The market and the economy in 2016

What will 2016 be remembered for? Here are three suggestions: the oil crisis reached a turning point, interest rate levels reached a turning point, the stock market did not.

In a previous analysis, Pareto estimated that the full effects of the oil price slide would hit the mainland economy after approximately six quarters. By the start of 2016, precisely six quarters had passed since the oil price began its downward spiral. In the oil service sector, problems had long been mounting and the unease received plenty of fuel from outside the country. At the global level, markets staggered from concern to panic.

That was how 2016 started – but that was not how the year continued. After just a few weeks, the unrest abated, without any noticeable calming news of an economic nature. The market initially harboured deep concern about declining Chinese growth. Then, just a short time later, it seemed the market was not that concerned after all.

And so, yet again, we saw that the mood of the world's asset markets can change quite markedly in a very short space of time.

The challenge is identifying the underlying patterns.

First, one step back

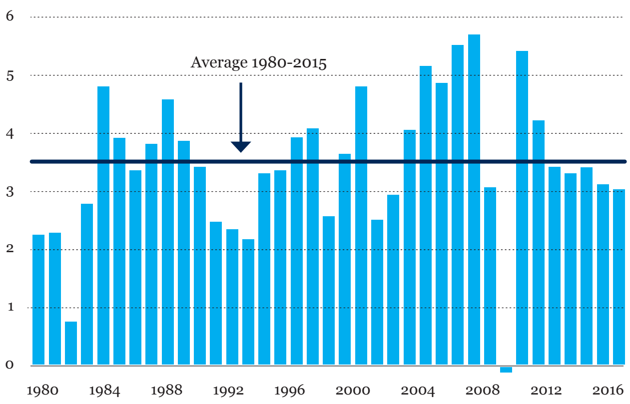
Oslo Børs Benchmark Index had a difficult start to the year, but then climbed steadily upwards.
Source: Oslo Børs

The oil price – a barometer

China's significance for international growth is difficult to assess and easy to misunderstand. National statistics are viewed as unreliable and partly controlled markets behave unpredictably, not least when it comes to mortgaged real estate. Furthermore, we find that interaction with the rest of the world is easily confused with domestic effects within China, typically when estimates are made of the impact of Chinese growth on global growth – a lot of which takes place in – yes – China.

Often the only course of action available is to look at indirect effects, such as energy consumption or commodity imports. For example: China's imports and oil consumption provide a useful indicator of the pace of the economy.

Global growth marginally weaker

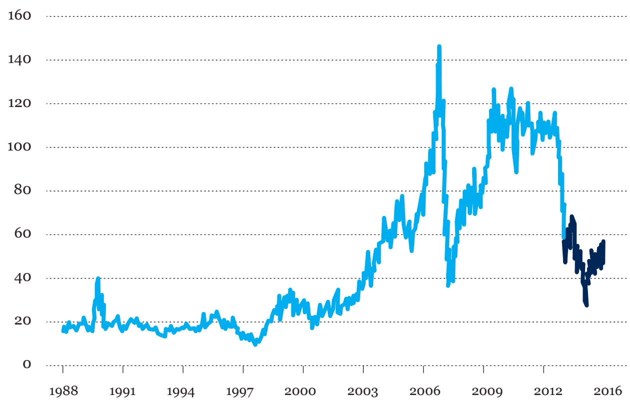


Percentage growth in global GDP.
Source: IMF

When in January 2016 the oil price fell as low as USD 26-28 a barrel, depending on the series of oil prices quotes, this reflected concern about Chinese growth, global growth and the knock-on effects for oil-related industries – which are well represented on Wall Street. In hindsight, the sharp shifts in mood may seem random, but at the time there are always key figures to support the current view. In January of this particular year, the oil price was one such key figure.

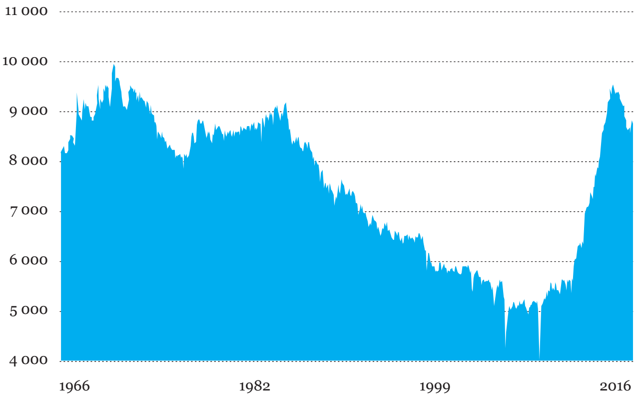
And then the situation took a turn for the better. When the market is no longer able to find confirmation in weak key figures, the field is clear for risk-seeking opportunists looking for cut-price securities. During the first half of February, the S&P 500 fell by over 10 per cent and Oslo Børs by almost 16 per cent. From there onwards there was an excellent upside in both oil price and stocks.

Climbing up from the bottom



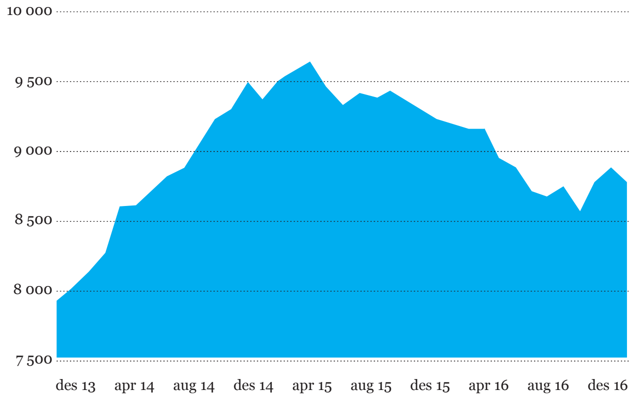
Oil (Brent blend) in US dollars, spot price
Source: Bloomberg

Back to the glory days of yore …



US oil output in thousands of barrels per day
Source: US Energy Information Administration

At least for now …



US oil output in thousands of barrels a day
Source: US Energy Information Administration

Higher oil pressure

By the winter of 2016, US rig counts had long been exhibiting a marked downward trend: lower oil prices undoubtedly had the effect of reining in shale oil production. This helped to boost faith in the view that the oil price had bottomed out, since more and more capacity was being taken off the market.

As 2016 progressed, increasing attention was focused on OPEC, which in September agreed on production cuts of 1 million barrels a day. In November, the organization was able to hammer out the associated quotas.

One factor which received less attention, but which was of fundamentally greater importance, was the strong surge in the demand for oil. In December 2015, the International Energy Agency estimated that average worldwide consumption in 2016 would be 95.8 million barrels a day. This was an increase of 0.8 million barrels on what turned out to be the figure for the preceding year, of itself a not insignificant increase.

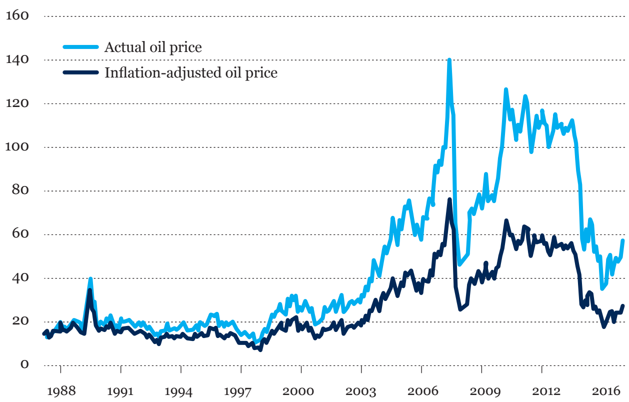
Before the year was over, the agency had adjusted its estimates upwards several times. These upward adjustments continued into the following year, and it now looks as though the historical record will show consumption in 2016 to have been 96.6 million barrels a day. In other words, growth was almost precisely 100 per cent higher than indicated by the original estimates – even higher if we apply the downwardly adjusted estimate in February 2016. In the last quarter alone, demand is now estimated to have been no less than 2 million barrels higher than in the same quarter in 2015.

The oil price followed more or less the same trajectory, not surprisingly aided by the OPEC quotas adopted in November. By yearend, the oil price was twice the level it had bottomed out at during the winter months.

But to what extent are the oil market reports published by the IEA based on fundamental figures? They are typically published in the second week of each month. By that time, the organization has had time to observe developments in the preceding month, not least on the stock markets. And lo and behold:

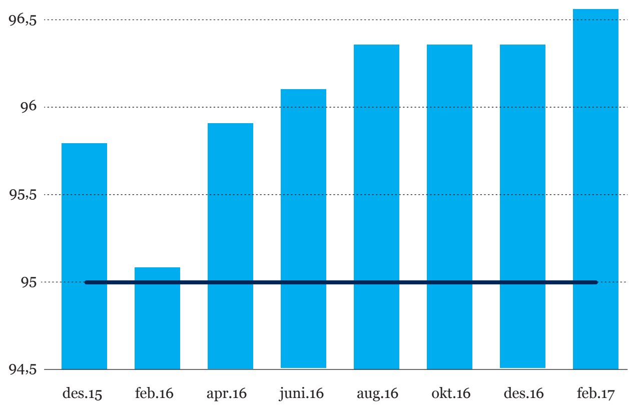
It turns out that during this 15-month period there is a correlation between the monthly oil price estimates and the closing price for the preceding months on US stock index S&P 500 of no less than 93 per cent. This is exceptionally high. A coincidence? Or could it be that the

The true price of oil remains moderate



Price of oil (Brent Blend) in US dollars, spot price adjusted for US inflation
Sources: Bloomberg, US Bureau of Labor Statistics

Much thirstier than was first assumed



Global demand for oil in millions of barrels per day, estimates for 2016 at various times. The dark blue line shows demand for oil in 2015.
Source: IEA

IEA is also affected by the mood of the market, by the sentiment?

One conclusion must surely be permitted: this is how difficult it can be to separate fundamental causes from mood swings in the market.

Cost cuts? More like price cuts

In Norway, the weakened krone had cushioned the damaging effects of the drop in the oil price. Because the fall in the value of the krone really was substantial: at the outset of 2016, the Norwegian krone, measured on the currency basket in the Trade Weighted Index, was close to its lowest level ever.

True, the immunisation of the oil revenues, by salting them away in the Government Pension Fund Global, was decreasing. For many years, large chunks of the oil income had been transferred directly into the fund, without being converted into Norwegian kroner, and in addition, Norges Bank had purchased currency for additional transfers of substantial amounts. Now we were no longer salting away as much in the fund, and, in fact, Norges Bank moved from buying currency to selling currency (buying Norwegian kroner). That did not suggest further assistance for the Norwegian economy from a depreciating krone.

For the oil companies, with the fairly well-padded Statoil taking the lead, the price drop triggered cost cuts on a major scale. The effect was formidable. From their peak in 2013, Statoil's exploration and operational costs dropped from USD 12.10 a barrel to USD 6.20 a barrel – a reduction of almost 49 per cent. Since the oil price is quoted in the same currency, the dollar is the logical yardstick, but even measured in Norwegian kroner this represents a substantial reduction – close to 27 per cent.

Cost cutting may not be the appropriate phrase. Much of this reduction was shouldered by subcontractors in the form of drastic price cuts. And now we could finally see these price cuts reflected in the national accounts. According to Statistics Norway, value added (gross product) in "Extraction and related services industries" recorded a growth in prices in 2016 of minus 23.7 per cent. One year earlier, that figure had still been positive, at 1.9 per cent.

Put in a slightly different way: when you examine the national accounts to find the growth in gross product, you don't see the drama. Here, after all, developments are adjusted upwards by a factor corresponding to the fall in price in the preceding year. Deliveries (volumes) have had a far gentler development than invoices.

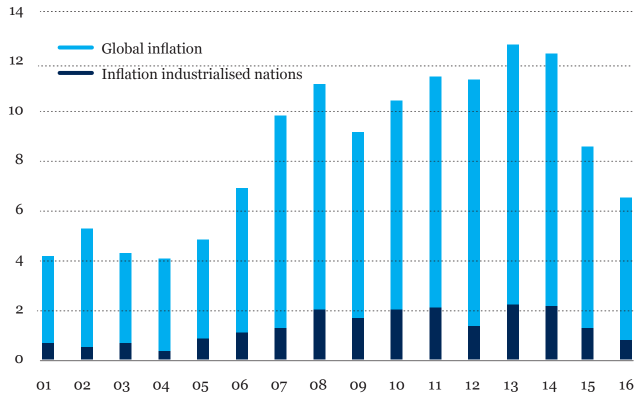
The bond clear-out

Subcontractors to Statoil and other petroleum companies are well represented on the Norwegian securities market, both stocks and bonds. On the stock market, problems were clearly visible at an early stage on the oil service index, which, following a drop of some 60 per cent over an 18-month period, fell by a further 32 per cent during the course of a few weeks in January. That being said, the index recovered from this reversal, ending the year at almost double its previous level.

The bond market, too, had given numerous clear signals, but 2016 was the year in which the problems truly surfaced in the form of defaults, debt negotiations and restructurings. In the case of petroleum-related companies (which dominate here), Stamdata registered defaults on 47 loans with total amounts outstanding of NOK 42 billion, as compared with 15 loans and NOK 9.6 billion in the preceding year. Defaults can be more of a technical issue and need not mean heavy losses, but in the case of some of these loans it gradually became clear that the bondholders would have to shoulder substantial losses.

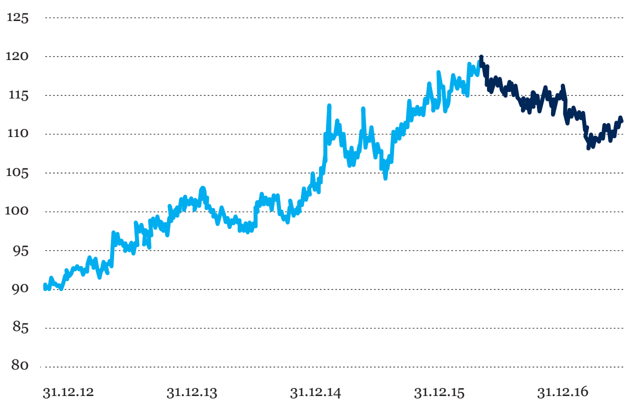
In this market, the uncertainty lasted somewhat longer, with high

Deflation on the Continental Shelf



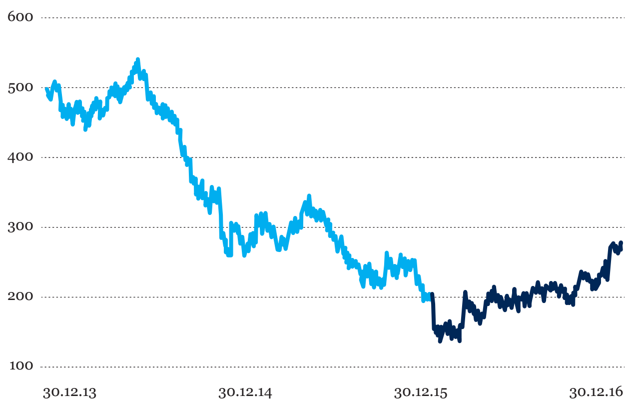
Statoil's operating costs (incl. selling, general & administrative expenses) and exploration costs in USD per barrel.
Source: Pareto Securities

Weakening in reverse



The Trade Weighted Index. Higher figures signify a weaker krone
Source: Norges Bank

Well survived ...



The Oslo Børs Oil Service Index turned the corner in 2016
Source: Oslobors.no

credit premiums also being seen at the international level. Nerves were not calmed until the European Central Bank announced a raft of measures on 10 March, including the extension of support purchases to take in non-financial investment grade bonds. Credit premiums then started to come down, in both Europe and the US; the prices of corporate bonds moved upwards again.

This improvement rapidly spread to bonds with lower ratings (high yield) and, not least, oil-related companies, although here the Norwegian market lagged slightly behind. By the end of the year, credit premiums on oil services remained higher in Norway than in the United States. Even so, the autumn saw a powerful rebound after what had been a substantially more difficult first six months.

Alarm bells

When, in March, the ECB announced a modest reduction in its already low key interest rates, Norges Bank followed suit with a reduction of a quarter percentage point. These rates remained unchanged for the rest of 2016. The Federal Reserve, for its part, increased the key interest rate by a quarter percentage point before the year was over.

In the meantime, the market had also had time to adjust its views on interest rates. With the slightly near-sighted assessment that comes so readily to those who follow the market day-to-day, hour-by-hour, it almost appeared as if Donald Trump was the catalyst. This was what many people concluded at the tail end of 2016. But it didn't look that way on first examination.

When it became clear that Trump would be the new President of the United States, futures on the US stock market augured a drop of a swingeing five per cent. However, after a short burst of trading the market did a volte face. The relief, combined with renewed attention to the detail of Trump's more business-friendly rhetoric, triggered an unusually rapid change in mood. The sentiment shifted in record time. This also impacted on the fixed-income market.

Perhaps the most compelling argument in favour of believing in Trump was his promise of massive investments in infrastructure. Many investors locked on to the idea that he might be capable of stimulating growth, even though the blatantly protectionist stance was an obvious danger signal.

In the short term, the renewed confidence in the stock market attracted the most attention. From a longer term perspective, a more interesting point is that long-term interest rates began to rise.

Solid ground underfoot

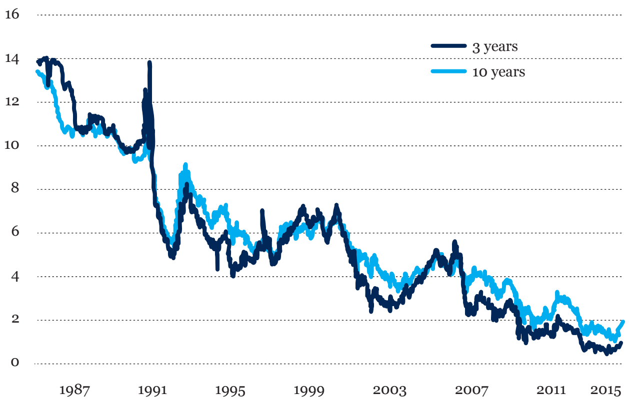
At the start of the year we saw a modest increase in long-term interest rates and a somewhat steeper interest rate curve in both the US and Norway. German 10-year rates ended the year somewhat lower than they started it, but in the interim they had fallen below zero for some months. Swedish 10-year rates also nudged upwards again after a period of very low rates. Admittedly, they stayed above zero, which is more than can be said for Swedish money market rates – which fell even further and ended at almost -0.6 per cent.

As it turns out, we have not had a substantial increase in interest rates. We have seen a modest lift from extremely low rates to unusually low rates. The key point is that a downward trend that persisted over many years has been broken. Perhaps this was only to be expected, given the low level to which interest rates had dropped. Even so, this break was significant. Beyond the end of the year there are also several additional signs pointing in the same direction.

Support for the upward adjustment of interest rate expectations can be found in key figures in the real economy. The IMF, which in the two preceding years cut estimates in its January updates, now maintains that global growth can be expected to rise to 3.4 per cent in 2017 from 3.1 per cent the year before. For the industrialised economies, the estimates have picked up since the last report. There are also a number of current key figures that point in the same direction, not least for Europe.

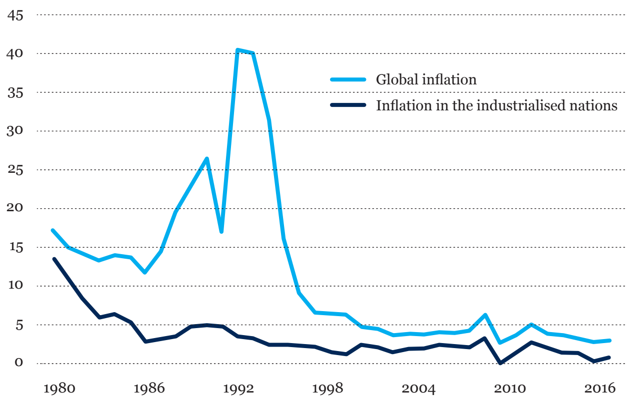
In the United States, there is less scope for lifting growth, given that solid growth over a period of several years has brought unemployment down to a level that provides very little in the way of spare production capacity. Nor does tax relief for smaller groups with already high levels of consumption provide any real growth impulses to consumption. However, the nature of the overall growth, with an emphasis on infrastructure, does suggest higher demand for investment capital. Moreover, the Federal Reserve has, after all, already signaled that further interest-rate hikes must be expected in the coming year.

Did interest rates bottom out in 2016?



Yield to redemption for different maturities of Norwegian government bonds, percentages
Source: Norges Bank

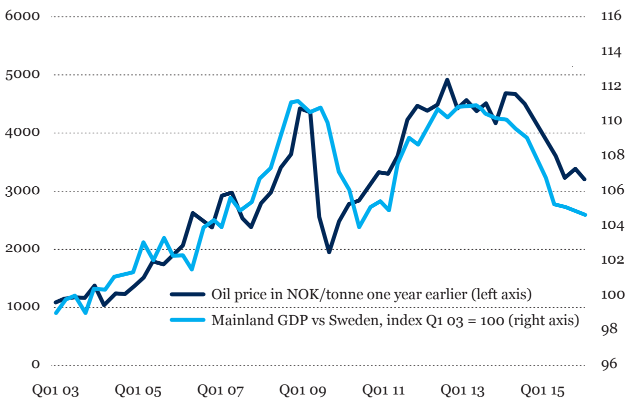
Inflation? In the recovery position



Source: IMF

In Norway's case, it is probably true to say that the oil-related economy hit bottom faster than suggested in our previous analysis, due in no small part to the sharp drop in the value of the Norwegian krone. Growth picked up again somewhat in the fourth quarter and all estimates indicate increased growth on the mainland too – which has nevertheless demonstrated the extent of its dependence on oil.

Oil-fired heating on the mainland



Sources: Pareto, SCB, Statistics Norway

The interest-rate gap

One of the primary reasons for the record low and, in some places negative, rates of interest, has been the handling of the crisis and the management of expectations, although the rationale can also be found in demographics and other fundamental factors. Now that it seems clear on an increasing number of fronts that the danger of the crisis flaring up again has receded, it is only logical to expect that there will be a further normalisation of interest-rate levels.

In some cases, only ever-smaller traces of the crisis remain for use by way of justification. Sweden is a case in point. The Swedish real economy is not in any way in crisis, with an estimated growth rate of no less than 3.3 per cent in 2016. Nor does anyone expect a new crisis on the scale suggested by the key interest rate (repo rate less 0.5 per cent). We therefore venture to suggest that Swedish long-term interest rates are showing the way forward: they have increased markedly since hitting bottom during 2016.

One final point: low interest rates can also be ascribed in part to unarticulated wishes to keep rates of exchange in check. In many countries, Norway not excluded, this has contributed to lower rates of interest and/or interest-rate expectations than would otherwise be the case. But this is a relative game. When a leading economy like the United States is in the process of introducing such a marked increase in interest rates it is easier for other central banks to follow suit without having to fear exchange rate effects.

In terms of game theory, the currency consideration gives the interest rate reduction something of the character of the "Prisoner's dilemma", a game that illustrates how what is logical individually may be collectively illogical. A familiar illustration is provided by a crowd at a football game, where no one gains when everyone stands up to get a better view. We are now witnessing the US, seated on the foremost bench, readying itself to sit down.

So yes: That really was the interest rate bottoming out. There are very few indications that high interest rates lie ahead, but very many suggesting that interest rates will be slightly higher than we have seen for some time. This could have interesting effects on government bonds, which in the major markets have been almost synonymous with risk free. After 35 years of falling interest rates it could be that our understanding of risk free needs to be slightly more nuanced. After all, in the case of long-term government bonds in particular there is a significant interest-rate risk.

But what of the stock market? Or the housing market?

Waves and ripples

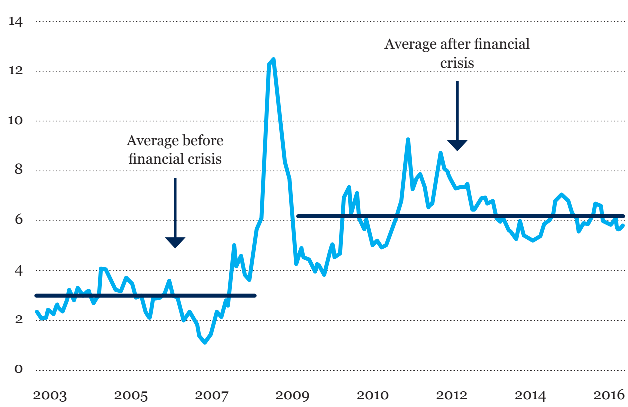
The stock market and the housing market have both derived obvious benefits from low interest rates. Furthermore, both markets have recorded an impressive upturn since the financial crisis. However, their reactions to the low rates of interest have been very different.

Pre-financial crisis, Oslo Børs recorded an earnings yield in the region of four percentage points above the effective rate of interest on 10-year government bonds. The all-time low levels of interest rates post crisis have resulted in a drop in earnings yield, but this reduction has not been as significant as that of the interest rates. The upshot has been that the premium over the 10-year rate of interest has hovered around six percentage points in the years since the financial crisis. By the end of 2016, the premium had – admittedly – crept slightly below this average, but it was still far above the level recorded before the financial crisis. Put in a slightly different way: the margin of safety has increased.

The same could hardly be said of the property market, where both credit statistics and house prices indicate that households have largely "maxed out their cards": they have expended most of the freedom of action afforded by low interest rates. Put in more popular terms: they have bought the most expensive houses they can afford.

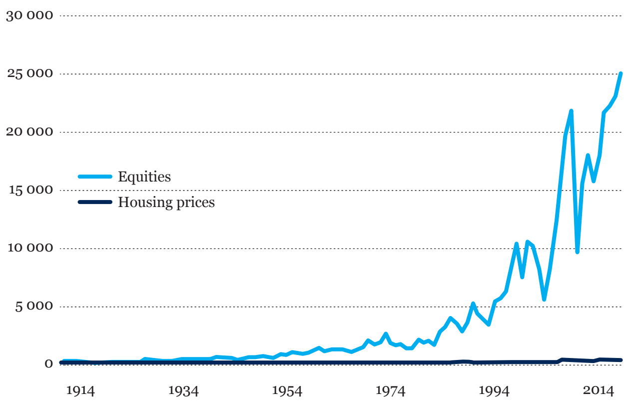
In this light, it is interesting to note that ever-rising house prices is not a law of nature. A buyer of an average Norwegian dwelling in 1914 would have been through several decades of negative real prices. Not until 1996 rolled around would the line marking the passage from negative to positive finally have been crossed. In the housing market,

The stock market safety margin



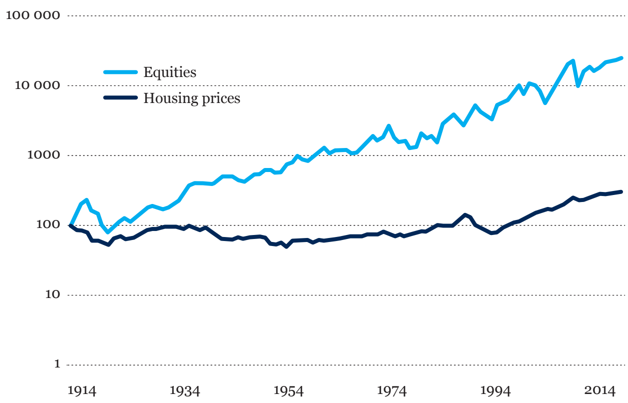
Difference in percentage points between forward earnings yield and yield on 10-year government bonds.
Source: FactSet, Norges Bank

Values don't always soar



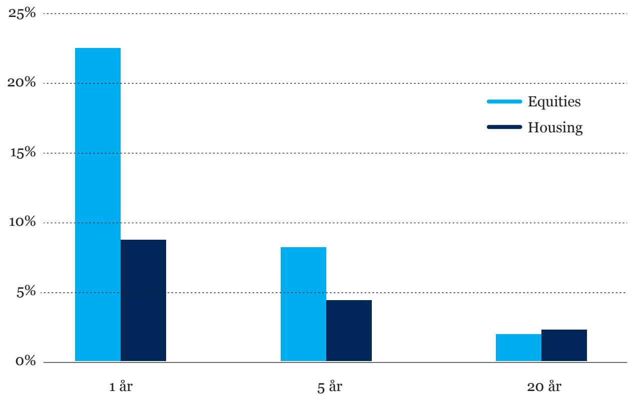
Index, 1914=100, real prices (deflated by Consumer Price Index).
Source: Norges Bank, Statistics Norway, Pareto

A more correct scale



Index, 1914=100, real prices (deflated by Consumer Price Index).
Source: Norges Bank, Statistics Norway, Pareto

If you wait long enough, equities fluctuate less than housing



Standard deviation by investment horizon in the period 1914-2016
Sources: Pareto Asset Management, Statistics Norway, Norges Bank

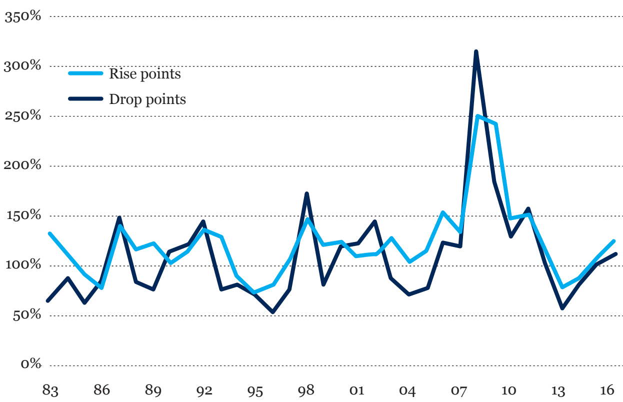
the foundations are eroded by inflation, a problem which the stock market handles more effectively.

This illustrates how much risk in the housing market differs from risk in the stock market. House prices fluctuate in long waves; the stock market has choppier waves with lower risk in a longer perspective. If we take a suitably long-term view, this in fact entails that the stock market has shorter fluctuations than the housing market – notwithstanding the safety that many people clearly ascribe to the housing market.

Noise insulation

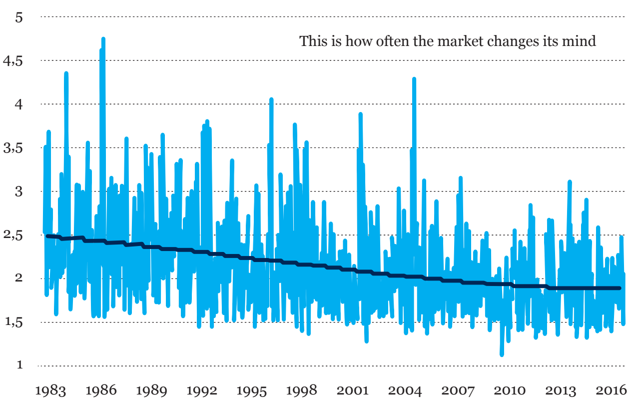
Neither financial theory nor investors have done an especially good job of separating noise from risk in the stock market. This point can be illustrated by adding up the daily price changes on Oslo Børs. In a normal year, the result is 121 rise points (total daily increases as a percentage) and 108 drop points. By way of comparison, the average rate of return in the same period, from and including 1983, was 11.7 per cent. In other words: an investor is left with roughly 10 kroner for every hundred kroner in gains on the stock market in gross increases.

Spot the difference?



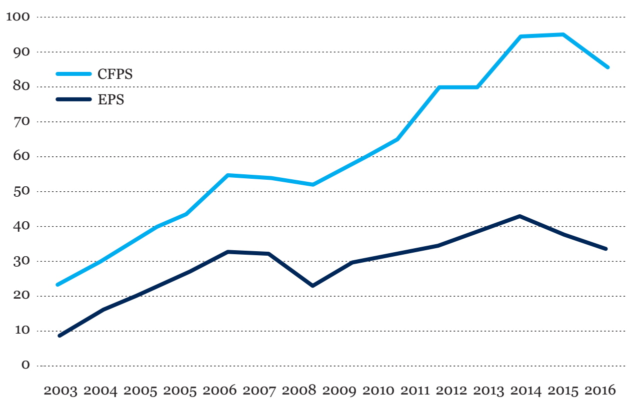
Oslo Børs benchmark Index interlinked with the Total Index from and including 1998.
Sources: Oslo Børs, Pareto Asset Management

360° turnaround



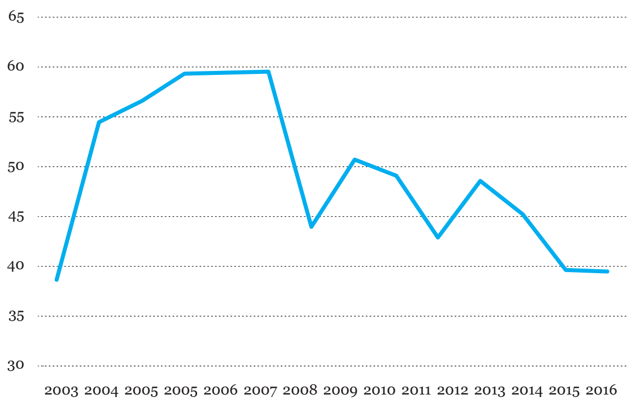
Number of days in which the market points in the same direction, average over 25 trading days.
Sources: Oslo Børs, Pareto Asset Management

Higher cash flows



Cash flow (CFPS) and earnings (EPS) per share for OSEBX
Source: FactSet

Less lofty earnings?



Earnings per share (EPS) as a percentage of cash flow per share (CFPS) for OSEBX.
Sources: FactSet, Pareto Asset Management

Is this true risk or is it largely noise? The answer to this question is: it depends on how long you remain invested. If the perspective is long enough it is logical to regard these leaps as noise, although you will not necessarily find this word in the textbook.

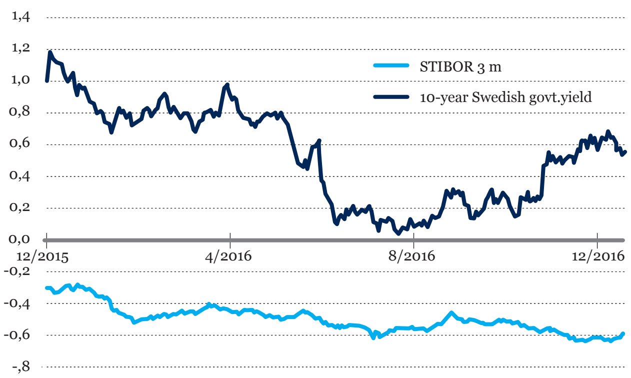
Of course, there is no shortage of real risk, especially if we look at individual stocks. Moreover, the fact that the stock market has not priced in the entire fall in interest rates does not mean that it has not priced in a great deal of this reduction. This can also be seen in the day-to-day pricing, for example in the price/earnings ratio (P/E), with, however, more real cash flow in earnings than was the case 10 years ago.

A modest rise in interest rates should be well within what the market is both able to withstand and expects. This does not mean, however, that everyone will agree in the short-term. Corrections do come at regular intervals.

If this is the case, it is important to remember what drives returns in the longer term: the ability of companies to generate profits for their owners. As long as business and industry function more or less normally, the stock market will be a series of recurring all-time highs, interrupted only by shorter or longer reversals. In the United States, where statistics have been calculated back to 1871, the 500 largest listed companies, on aggregate, have never operated at a loss!

If we are right in our thinking that forthcoming interest rate hikes will be relatively limited, it might be useful to take a slightly longer term view: investing money has never been cheaper.

Cheap money in Sweden



Effective interest rates as a percentage.
Source: Riksbanken

2016 in a nutshell

OSEBX	+12.1%
S&P 500 return	+12.0%
MSCI World net (USD)	+7.5%
3-month NIBOR	from 1.13% to 1.17%
3-month STIBOR	from -0.29 to -0.59
10-year Norwegian Treasury	from 1.54% to 1.70%
10-year Swedish Treasury	from 0.99 to 0.55%
10-year US Treasury	from 2.27 to 2.44%
Brent Blend	from USD 37.28 to USD 56.87
USD/NOK	from 8.81 to 8.62
EUR/NOK	from 9.62 to 9.09
GDP growth, global	3.1%
GDP growth, Norway	1.0%
GDP growth Sweden	3.3%
GDP growth, Mainland Norway	0.8%

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