

Financial markets and the economy in 2018

by Chief Investment Officer Finn Øystein Bergh

In 2018, all eyes were on a turning point that, despite several warning signs, failed to appear.

Stretching the cycle

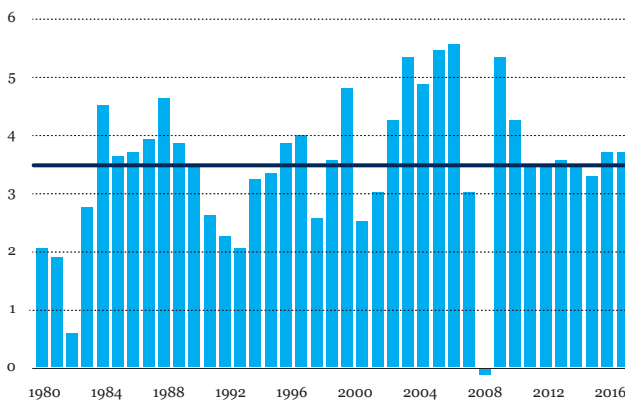
Just as the last leg of a long trip tends to colour your impression of the entire journey, the last quarter of 2018 may have made you think that it was a most unusual year, portending perhaps the end of this long, profitable cycle. After three quarters of slightly apprehensive bull markets, the fourth quarter of 2018 offered rapidly falling stock prices and similarly rising credit spreads.

Let me point out, then, that the calendar year 2018 was in fact well within the expected range of outcomes for any given year. Global GDP growth, estimated at 3.7 per cent, was slightly above average. In Sweden and Mainland Norway, growth came in at 2.3 and 2.0 per

cent, respectively. The S&P 500 lost some four per cent, adjusted for dividends. The Norwegian benchmark index lost just 1.8 per cent.

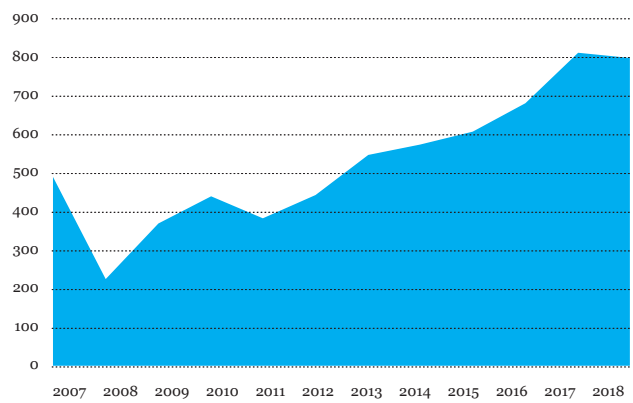
With the benefit of a little hindsight, after market reversals at the beginning of 2019, the gloomy end to 2018 looks like a false alarm. Keep in mind, though, that false alarms are a regular feature of forward-looking financial markets trying to divine future developments. This year, against a relatively stable backdrop, the predominant theme was the length of the business cycle, or rather how much was left of it. Would reversal of the extremely expansionary monetary policies send interest rates upwards, terminating the cycle? Would inflation resurge? Would there be a recession?

GDP growth above average



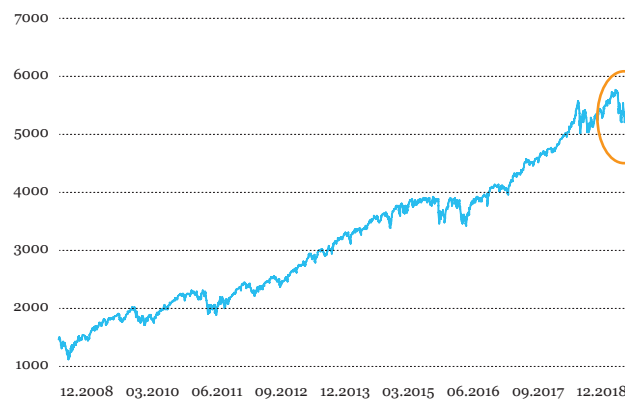
Global GDP growth.
Source: IMF

Just a breather?



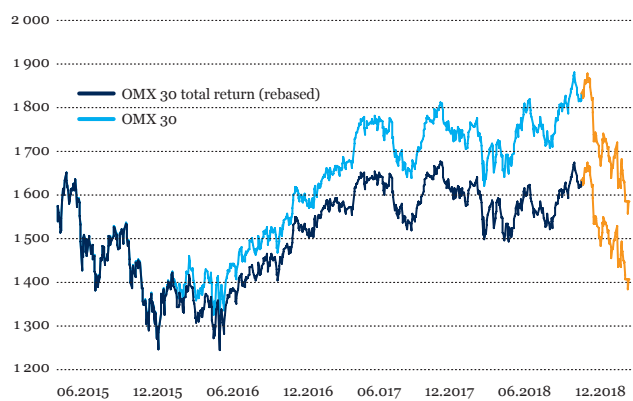
The Oslo Børs benchmark index, year-end quotes.
Source: oslobors.no

The end of a beautiful relationship?



S&P 500 Total Return.
Source: FactSet

Swedish pullback



Source: FactSet

And, of course, would there be new tweets indicating an escalation of the budding trade war between the US and China?

... and counting

An unusual number of analyses this year were based on plain and simple counting. At the end of January, the MSCI World Index had recorded 15 consecutive up months. A few months later, the American economy recorded its second-longest expansion in US history, starting in June 2009. And in August, the US stock market notched up its longest bull run in history, starting in March 2009.

Given the gravitational pull of the American market on pretty much all markets around the world, what did that tell you?

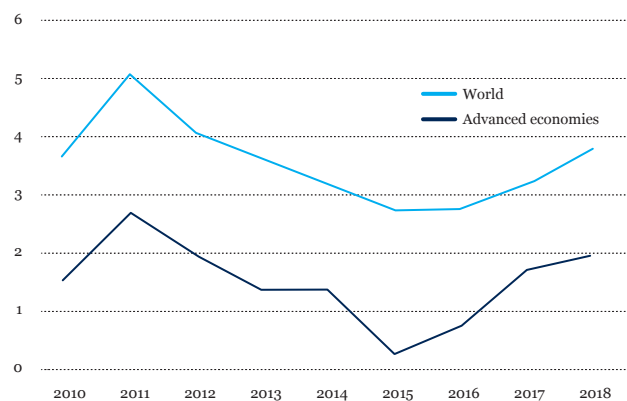
Actually, not a lot.

For one thing, defining expansions or bull runs is a matter of statistical malleability. There are more ways than one of defining when to start or stop counting. Furthermore, the great financial crisis made room for quite a bit of catching up, in terms of GDP growth as well as financial returns. It has been a slow climb.

Let us take a closer look at the economic picture in 2018. As for monetary policy, market jitters were fuelled by two factors: four rate hikes by the US Federal Reserve, the last of which just before Christmas, and the seemingly imminent risk of a negative term spread – a classic recession indicator.

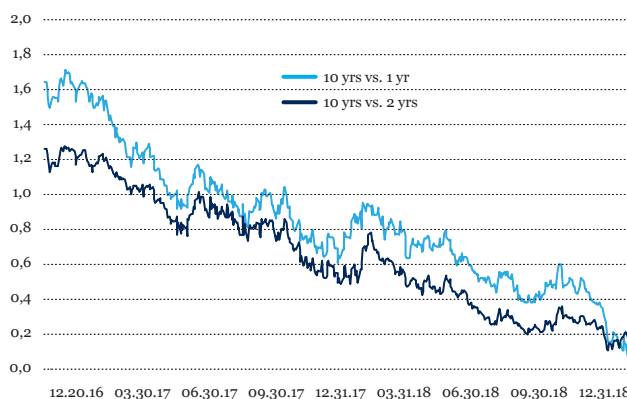
Normally, the yield curve is upward-sloping, compensating for higher risk on bonds of longer maturity. Yields on longer-dated bonds also convey expectations of economic growth. High long rates signal a belief in good growth further ahead, whereas low long rates indicate

Inflation picking up?



Inflation, average consumer prices, per cent. Source: IMF

The 2018 yield curve scare



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

expectations of weaker growth and a future need for further rate cuts.

Policy rates are short-term. Traditionally, therefore, the yield curve reflects key policy rates at the short end and market expectations at the long end.

And here's the clue to the importance of the yield curve: If the central bank hits the brake (increase short-term rates) just as the market sees speed bumps ahead (falling long-term rates), speed (growth) is very likely to become unduly slow.

Hence, an inversion of the yield curve – short-term interest rates rising above long-term rates – has come to be known as a reliable recession indicator. According to the Federal Reserve Bank of San Francisco, every US recession since 1955 has come in the wake of a negative term spread. Similarly, every yield curve inversion but one has been followed by a recession.

No wonder the rapidly falling term spread became a hot issue in 2018. It didn't turn negative, but it came very close to doing so.

Bear sightings?

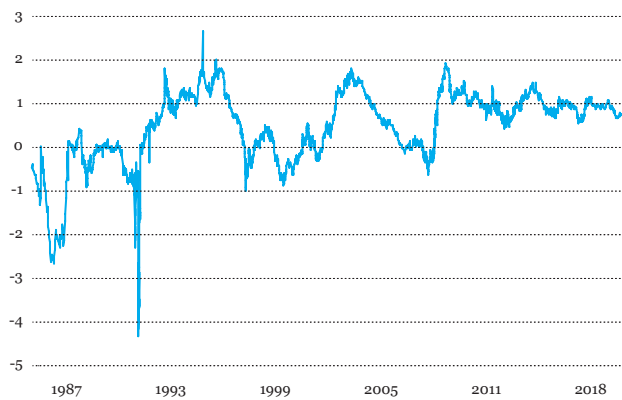
On closer inspection, the term spread case may have been overplayed. For one, whereas the Fed study looked at the spread between 10-year bonds and 1-year bonds, it seems many analysts were zooming in on selected parts of the yield curve to make their point. In addition, such predictions are not that precise. Some recessions occur after six months, others after as much as two years.

Better yet, this time is different. All the major central banks have been buying government bonds in abundance and some still do. By doing

so they have lowered long rates, which in a sense are artificially low and, logically, don't necessarily reflect bearish expectations.

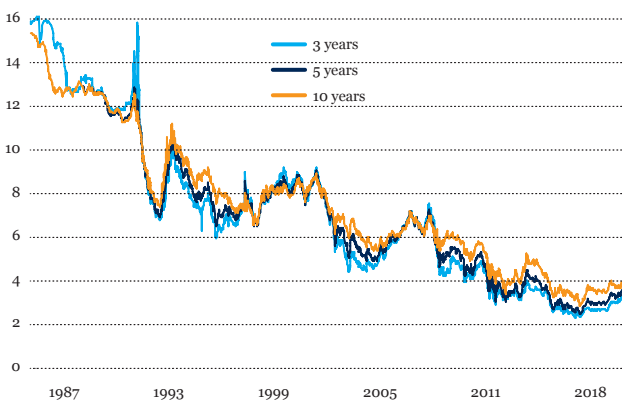
You've probably seen this question many times in 2018: How can the central banks reverse their quantitative easing without pushing up long rates through massive bond sales? Now, in a neat twist of fate, lower long rates may just make it easier to unload bonds without pushing rates uncomfortably high. This time, central banks may be able to influence (or, if you like, manipulate) both ends of the yield curve. And, of course, please remember that while a rising stock market may forecast better growth, increasing growth does not forecast rising markets. By extension, the same goes for term spreads. For instance, in December 1988 the term spread turned negative (by a small margin, though). The following year the S&P 500 returned an impressive 32 per cent.

So far, no spread warning



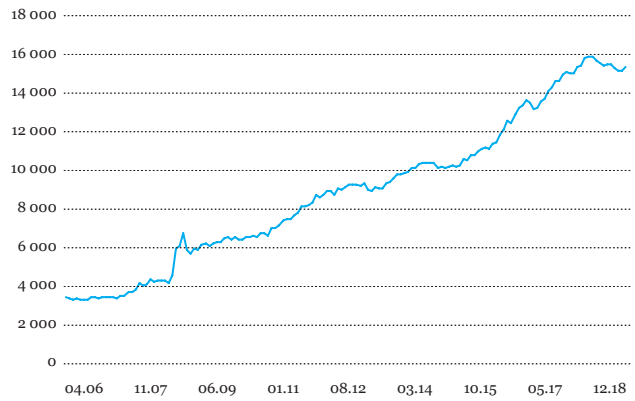
Term spread Norwegian government bonds in percentage points: yields on 10-year bonds less yields on 3-year bonds. Source: Norges Bank

Bouncing off the rate floor?



Yields on Norwegian government bonds in per cent. Source: Norges Bank

Not much tightening, really



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

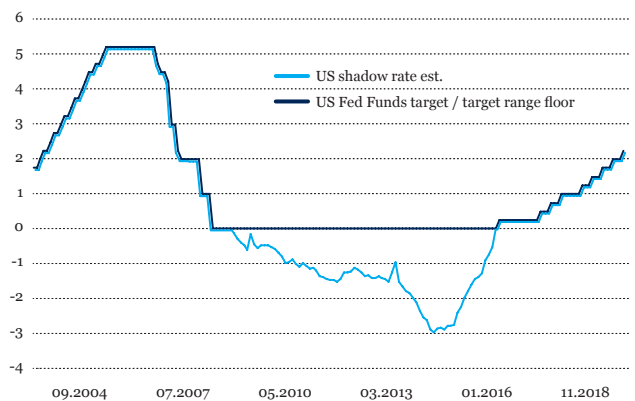
Lesson to be learned: There is often a plethora of figures pointing in either direction – and of commentators basing their forecasts, uncritically, on too few of them.

Shadow rates

How do you measure the impact of monetary policy when major central banks have been using unconventional methods for years, buying vast quantities of securities and setting key policy rates at or below zero?

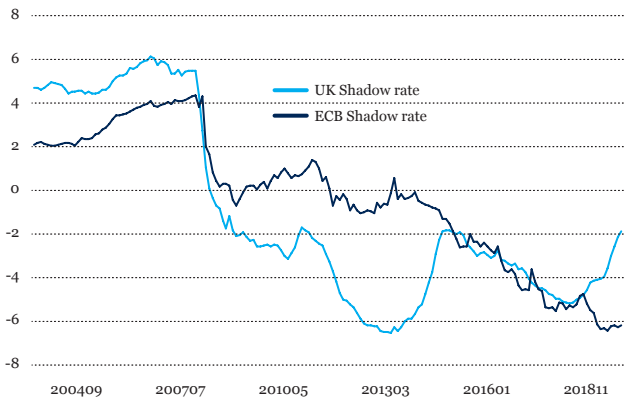
One possible answer is calculating shadow rates, designed to capture the effect of unconventional monetary policy and summarise policy in a kind of interest-rate equivalent. The graphs here are based on figures from American finance researcher Jing Cynthia Wu. They reveal a major change: By this measure American monetary policy has been tightened by the equivalent of a full 5.25 percentage points after the Fed halted its bond purchases in 2014.

Pushing the pedal below the floor



Sources: Jing Cynthia Wu, Federal Reserve

Still expansionary



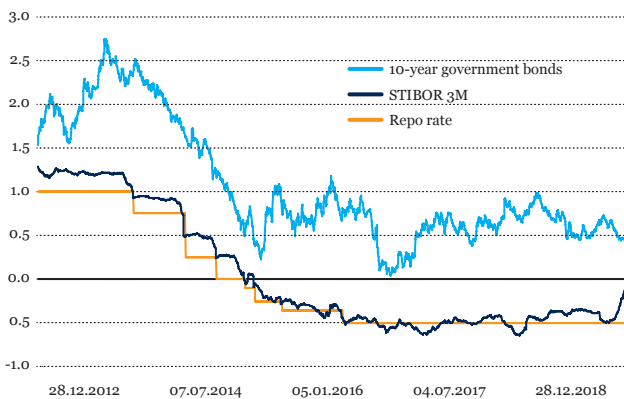
Sources: Jing Cynthia Wu

Quantitative tightening was initiated in June 2017, whereby the Fed would reduce its 4,500-billion-dollar balance by up to 50 billion dollars a month. One may argue that the markets started to feel the punch towards the end of 2018.

On the other hand, as you can see from the next graph, monetary policies are still clearly expansionary in the eurozone and the possibly soon to be independent Great Britain. The same obviously goes for Sweden, where the repo rate was kept unchanged at -0.5% until one week into 2019 (when it was set at still expansionary -0.25%).

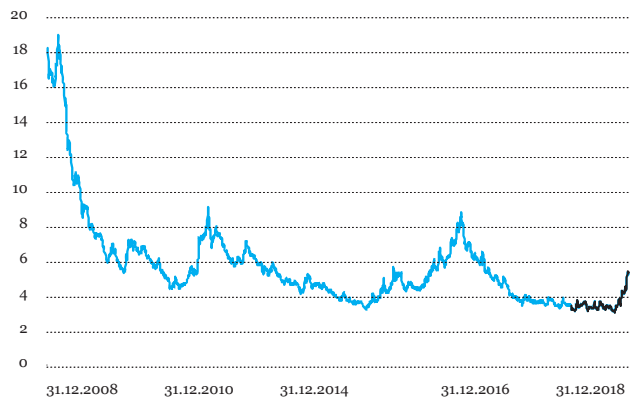
Of course, key policy rates are only one part of the picture. Towards the end of 2018, credit spreads shot up, especially on high-yield bonds. In December alone, spreads on US high-yield bonds increased by more than 100 basis points (one percentage point). While this may seem dramatic, spread levels were nowhere near levels seen in 2016, 2011 or – naturally – 2008.

Back to normalcy?



Swedish interest rates / yield. Per cent. Source: riksbank.se

Rising credit spreads



ICE BofAML US High Yield Master II option-adjusted spread, per cent, not seasonally adjusted. Source: FRED

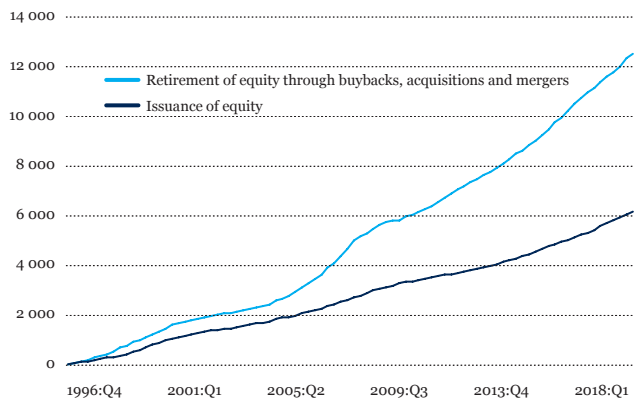
A tremendous source of liquidity

In December 1996, Alan Greenspan, then Chair of the US Federal Reserve, held a speech suggesting that asset prices might be inflated by irrational exuberance. At the very same time, in a possible coincidence, the Fed started compiling data on the issuance of equity in US companies – and the opposite, i.e. retirement of equity through repurchases and mergers and acquisitions. Their data set has been undeservedly anonymous.

Not unexpectedly, huge and ever-increasing amounts of equity are being injected into American companies. The annual rate has risen from \$155 billion to \$480 billion through the third quarter of 2018, boosted by what is presently a very good climate for US business. In total, since December 1996, equity issuance adds up to more than 6,000 billion dollars.

Note, however, a bit of a surprise: Net issuance is negative and the

Negative net issuance of equity



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

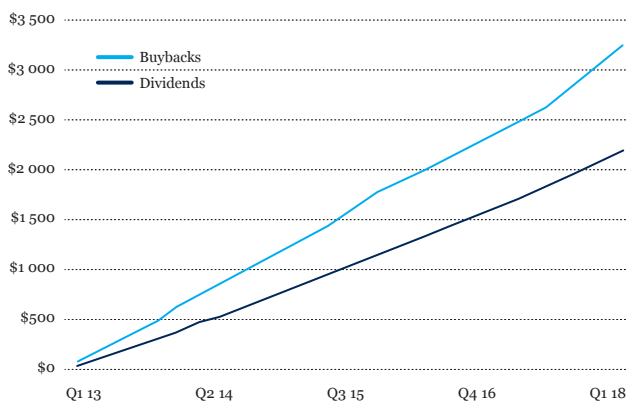
gap increases. By the end of 2018, stock buybacks, acquisitions and mergers (only the cash part) add up to more than 12,000 billion dollars.

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.

Note that dividends are not included in the above figures. Over the same couple of decades, dividends paid from US non-financial corporations add up to more than 11,000 billion dollars.

These figures apply to all US corporations, not just listed companies. For listed companies, stock buybacks have surpassed dividends. Either way, it all adds up to an even more impressive flow of liquidity, financed by rising profit margins and increasing leverage.

Returning cash to shareholders



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

In other words: Strong liquidity generation in US companies has given a strong impetus that must be considered when explaining the high pricing in recent years. It's a bit like the housing market. When new housing is not being built – or, in this case, more equity is not being issued (on the contrary!) – more money is chasing the equities that are already there.

In the short term, there are few if any signs of this effect petering out. Longer term, though, rising profit margins, increasing leverage and liquidity generation in US business are hardly laws of nature.

Inflating EPS?

In addition to providing liquidity, do stock buybacks also lift stock prices through increasing earnings per share?

Let's take a look at the little-known S&P 500 buyback index, produced by selecting the 100 companies in the S&P 500 with the highest buyback ratios. From the end of 2010 through 2016, this index beat its

famous cousin by an annual margin of a full 2.7 percentage points. The buyback index is equal-weighted, but comparing it to the equal-weighted S&P 500 does not alter the conclusion: Companies with high buyback ratios eclipsed other stocks.

The past couple of years, however, paint a different picture. Whereas the S&P 500 delivered an annualised return of 7.9 per cent, the buyback index lagged by a margin of 1.8 percentage points.

Why the about-turn? A likely cause might be leverage. For some years now, many US companies have loaded up on debt – partly to finance buybacks and dividends. When leverage is low, the market probably has few misgivings about increasing levels of corporate debt. At higher levels of leverage, though, risk increases – possibly to such an extent that it outweighs the benefits of higher earnings per share.

If that is the case, many a finance professor would feel vindicated. There really is no such thing as a free lunch.

A margin of safety

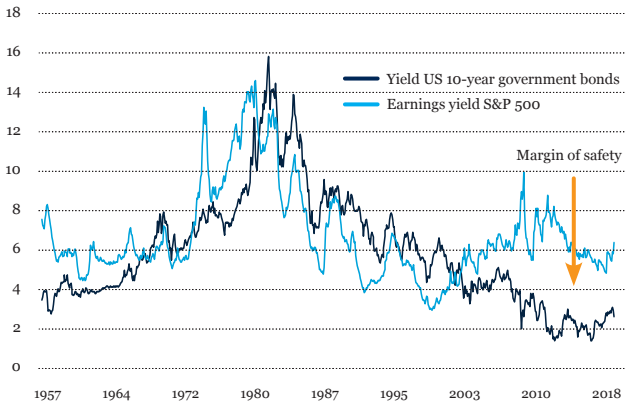
Have you found it puzzling that stock markets have held up so well against monetary tightening, a bull market possibly nearing its expiration date, a random walk down trade policy tweets, or perhaps still more expensive stocks?

First, a couple of notes on the latter point. Contrary to popular belief, stocks became less expensive in 2018; earnings and book values rose in most markets, while stock prices slipped somewhat. Historically, severe downturns have not occurred in the absence of unusually high pricing. And while multiples like P/E (price to earnings) or P/B (price to book) may seem well above average, they cannot be evaluated without reference to the level of interest rates.

Comparing the earnings yield (the inverse of P/E) on Wall Street and Oslo Børs with the yield on 10-year government bonds, we see that something changed after the global financial crisis: the stock market became unwilling to adapt its pricing as interest rates crept ever lower. The gap produced by lower interest rates was filled by increasing the forward-looking equity premium. Stock investors demanded a margin of safety, an expected return from stocks that was not based on interest rates staying this low indefinitely. After gradually shrinking for a few years, this margin of safety increased notably in 2018.

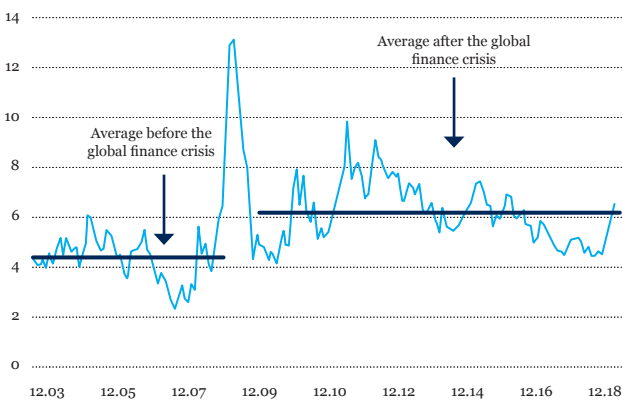
As for Oslo Børs, a further point is that cash flow has grown a lot faster than earnings. In terms of the price to cash flow multiple, Norwegian stocks ended 2018 with a pricing on par with the years immediately following the global financial crisis. Part of the divergence may be explained by higher accounting accruals at the beginning of this period, meaning that a lower share of earnings represented cash income, although differing rates of depreciation cannot be disregarded. Either way, such figures hardly represent a crash warning.

Mind the gap!



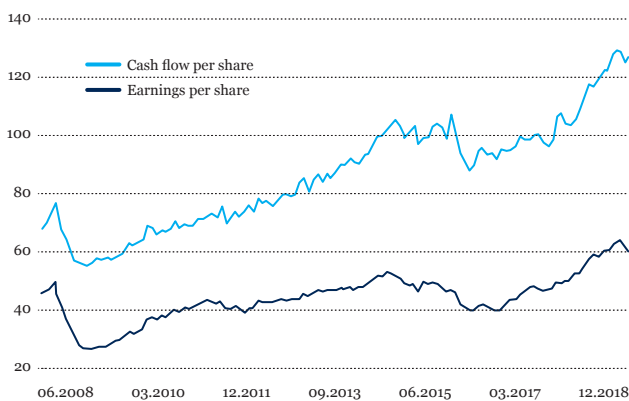
Sources: Robert Shiller, FactSet, Pareto

Renewed margin of safety



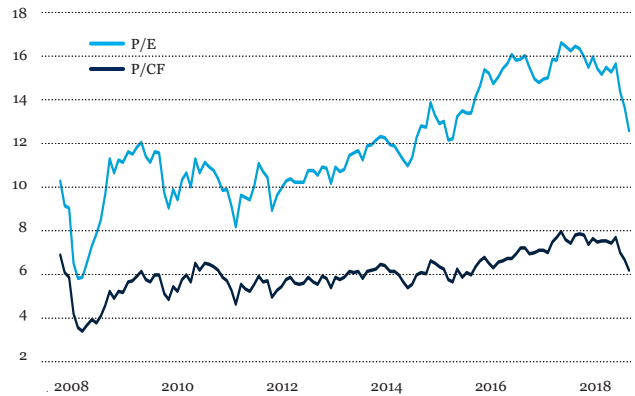
Percentage points, difference between the OSEBX forward earnings yield (next 12 months) and the yield on Norwegian 10-year government bonds. Source: FactSet, Norges Bank, Pareto Asset Management

More cash in earnings



Oslo Børs benchmark index. Source: FactSet

Not so expensive on cash flow



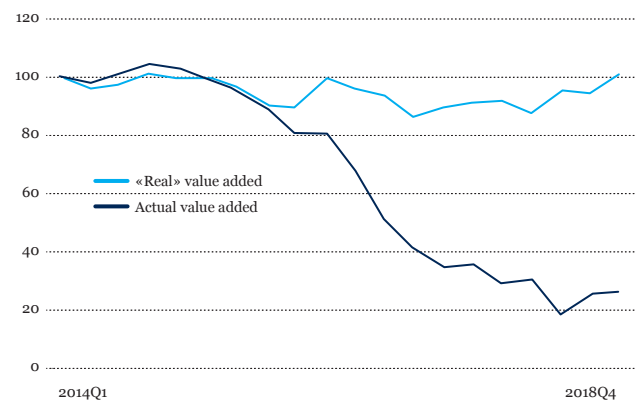
Price to earnings and price to cash flow ratios for the Norwegian benchmark index based on estimates for the next 12 months. Source: FactSet

The oil service shock revealed

In the Norwegian economy, the oil sector – and oil service companies in particular – took a considerable beating after the oil price started falling midway in 2014. On the face of it, or rather according to the national accounts, the downturn is now officially over. In the last quarter of 2018, value added in oil services – “service activities incidental to oil and gas”, in statistical parlance – was slightly above the Q2 2014 level.

That, however, is but statistics. In calculating the “real” contribution to GDP, Statistics Norway adjusts for price changes – as indeed they should. This is the way national accounts are being calculated everywhere, according to internationally agreed conventions. The problem is that this price adjustment does not capture anything like an inflation effect. When prices on products and services skydive, the entire industry experiences a downturn that makes ordinary recessions seem immaterial.

Masking the downturn in oil services



Rebased to 2014Q1 = 100. Value added, service activities incidental to oil and gas. Source: SSB

Just look at these figures: In terms of actual invoice figures in Q4 2018, valued added in this sector is down almost 75 per cent from Q2 2014!

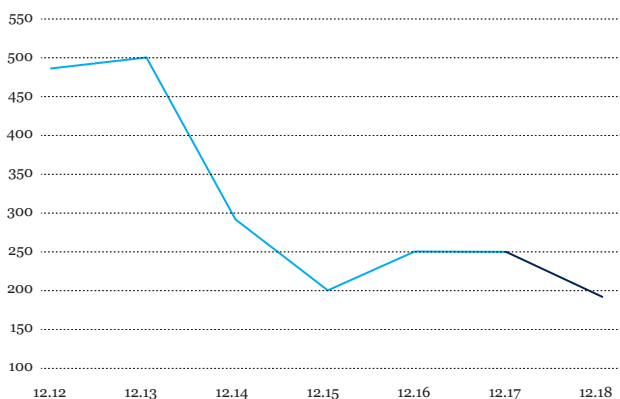
Things are picking up, though. Share prices for oil service companies indicate that the worst is behind them, although there is no strong rebound save for selected companies. A further sign is that cost cutting seems to have run its course in local oil major Equinor; according to Pareto Securities estimates, operating costs are picking up again.

Furthermore, as I have repeatedly pointed out, the impact of the oil industry on the Norwegian mainland economy is probably understated. It is visibly clear in the graph here, where I have produced an index showing the strength of the Norwegian mainland economy relative to the Swedish economy. Even though the oil sector is excluded, it is apparent that the mainland economy is heavily impacted by movements in the oil price about four quarters earlier.

Given the extent of the fall in the oil price, from 110 dollars in June 2014 to about half that level towards the end of 2018, with months of even lower prices in the intervening years, it may seem surprising that the mainland economy has not suffered further hits to growth. The reason this did not occur is the exchange rate; a weaker Norwegian krone boosted mainland exports and helped compensate for the downturn in oil-related business.

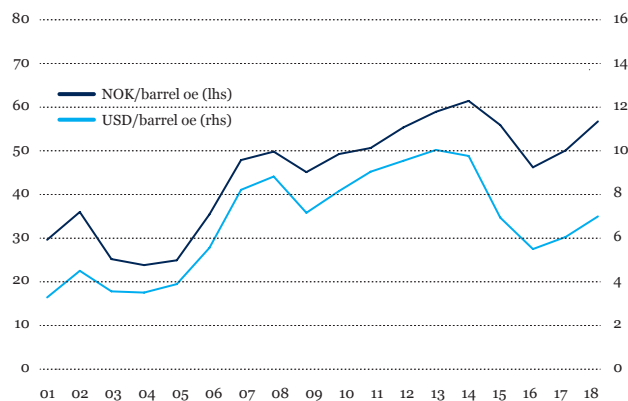
Considering the rebound in the oil price since it hit bottom in January 2016, the Norwegian krone might have been expected to reverse part of the depreciation. So far, this has yet to happen. Part of the explanation may be that it has been pulled down alongside Swedish kroner; there is a surprising degree of correlation between the two currencies. Another part may be a more pessimistic view of the Norwegian economy after government budgets will have to be tightened in the years to come.

Rebound in oil services? Not really ...



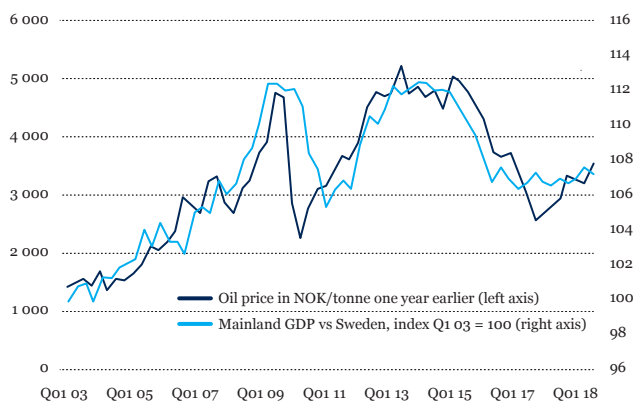
The OSE101010 Energy Equipment & Service index. Source: Oslo Børs

Cost inflation revisited



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

Oil certainly fires the mainland economy



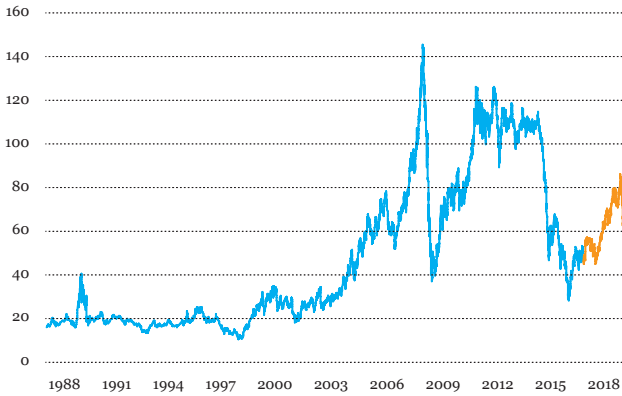
Sources: Pareto, SCB, SSB

NOK still soft



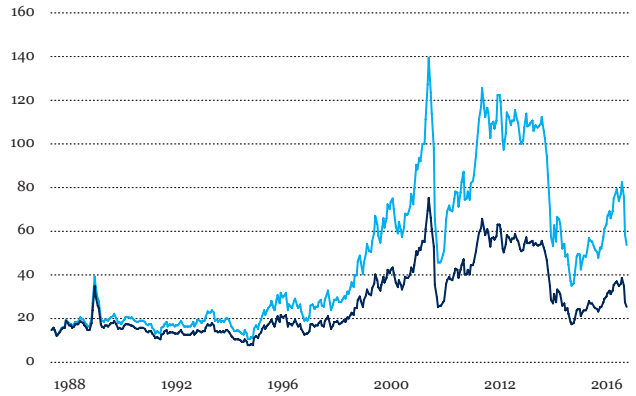
TWI, trade weighted effective krone exchange rate (reversed scale). Rising index values indicate a depreciating krone. Source: Norges Bank

Stunted again



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

Really quite moderate



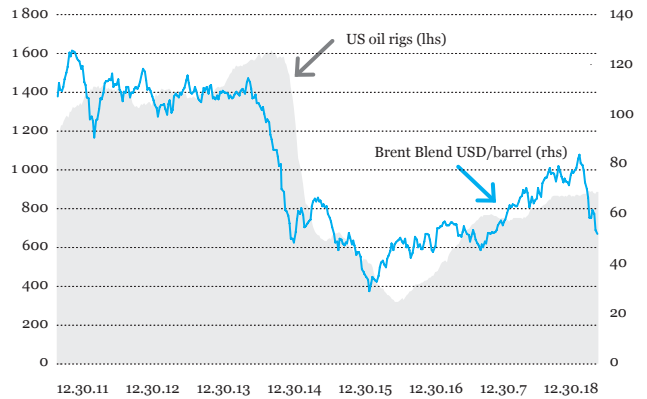
Oil price (Brent Blend), current quotes and adjusted for American CPI. Source: FactSet, US Bureau of Labor Statistics, Pareto

Expensive tweets?

Last year provided an interesting example of just how jumpy the oil price can be. Apparently in response to Saudi Arabian authorities killing a journalist in their consulate in Turkey, President Trump wrote a tweet generally considered as intent on bringing the oil price down – as indeed it did. In a short space of time, the oil price (Brent Blend) fell by some 30 dollars a barrel.

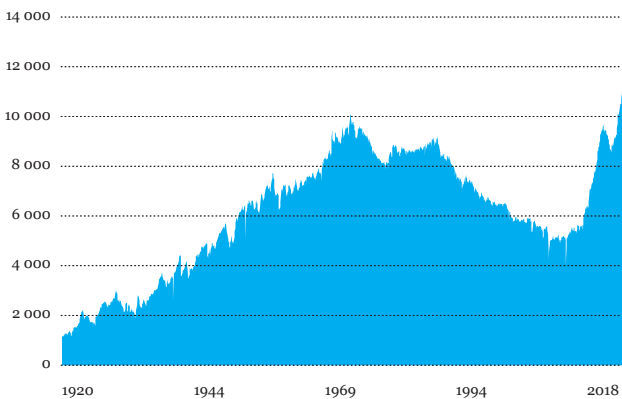
Of course, there was more to the falling oil price than a tweet or two. Over the last few years, US production of crude oil has more than doubled, covering almost half the accumulated increase in world oil demand. Since a major part of this increase has been based on shale oil, i.e. short-duration oil production with steadily improving technology, American crude production is highly price-elastic. This helps limit oil price changes on the upside as well as the downside.

Responding to the oil price - this time too?



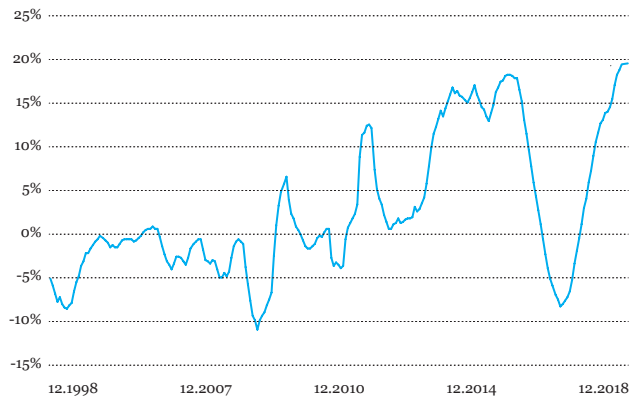
Source: Baker Hughes rig count.

US crude production at an all-time high ...



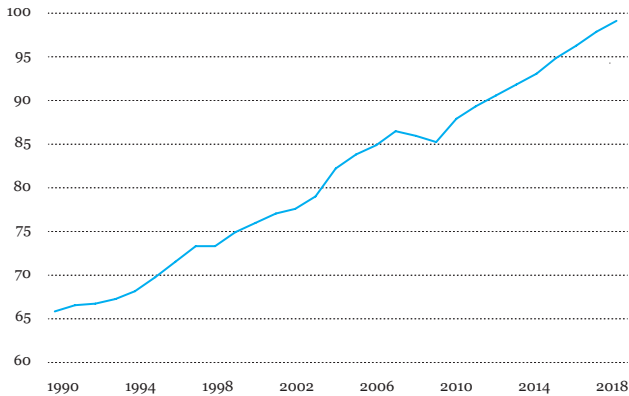
US field production of crude oil (thousand barrels per day). Source: US Energy Information Administration

... and still growing fast ...



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

Filling 'er up



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

So far, neither heightened awareness of climate risk nor increasing supply of renewable energy has managed to dent oil demand, which is about to reach 100 million barrels per day. A growing number of analyses indicate that peak oil may come as a result of lower demand rather than limitations to supply. These analyses have a decidedly long-term perspective, however, meaning that oil demand is not likely to plateau in the near future. Besides, even keeping production at present levels will require increased exploration, providing more business for a number of oil-service companies.

Be prepared, though, to read more about climate risk in future reports.

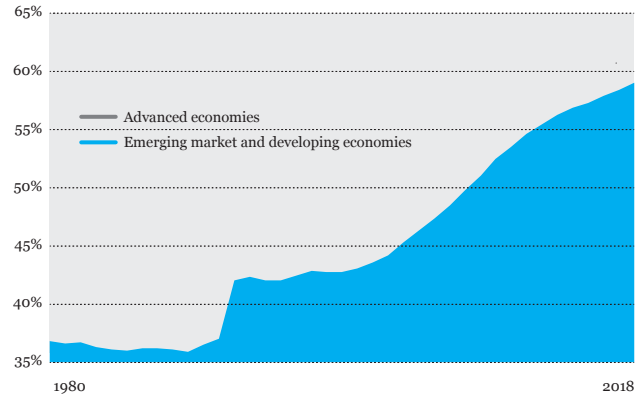
Overblown fears of a Chinese slowdown?

Much of the growth in energy demand comes from brisk economic growth in emerging economies, in particular China. Similarly, a significant – and increasing – share of global growth over the past couple of decades can be ascribed to emerging economies. The two effects must, however, be separated.

For a country like Norway, the stimulus from high energy demand has been of vital importance – through increased prices on oil exports, repercussions in the oil-service sector and the mainland economy, the accumulation of wealth in the Norwegian Government Pension Fund Global and the resulting possibility of a more expansive fiscal policy.

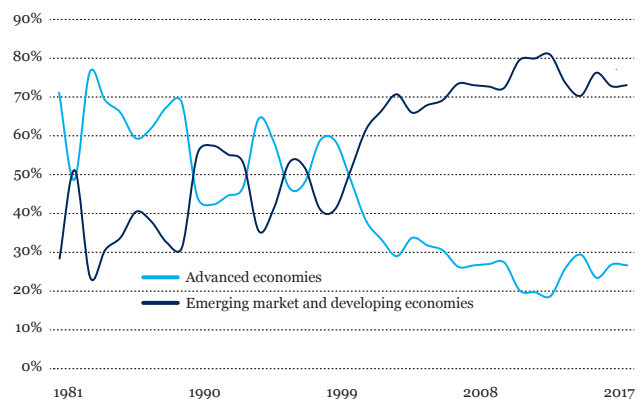
For other developed countries, the picture is decidedly more mixed. There is a vital distinction between emerging economies' contribution to global growth and emerging economies' contribution to growth in the rest of the world – a distinction that sometimes seems to be lost in the fear of a major slowdown in the Chinese economy, a recurring topic in 2018.

A truly different economic geography



PPP GDP, share of world GDP. Source: IMF

Gaining in importance



Share of global GDP growth, PPP, 1992 and 2008/2009 smoothed. Source: IMF, Pareto Asset Management

On several accounts, Chinese statistics can't be trusted. There is a clear possibility that national accounts are being inflated by regional authorities wanting to comply with official growth goals, or simply central authorities wanting to paint a sufficiently rosy picture of the economy. In 2018, pumped up Chinese growth figures were a major concern in assessments of the global growth outlook.

If, somehow, we were to receive confirmation that the Chinese government had made up their national accounts, what would happen? Most likely, global growth figures would have to be revised down by a substantial margin. But the impact on growth in developed countries would be more limited, and evident long before this came to surface. Absent a severe contraction, inflated Chinese figures may be less of a menace to the world economy than some would have it.

Chinese debt bubble?

On the other hand, the problem may be compounded by what looks very much like a Chinese debt bubble. There are lots of empty apartments in Chinese cities, financed in large part by rapidly growing amounts of debt. Transparency is not up to Western standards, but Chinese authorities do seem to have more control of their financial system than in freer markets. And should there be a financial crisis of sorts in China, the linkages to the international financial system may not be sufficient to warrant losing sleep.

As for Chinese growth, the major short-term concern is trade relations with the US. Towards the end of 2018, a trade war – or at least a prolonged trade conflict – seemed likely if not unavoidable. Judging from events during the first few weeks in 2019, a couple of presidential tweets on the US–Chinese trade negotiations calmed market nerves, making it seem more likely that a trade war will be avoided.

Trade relations nevertheless represent a major source of uncertainty going into 2019. There is obviously a wide range of possible outcomes, but a World Economic Forum simulation may give us an idea of what is at stake here. According to their estimates, a full-blown trade war could reduce global GDP growth by 0.7 percentage points in 2019. US growth, less vulnerable, would be reduced by 0.4 percentage points, while Europe, much more dependent on free trade, could lose a full 0.8 percentage points.

While recent tweets suggest that these figures would have to be reduced, they certainly explain why so much attention has been devoted to this issue. But that's the nature of financial markets: It's all about risk. That's what you get paid for.

A decennial anniversary provides an illuminative example.

Lehman Brothers – ten years on

Let's say that you put your money in the stock market at the end of August 2008 – little more than two weeks before Lehman Brothers filed for bankruptcy and unleashed the global financial crisis. There can hardly be a better definition of utterly horrible timing in the stock market. For most investors, initial trepidation would surely have turned to terror.

In Norway, the nadir came as early as 21 November. On that day, the market had fallen some 64 per cent from its all-time high – and 56 per cent from the end of August, i.e. in less than three months. A fine example of real stock market risk, as opposed to statistical risk metrics.

And yet: If indeed you had invested in the Norwegian stock market at the end of August 2008 and stayed the course for ten years, you

would have doubled your money. Your annualised return would have been 7.5 per cent, despite the horrible timing. As bad luck goes, I'd say that's not bad.

If instead you had chosen the global stock market, as represented by the MSCI World Index, you would in fact have tripled your money and then some, provided you tallied your gains in Norwegian kroner. Average compound return would amount to a decent 11.9 per cent.

Our fund investors would have done even better, provided they did not jump ship at the very wrong moment. If they did, I suspect they never got back on board in time – if ever. That, too, as evidenced by the forgone return, is risk. For a sufficiently long-term investor, it may very well be the biggest risk of all.

2018 in a nutshell

• OSEBX	-1.8%
• S&P 500 return	-4.4%
• MSCI World net (USD)	-8.7%
• 3-month NIBOR	from 0.81 to 1.27 %
• 3-month STIBOR	from -0.47 to -0.13 %
• 10-year Norwegian Treasury	from 1.65 to 1.79%
• 10-year Swedish Treasury	from 0.78 to 0.47%
• 10-year US Treasury	from 2.41 to 2.68%
• Brent Blend	from USD 66.87 to USD 53.81
• USD/NOK	from 8.21 to 8.69
• EUR/NOK	from 9.84 to 9.95
• GDP growth, global	3.7%
• GDP growth, Norway	1.4%
• GDP growth, Sweden	2.3%
• GDP growth, Mainland Norway	2.2%

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