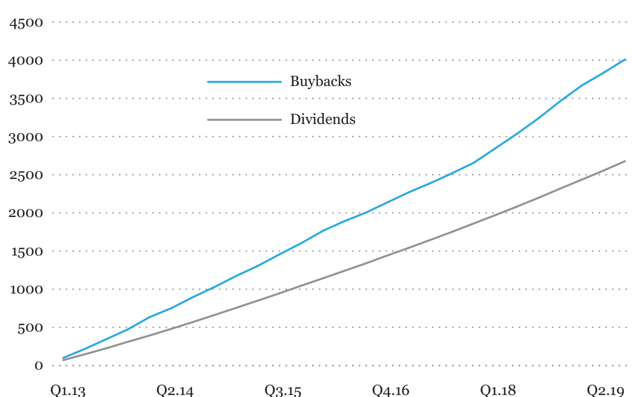

*Issuance and retirement of equity in American corporations. Accumulated amounts in billion dollars. Source: Federal Reserve, Pareto Asset Management*

**The buyback collapse**
Just don't be fooled into thinking that there is in fact such a thing as a free lunch. Buybacks may lift stock prices and reduce the cost of equity, but the advantage is fleeting.

In November 2012, the S&P 500 Buyback Index was launched, an equal-weighted index of the top 100 stocks with the highest buyback ratios in the S&P 500. After back-testing information prior to the launch date, the index was set at 100 on 31 March 2010.

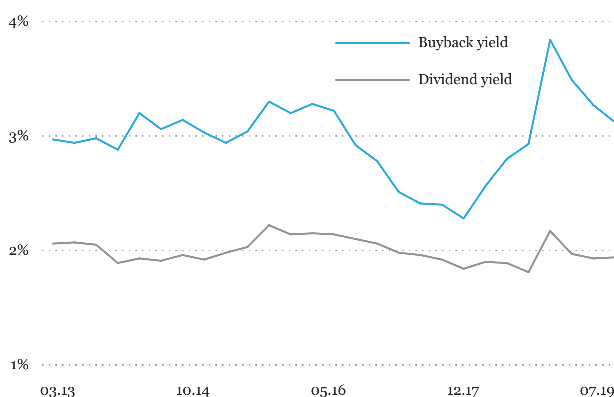
After less than five years, the buyback index had notched up a total return that was a full 43 percentage points ahead of its better-known cousin, the S&P 500. Over the next five years, their returns were more aligned, with the buyback index weaker in softer years and vice versa.

*Returning trillions to shareholders*




*S&P 500, billion dollars, accumulated figures.*
*Source: Spindices.com, Pareto*

*On the way down?*




*S&P 500, per cent.*
*Source: Spindices.com*

But then came the coronavirus.

Close to midway in April 2020, the S&P 500 has lost 14 per cent since the start of the year – whereas the buyback index has lost more than 26 per cent!

This may not tell you much about developments in 2019, but it certainly reveals a whole lot about the risk these companies carried. A fair conjecture is that buybacks increase returns up until leverage reaches a certain (unknown) threshold, above which they actually increase the cost of capital – potential or realised.

**A case of a Roadrunner act?**
Here, too, is an obvious caveat regarding my point that the ensuing market crash does not imply overpricing or overstretching in 2019. Risk is not only about the "known unknowns", in the immortal words of former US Secretary of Defense Donald Rumsfeld. The coronavirus is an obvious case of "unknown unknowns" – things we didn't know that we didn't know. We do, however, need to pose the following question: Is this a kind of risk that warrants protective or precautionary action?

Here is a mirror image of sorts: The market holds many risks that fail to materialise, risks that we would nevertheless be well advised to handle. Sometimes, these risks don't come into play because of a consensus that they are not worth the worry. Many commentators have likened the market to a classic cartoon scene best known from the actually very violent Roadrunner cartoons: The characters run off a cliff and keep running in thin air until they discover that there is nothing beneath them – whereupon they plunge to the ground. Financial markets may have crossed many ravines in this fashion, keeping risks from materialising.

There is, in other words, a symmetry of logic here: While a crash does not necessarily mean that the market was overstreched, a further appreciation is certainly no proof that there was no reason to worry. At any point in time, there are many possible outcomes.

We do know, however, that when the market crashes, it inevitably shoots back up again after some time. Not because of a general tendency to rebound; there is no inverse gravity involved here. What goes down, mustn't necessarily go up. But companies that keep making money will inevitably generate profits for their shareholders and bondholders in the long run.

A cleverish adage has it that these are the four most expensive words in the financial markets: This time is different. You're probably used to reading about these four words when the market sentiment is more upbeat. Keep in mind, though, that they might be every bit as expensive if they keep you from investing at a favourable point in time – provided this time isn't different either. Is it?

The truth isn't necessarily out there. It's in the probabilities.

***2019 in a nutshell***

| | |
|---|---|
| OSEBX | 16.5% |
| S&P 500 return | 31.5% |
| MSCI World net (USD) | 27.7% |
| 3-month NIBOR | from 1.27 to 1.84% |
| 3-month STIBOR | from -0.13 to 0.149% |
| 10-year Norwegian Treasury | from 1.79 to 1.55% |
| 10-year Swedish Treasury | from 0.47 to 0.15% |
| 10-year US Treasury | from 2.68 to 1.92% |
| Brent Blend | from USD 53.81 to USD 66.00 |
| USD/NOK | from 8.69 to 8.78 |
| EUR/NOK | from 9.95 to 9.86 |
| GDP growth, global | 2.9% |
| GDP growth, Norway | 1.2% |
| GDP growth, Sweden | 1.2% |
| GDP growth, Mainland Norway | 2.3% |

Sources: Oslo Børs, S&P Dow Jones Indices, MSCI, Norges Bank, FactSet, IMF, SSB, SCB, Riksbanken, Pareto.

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